



Seizing Power:

Occupation, Torture, and Nuclear
Safety Breaches at the Zaporizhzhia
Nuclear Power Plant



TRUTH HOUNDS



**What's happening at
the nuclear power plant is,
it's dying little by little.**

Zaporizhzhia Nuclear Power Plant staff
member interviewed by Truth Hounds

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Foreword

Truth Hounds began investigating the situation in Enerhodar and at the Zaporizhzhia Nuclear Power Plant in March 2023. These efforts resulted in the publication of the report **"In a Nuclear Prison: How Rosatom Turned Europe's Largest Nuclear Power Plant into a Torture Chamber and How Can the World Stop It"** in September 2023. The report, based on interviews with survivors and witnesses from the initial period of occupation, documented instances of torture, detention, and coercion against power plant personnel and Enerhodar residents, while examining Rosatom's complicity in these violations.

Following the publication of our first report, the work of collecting and analyzing information from the occupied city continued. We conducted further interviews with power plant employees and Enerhodar residents who had reached Ukrainian government-controlled territory. The new data obtained, the expanded methodology, the application of additional analytical frameworks, and our assessment of the initial report's limitations were among the factors that have led us to produce a second publication on this topic.

This report is the result of dedicated collective work, but it would not have been possible without the courage of those who agreed to speak to us. Sharing their statements required extraordinary determination and effort. We are sincerely grateful to everyone who entrusted us with their stories.

In preparing this report, we faced a difficult choice—which of the numerous crimes to focus on and which to leave outside the scope of this study. Ultimately, we decided that this report should primarily be a study of the occupation

itself, of both the city and the plant, of cases of torture of civilians, and of the threats posed to nuclear safety and security. At the same time, we considered it important to focus on an enabler of the reported crimes and breaches.

In choosing the focus of this study, we proceeded from the understanding that the occupation of a functioning nuclear facility creates threats that transcend borders and the interests of the parties to the armed conflict alone. This is why we consider it critically important that this issue continues to receive international attention and that the international community respond effectively to new challenges while standing in solidarity with all those in Enerhodar who have suffered from Russia's torture and pressure.

At the same time, we made a conscious choice not to disclose some information publicly. We did this to protect the people who spoke to us and to preserve the integrity of official investigations. For this reason, the report does not name witnesses or possible perpetrators, unless those names had already been made public by investigative authorities. In accordance with Truth Hounds' ethical principles, our priority has been to combine thorough research with responsibility toward those who entrusted us with their stories and to make sure their statements can also serve for accountability purposes.

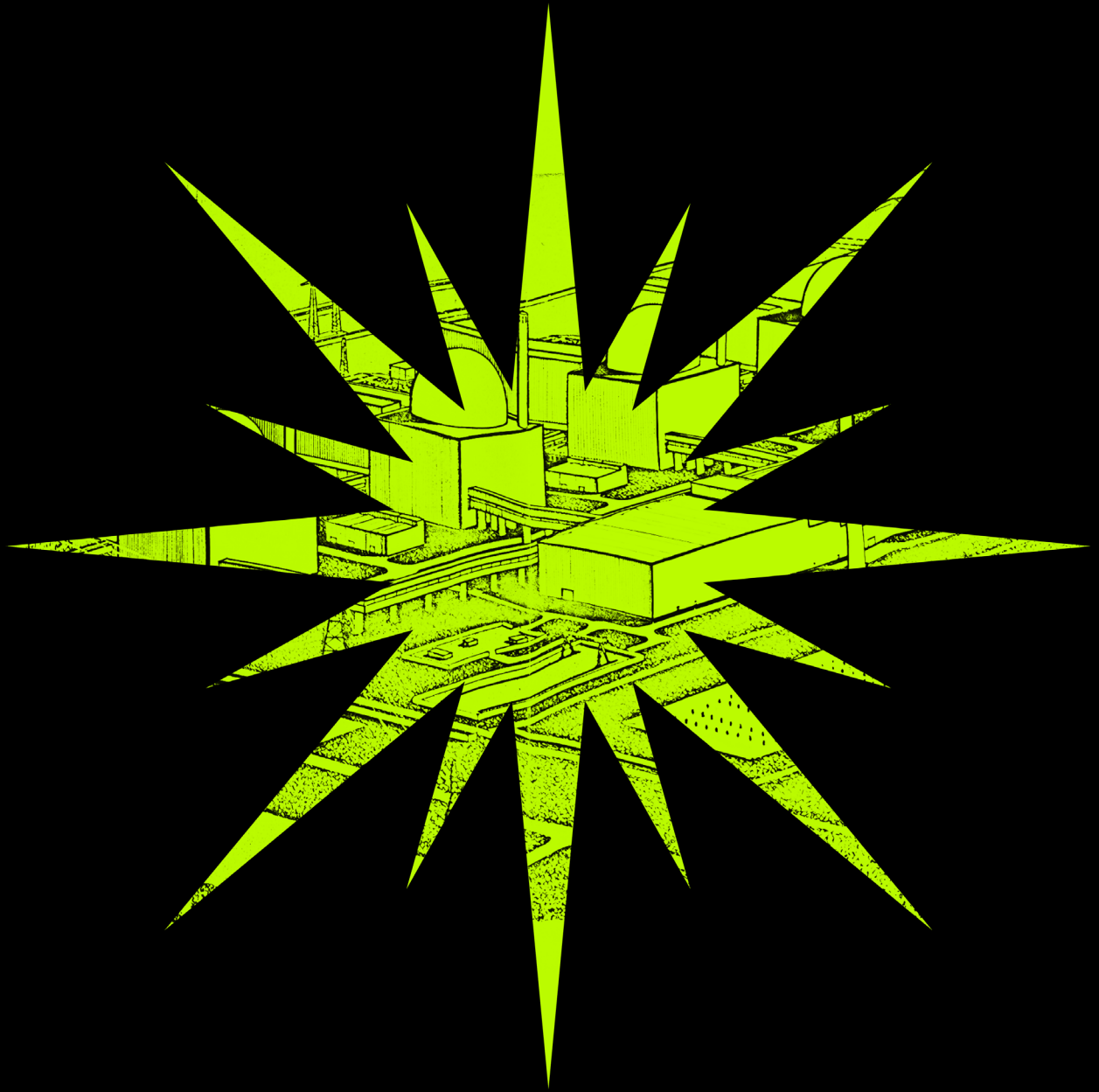


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List of Abbreviations

AP(I) – Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts (Protocol 1)

AFU – The Armed Forces of Ukraine

CAT – The UN Convention Against Torture

ChNPP – The Chornobyl Nuclear Power Plant

DNR – The so-called “Donetsk People’s Republic”

Ed. – Abbreviation of “edited”; indicates that certain parts of a quotation have been redacted for security reasons

EoC – Elements of Crimes under the ICC

FSB – The Federal Security Service of the Russian Federation (in Russian: “*Federalnaya Sluzhba Bezopasnosti*”)

GC – The Geneva Conventions

IAEA – The International Atomic Energy Agency

ICC – The International Criminal Court

ICL – International criminal law

ICTR – The International Criminal Tribunal for Rwanda

ICTY – The International Criminal Tribunal for the former Yugoslavia

IHL – International humanitarian law

INSAG – The International Nuclear Safety Group

KhNPP – The Khmelnytskyi Nuclear Power Plant

LNR – The so-called “Luhansk People’s Republic”

LOOP – Loss of Offsite Power

MLRS – Multiple-Launch Rocket System

NPP – Nuclear power plant

OECD NEA – The Organization for Economic Co-operation and Development’s Nuclear Energy Agency

OO – Zaporizhzhia Nuclear Power Plant Operating Organization

PWR – Pressurized water nuclear reactor

RBMK – A Soviet-designed high-power channel nuclear reactor (in Russian: “*reaktor bolshoy moshchnosti kanalny*”)

RNPP – The Rivne Nuclear Power Plant

RS – The Rome Statute of the International Criminal Court

SBU – The Security Service of Ukraine (in Ukrainian: “*Sluzhba Bezpeky Ukraïny*”)

SBO – Station blackout

SFSR – Soviet Federative Socialist Republic

SIZO – A “special investigative isolator” detention center

SNRIU – The State Nuclear Regulatory Inspectorate of Ukraine

SSR – Soviet Socialist Republic

SUNPP – The South Ukraine Nuclear Power Plant

UHS – Ultimate heat sink

UN – The United Nations

VVER – A Soviet-designed type of PWR

WANO – The World Association of Nuclear Operators

ZNPP – The Zaporizhzhia Nuclear Power Plant

ZTPP – The Zaporizhzhia Thermal Power Plant

Executive Summary

Russia's seizure of the city of Enerhodar and the Zaporizhzhia Nuclear Power Plant (ZNPP) in March 2022 marked an unprecedented event in modern history: the first military occupation of a functioning commercial nuclear power plant. This occupation, now into its fourth year, has seen a convergence of human rights abuses, breaches of international law, and acute nuclear safety and security risks, with profound national and global consequences.

This report examines the occupying forces' physical and administrative takeover of Enerhodar and the ZNPP, the systematic torture and persecution of civilians, including plant personnel, and the deep integration of Russia's state nuclear corporation, the Rosatom State Atomic Energy Corporation (hereafter, Rosatom), into the governance of occupied Enerhodar and the crimes themselves.¹ Based on months of investigative research, the report reveals how Rosatom's corporate, administrative, and financial structures have been weaponized in the service of military control and led to the suppression of resistance, the commission of serious crimes, and the compromising of nuclear safety and security. The findings underscore the urgent need for coordinated international action to halt ongoing violations, protect nuclear safety and security, and hold perpetrators accountable.

When Russian forces captured Enerhodar on March 4, 2022, less than two weeks after the full-scale invasion of Ukraine began, they took control of the ZNPP, the largest nuclear power plant in Europe. Russian troops held critical infrastructure in Enerhodar, but Ukrainian municipal authorities continued to try to function, organizing evacuations, maintaining public services, and sustaining citizen morale. Civilian resistance led to thousands demonstrating against the occupation. This fragile arrangement collapsed in late March and early April, when Russian forces dismantled Ukrainian governance systems, replacing them by force with parallel administrative bodies. Repression and violence quickly became systematic, targeting territorial defense volunteers, pro-Ukrainian activists, and ZNPP staff who refused to collaborate, among others.

Russian forces established at least seven detention sites in Enerhodar and the surrounding area, including two smaller-scale facilities. Truth

Hounds has documented how the Russian occupation unlawfully detained at least 226 Enerhodar residents and ZNPP employees, most of them in severely overcrowded facilities where detainees were subjected to physical and psychological torture to extract information, force confessions, punish dissent, intimidate, and coerce collaboration. Russian forces deprived detainees of food, water, and medical care, contrary to the provisions of international law. Torture, including beatings, electrocution, sexual violence, mock executions, and threats to family members of detainees, became routine.

Interrogations often sought intelligence on resistance activities, weapons, and Ukrainian military ties. Some detainees were compelled to sign cooperation agreements or contracts with Rosatom and many were filmed making false statements praising Russian forces or discrediting Ukraine for propaganda purposes.

Truth Hounds research indicates that such abuses were widespread and systematic acts directed against civilians that constitute war crimes and crimes against humanity under international law. Furthermore, licensed plant personnel and specialists with unique technical skills critical to reactor safety were deliberately targeted, compromising the safe operation of the facility and heightening the risk of a nuclear accident.

By fall 2022, Russia had consolidated its control through a staged referendum, decrees transferring the ZNPP to Russian jurisdiction, and the disconnection of the plant from Ukraine's energy grid. Enerhodar's population fell from 50,000 before the occupation to roughly 10,000 by March 2025. Rosatom played a central role in this consolidation. Municipal budgets became dependent on subsidies and grants channelled through the corporation, with key positions in the occupying administration filled by individuals with Rosatom or nuclear-sector backgrounds, replicating governance models from Russia's "atomic cities". Rosatom representatives or those acting on their behalf coerced ZNPP staff into signing contracts and pledging compliance with the occupation. The corporation's status as a "state corporation" under Russian law, which combines commercial activity with state functions, enables it to serve both as an economic actor and an implementer

of occupational policy. Its continued presence in global nuclear markets provides resources and expertise to sustain the occupation itself.

The conduct of Russian forces and occupying authorities in Enerhodar and at the ZNPP amounts to serious breaches of international humanitarian law (IHL) as war crimes and to crimes against humanity. The unlawful confinement, torture, and inhumane treatment of civilians violate the Rome Statute and the Geneva Conventions, while the targeting of civilian nuclear facilities contravenes Additional Protocol I (AP(I)). Rosatom's active role in coercive practices may give rise to state responsibility and corporate liability under international law. Furthermore, the integration of a state-owned corporation into the machinery of occupation and repression is a troubling and dangerous reality that warrants greater international action to hold corporate actors to account for their role in the commission of these crimes.

The risks of nuclear disaster at the ZNPP remain real and demonstrate Russia's fundamental disregard for well-established international norms on nuclear safety and security. The occupation's coercive recruitment of plant personnel and the broader climate of fear in and around the ZNPP violate the International Atomic Energy Agency's (IAEA) "Seven Indispensable Pillars of Nuclear Safety and Security", especially the principle that staff must operate free from undue pressure. Intimidation, loss of qualified staff, and severed ties to Ukraine's regulatory systems have eroded the plant's safety culture, creating nuclear risks with international implications. As of September 2025, the ZNPP remains under *de facto* Russian control. The six reactors at the plant have been in shutdown since September 2022, but, in May 2025, Rosatom chief Alexey Likhachev announced approval of a plan to restore the plant's full generating capacity, including the replacement of the power grid. There is evidence of new power lines connecting the plant to the Russian grid. The major nuclear hazards that currently exist at the ZNPP, would become severe in the event of Rosatom restarting one or more reactors, with the potential for very large releases of radioactivity into the environment of Ukraine and Europe.

These crimes and nuclear safety and security risks are taking place against a backdrop of renewed

diplomatic discussions about ending hostilities. The ZNPP's fate was among the issues raised in these talks,² with Russia declaring it will never transfer control and the Ukrainian government insisting that full Ukrainian control is the only way to restore safety. International actors have proposed international oversight of the plant, but lack any meaningful agreement.³

This report is based on 39 in-depth interviews with survivors and witnesses—including 20 ZNPP staff members—conducted in Ukrainian and Russian, anonymized for security, and gathered in line with ethical field research standards, as well as an additional testimony from 17 former Enerhodar residents provided by the Association of Relatives of Political Prisoners of the Kremlin. Truth Hounds also monitored and analyzed open-source information from media outlets, local Telegram channels, official social media channels, leaked databases, and other open-source material to document administrative changes, civilian restrictions, social dynamics, and military presence in and around Enerhodar. The research incorporated an analysis of Rosatom's governance, operations, and global activities, drawing on official Russian sources, corporate reports, and other specialized sources. To assess nuclear safety and security risks, the team consulted a Greenpeace Ukraine nuclear expert and interviewed former ZNPP nuclear professionals. Legal experts reviewed evidence to evaluate potential violations of IHL and international criminal law (ICL), with cross-verified findings through both witness testimony and open-source data to generate a comprehensive analysis of the occupation's impact.

The implications of recent events in Enerhodar and at the ZNPP are not confined to Ukraine. The operational degradation of the ZNPP, its proximity to active hostilities, and the erosion of safety culture threaten nuclear security across Europe and potentially beyond. A severe incident could disperse radioactive materials over vast areas, with grave humanitarian, environmental, and economic consequences.

Truth Hounds and Greenpeace Ukraine call for immediate and decisive international action. Criminal justice actors in relevant jurisdictions should initiate investigations and legal proceedings against individuals and entities responsible

for war crimes, crimes against humanity, and nuclear safety violations in Enerhodar and at the ZNPP. Key stakeholders should urgently impose expanded sanctions on Rosatom and its subsidiaries, targeting the financial flows that sustain the occupation. The IAEA's on-site inspection team must be granted full and unimpeded access to the plant's staff and all relevant areas of the ZNPP. Independent monitoring of human rights conditions in Enerhodar and any detention facilities is essential, with priority given to protecting plant personnel. The United Nations (UN) bodies should also do more to publicly condemn the situation at the ZNPP and ensure systematic monitoring and reporting of human rights abuses, violations of international law, and risks to nuclear safety. In any ongoing negotiations, priority should be given to restoring the ZNPP to Ukrainian control.

The occupation of Enerhodar and the ZNPP is a uniquely dangerous convergence of systematic repression, breaches of international law, and risk of nuclear catastrophe. With Russia signaling its intent to restart the plant under unsafe conditions, the dangers are accelerating. Inaction will not only abandon the survivors of abuses in Enerhodar, but also expose the world to the possibility of a nuclear disaster. The international community must treat the ZNPP crisis as a global security priority, acting to restore safety, uphold the rule of law, and prevent the establishment of a precedent of the militarization of civilian nuclear facilities, such as the ZNPP.



Recommendations

To foreign governments and criminal justice authorities:

- Investigate crimes under universal jurisdiction, including:
 - Investigations into torture and other serious violations of IHL in Enerhodar, including Rosatom's potential complicity; and
 - Investigate these abuses as crimes against humanity, given their widespread and systematic nature and hold both individual perpetrators and corporate enablers, including Rosatom, accountable.
- End cooperation with Rosatom, including by:
 - Suspending or terminating existing contracts with Rosatom and its subsidiaries due to their involvement in serious IHL violations;
 - Not entering into new partnerships with Rosatom, given its legal, ethical, and reputational risks; and
 - Banning Rosatom-linked entities from public procurement and energy sector partnerships.
- Impose expanded targeted sanctions by:
 - Broadening and imposing punitive sanctions against Rosatom, especially in the EU and other states yet to act, including:
 - Bans on new contracts and existing nuclear cooperation;
 - Restrictions on equipment, services, and technology exports;
 - Financial sanctions—asset freezes and transaction bans;
 - Export/import controls on nuclear materials, especially enriched uranium; and
 - Sanctions on Rosatom subsidiaries tied to military procurement and nuclear weapons development; and
- Call on Russia to release all unlawfully detained Ukrainian civilians, including Enerhodar residents and ZNPP employees.

To the bodies of the UN: The UN Secretary General:

- Appoint a Special Envoy for the Protection of Civilian Infrastructure and Nuclear Safety in Armed Conflict who is mandated to:
 - Coordinate international efforts to ensure the demilitarization of the ZNPP and the protection of nuclear facilities in Ukraine;
 - Engage directly with all relevant parties, including the Russian Federation, to secure the immediate withdrawal of military personnel and equipment from the plant;
 - Serve as a dedicated focal point for monitoring threats to nuclear facilities in conflict zones or areas at risk of political instability, including nuclear power plants in regions with rising tensions and report regularly to the UN Security Council and General

Assembly on the status of the ZNPP and other critical civilian infrastructure;

- Facilitate cooperation with the IAEA and the Office of the High Commissioner for Human Rights (OHCHR) to ensure independent monitoring, risk assessment, and accountability for IHL violations; and
- Reinforce international norms under IHL and human rights law regarding the protection of nuclear infrastructure, advocate adherence to the IAEA's Seven Indispensable Pillars of Nuclear Safety and Security and to the Five Concrete Principles in all conflict-affected areas, and push for the inclusion of nuclear safety protections in UN Security Council resolutions, peacekeeping mandates, and ceasefire agreements.

Concrete Principles, naming the responsible party when evidence is clear;

- Publishing frequent and detailed public reports, with annexes containing factual incident logs, timelines, and photographic or sensor evidence; and
 - Briefing the UN Security Council and General Assembly with clear language on violations, highlighting both immediate risks and structural threats caused by military control and staff coercion; and
- Demand Rosatom's full compliance with both the Seven Pillars of Nuclear Safety and Security and the Five Concrete Principles at the ZNPP and work to prevent any restarting of the plant under military occupation without independent oversight.

OHCHR:

- Increasing monitoring and public condemnation by:
- Incorporating findings on systematic detention and torture in Enerhodar into OHCHR reports and deploying investigative teams; and
 - Publicly calling for the immediate release of unlawfully detained civilians, including Enerhodar residents and ZNPP staff; and

UN Global Compact:

- Assess Rosatom's compliance with UN Global Compact principles. If violations are confirmed, immediately suspend its membership to uphold the Compact's integrity.

To the IAEA:

- Publicly document and attribute safety violations by:
- Moving beyond generic safety updates to specifically document instances where occupational practices violate both the IAEA's Seven Indispensable Pillars and the Five

To the Council of Europe Commissioner for Human Rights:

- Conduct a thematic investigation and public reporting, including by:
- Launching a special thematic report on human rights violations against ZNPP personnel and Enerhodar residents, documenting arbitrary detention, torture, coercion, and restrictions on freedom of movement, highlighting the direct connection between these abuses and compromised nuclear safety culture;
 - Including ZNPP-related findings in annual or *ad hoc* reports to the Committee of Ministers and Parliamentary Assembly of the Council of Europe;
 - Issuing formal public statements naming Russia's treatment of ZNPP staff and Enerhodar civilians as violations of the European Convention on Human Rights and IHL; and
 - Organizing public hearings or expert panels focused on "Human Rights in Occupied Nuclear Facilities", using the ZNPP as the primary case study to highlight the connections between the nuclear safety threat

and the grave human rights emergency in and around the ZNPP.

- Mobilize members to demand governments cut ties with Rosatom and support persecuted Ukrainian energy workers.

To Ukrainian State institutions:

- **The Ministry of Foreign Affairs:**
 - Integrate report findings into diplomatic efforts, international statements, and submissions to global bodies.
- **Energatom (Ukraine's state-owned nuclear power generation company):**
 - Use these report findings in public communications and international engagement with nuclear institutions.
- **The Office of the Prosecutor General:**
 - Include evidence from this report in ongoing investigations of IHL violations in Enerhodar, addressing both individual and institutional accountability, including Rosatom; and
- **Law enforcement:**
 - Ensure legal assessments of ZNPP personnel and civilians under occupation reflect the coercive environment, including torture and threats, limiting voluntary agency.

To civil society organizations, environmental activists, and the academic and scientific communities:

- Publicly recognize the ZNPP as a high-risk environmental and public health issue;
- Raise awareness of the situation at the ZNPP and demand justice by engaging governments, supporting justice and accountability for torture survivors and detainees, and conducting further research to further elucidate the issues detailed in this report;
- Advocate for full compliance with international safety standards, oppose any plant restart under occupation and push for the site's demilitarization;
- Further engage with ways in which survivors of repression and their families can be assisted in terms of psychological, legal, and humanitarian support; and
- Call on Russia to release all unlawfully detained Ukrainian civilians, including Enerhodar residents and ZNPP employees.

To nuclear sector businesses:

- Cease all direct and indirect ties with Rosatom due to its role in grave human rights violations and nuclear safety breaches.

To international trade unions:

- Publicly condemn Rosatom's involvement in human rights abuses, war crimes and crimes against humanity; and

This list of recommendations and addressees is not exhaustive. Institutions, organizations, and individuals with the capacity and mandate to advance the objectives outlined above are also encouraged to take appropriate action to prevent further safety, security, and human rights breaches and to ensure accountability for the violations examined in this report.

Methodology

This report examines developments in Enerhodar and at the ZNPP from the onset of the Russian occupation from March 2022 to June 2025. A significant part of this research relies on in-depth interviews with survivors and witnesses, which Truth Hounds conducted between March 2023 and June 2025, interviewing 39 individuals, including 20 ZNPP employees. Truth Hounds informed all participants about the purpose and voluntary nature of the interviews and the ways and formats in which their information could be used. The interviews were conducted in Ukrainian and Russian, analyzed, and uploaded to a secure database. All interviews were conducted in accordance with the documentation methodology employed by Truth Hounds and adhered to the Code of Ethical Conduct for Field Researchers. For security reasons, the identities of all interviewees have been anonymized and any potentially identifying details have been excluded from the interview excerpts included in this report.

In addition, Ukrainian NGO the Association of Relatives of Political Prisoners of the Kremlin, which documents war crimes in Zaporizhzhia Oblast, shared statements from 17 residents of Enerhodar who have since left the occupied territory with the Truth Hounds research team. These accounts contained additional contextual information about the occupation of the city and the ZNPP.

Both the monitoring and research teams at Truth Hounds tracked open-source information, including Russian and Ukrainian media outlets, local Telegram channels, and the social media pages of Ukrainian officials and representatives of the occupying administration. During the conflict, Telegram channels emerged as crucial informa-

tional conduits in occupied territories, where they serve dual functions: facilitating communication among residents, while simultaneously providing platforms for occupying administration announcements and messaging. This dual role makes these channels valuable research sources, as they capture both grassroots community responses and official administrative practices in areas with restricted media access. This information collection focused not only on incidents that may indicate violations of IHL, but also on a broader range of developments occurring in the occupied city, such as administrative changes, civilian restrictions, and social dynamics under occupation.

Information about Rosatom's governance and business activities, international operations, and related issues was gathered from Russian official sources, the corporation's annual reports, statements by its representatives, and thematic analytical reports and articles. This report incorporates research and analysis from specialized organizations, including the Bellona Foundation's nuclear safety assessments, World Nuclear Association industry data, Royal United Services Institute (RUSI) security analysis, and Columbia University's Center on Global Energy Policy research on nuclear markets and geopolitical implications.

To assess the threats posed to the ZNPP under Russian occupation, the Truth Hounds team collaborated with Greenpeace Ukraine Senior Nuclear Specialist Shaun Burnie and conducted interviews with nuclear professionals who had worked at the plant and later fled the occupied territories.

Truth Hounds' legal expert conducted targeted analyses of collected data, including interview

transcripts, open-source information, and expert assessments, to evaluate the consistency of findings with potential violations of IHL and ICL.

Information obtained from witness testimonies and open sources was analyzed independently and, where possible, used in a complementary manner to build a more comprehensive understanding of local realities.

Limitations

This report is based on diverse sources and methods. However, several limitations should be acknowledged.

First, the different thematic areas covered in the report are not addressed in equal depth across the whole reporting period. This variation primarily reflects the availability and nature of the source base relevant to each topic. For example, information concerning torture and other forms of ill-treatment mainly relates to 2022 and 2023, as it became increasingly difficult to access reliable accounts afterwards. This was due to a sharp decline in the number of people leaving the city and growing challenges in identifying and safely communicating with individuals possessing relevant knowledge. By contrast, the analysis of violations and risks related to nuclear safety and security spans the entire reporting period, up to June 2025, supported by a broader and more sustained source base. This includes eyewitness accounts and public statements by Russian officials, expert assessments, and other open-source materials.

Second, the nature of the primary source material used to document torture, ill-treatment, and broader experiences of life under occupation presents specific methodological challenges. Most relevant information comes from retrospective personal statements. While these statements provide valuable insight into the lived experience of occupation, capturing its atmosphere, everyday impacts, detention experiences, and other dimensions often absent from other available sources, they are also shaped by the psychological effects of trauma, memory distortions, and the emotional

toll of torture and detention experiences. Beyond these trauma-specific factors, the accounts reflect the interviewee's subjective perception, personal background, ideological orientation, and interpretive framework. There is additionally a risk of recall bias, where events may be unintentionally misremembered, and social desirability bias, whereby respondents may frame their answers in ways they believe to be more acceptable or expected rather than strictly accurate.

Third, as with any qualitative research, there exists a potential for researcher bias. Efforts were made to stay closely grounded in source material: information was cross-checked across multiple sources, discussed within the research team, and external reviewers were engaged to identify potential gaps or inconsistencies. Nevertheless, researchers' backgrounds, assumptions, or interpretive tendencies may have influenced how certain statements were understood, categorized, or prioritized.

Finally, due to serious security concerns, all interviewees were granted anonymity, which limited cross-referencing and external verification of certain personal accounts. While this measure was essential to ensure the safety and wellbeing of participants, it may affect the perceived transparency and verifiability of some findings for external audiences.

These risks were actively considered and steps were taken to mitigate them throughout the report preparation process, but they cannot be entirely excluded.

SECTION 1.

From Invasion to Control: Russian Occupation of Enerhodar and the Zaporizhzhnia Nuclear Power Plant

1.1 Introduction

Russia's seizure of the ZNPP on March 4, 2022, created an unprecedented situation: the first military occupation of an operational nuclear facility in history. This action transformed both the plant and Enerhodar into a testing ground for a new occupation model—one where Rosatom, Russia's state nuclear energy corporation, would emerge as the primary instrument of territorial control.

This section traces the evolution of the occupation of Enerhodar from a period of civilian resistance through to systematic repression and corporate administration, revealing how a state corporation can function as an occupying authority, managing everything from reactor operations to schools and municipal services. While this section focuses on the situation into which the city was thrust after the onset of Russia's full-scale invasion, [*Annex I*](#) provides a concise contextual overview of the wider region and of Enerhodar itself, outlining its development and pre-war history. This additional context helps to situate the dynamics of the occupation within a deeper local history.

1.2. The Establishment of the Occupying Regime: From Capture to Administrative Control

On the morning of February 24, 2022, columns of Russian military equipment advanced from annexed Crimea towards Ukraine's Kherson and Zaporzhzhia Oblasts. Occupying forces moved swiftly through southern Ukraine, unlike in other operational areas, where they faced large-scale organised resistance from the Ukrainian military. On the first day of the full-scale invasion, Russian units established control over several major settlements in Kherson Oblast: Kakhovka, Nova Kakhovka, Oleshky, and Henichesk. A rapid offensive deep into Zaporizhzhia Oblast led to the capture of Melitopol on February 26, 2022, creating a direct threat to Enerhodar, located 85 km northwest of the city.

Like the rest of Ukraine, Enerhodar implemented a series of security measures: martial law, a curfew, blackout protocols, and suspension of the work of educational establishments.⁴ The city prepared defenses, reinforcing patrols, civil defense shelters, and a checkpoint built at the main road on February 27. The city's strategic facilities, the ZNPP and the Zaporizhzhia Thermal Power Plant (ZTPP), continued operating under normal conditions.⁵

The night before February 27, advancing Russian units entered the village of Velyka Bilozerka, 20 km from Enerhodar, and stationed personnel on the premises of the local police department.⁶ However, further attempts to advance in this direction were met with non-violent resistance from the local community and municipal authorities. On February 28, at least 1,000 local residents gathered at the checkpoint to block the main entrance to the city. Defenses were reinforced with barricades made from cars and trucks, sandbags, and Czech hedgehogs (static anti-tank obstacles made from

metal angle beams).⁷ After negotiations with Mayor Dmytro Orlov and his deputy Ivan Samoidiuk, Russian forces refrained from entering the city.⁸ The determination of the local community to resist the offensive delayed the arrival of Russian troops by two further days.

One episode in particular, shared with Truth Hounds, illustrates the spontaneous self-organization of residents in producing anti-tank barriers:

"[...] I had a welding machine, an angle grinder—tools to make these hedgehogs. [...] I gathered everything and contacted the guys who volunteered in Enerhodar at the time... When the process was set up, people started coming one after another, bringing rebar, iron, rails—already cut up with a gas torch! They were bringing more and more and coming in with their own welding machines. Literally within half a day, we already had seven or eight machines, 20–30 people working, and that's just our site. Our power grid couldn't handle this load, so we were getting additional trusses from other directions to reinforce the power grid. I remember this guy came, an elderly man, very old, and said: 'Guys, I have a welding machine. How can I help?'; and he stood there with us and welded these hedgehogs. Still gives me the chills to remember it."⁹

On March 3, around 4:20 pm, the situation escalated. Russian troops launched a new assault on the city, shooting at the checkpoint from a tank¹⁰ and later attacking the newly formed local territorial defense forces¹¹ from Vasylivskyi Raion.¹² The unequal battle and further retreat of the garrison

of Military Unit No. 3042 of the National Guard of Ukraine, as well as the territorial defense forces, led to the breaching of the checkpoint and enabled the advance of Russian columns toward the city's main strategic facility, the ZNPP.¹³

An armed clash between Russian and Ukrainian units took place directly on the territory of the ZNPP at about midnight¹⁴ and lasted until morning, resulting in casualties on both sides. Russian shelling of the ZNPP's training center reportedly caused a fire that jeopardized the safety of the facility according to the State Emergency Service of Ukraine.¹⁵ Following negotiations, Ukrainian National Guard servicemen were taken prisoner by Russian forces, and local emergency responders were only allowed to extinguish the fire on the morning of March 4.¹⁶

1.2.1. Disordered Control and Active Resistance

The establishment of Russian military control over the city and the ZNPP marked the beginning of a short but important period characterised by the absence of clear procedures for interaction between the occupying administration and residents. This manifested itself in uncertainty about the mechanisms for control of civilian infrastructure and in the disorganized actions of Russian military units. In particular, Truth Hounds recorded instances where, without making proper maps, Russian forces would haphazardly mine and de-mine the ZNPP¹⁷ and repeated "captures" of administrative buildings when newly arrived units attempted to storm facilities that were already under Russian control.¹⁸

These inconsistencies led to the emergence of a kind of "gray zone" within governance arrange-

ments, exacerbated by the city's isolation. The city faced severe shortages of food and medicine, with residents enduring hours-long bread queues. By September 2022, informal supply networks emerged to provide basic necessities.¹⁹

In addition, Ukrainian municipal authorities refusing to cooperate with the occupying regime were able to continue to operate within Ukraine's legal framework.²⁰ The city administration focused on resolving critical humanitarian issues: restoring infrastructure damaged by hostilities, providing for necessities, and organising the evacuation of civilians through humanitarian corridors to Ukrainian-controlled territory. Humanitarian corridors through Vasylivka operated intermittently in March and April 2022. Despite several failed attempts due to shelling, thousands escaped—the March 9 convoy alone included 12 buses and approximately 100 private vehicles which reached Zaporizhzhia.²¹

Resistance to occupation in Enerhodar was strengthened, in part, by the consistent actions of municipal institutions. Most city council members resigned at the mayor's initiative, the local TV channel, ENTS, ceased broadcasting, and the Department of Education's decision to place its staff on leave disrupted Russian attempts to assert control over the school system. In addition, there were public demonstrations against the occupation, centered on a square featuring a bust of Taras Shevchenko²² in front of the Suchasnyk Palace of Culture.²³ Protests drew up to 1,500 participants, including notably on March 20, demanding the release of abducted Deputy Mayor Ivan Samoidiuk, demonstrating significant community resistance.²⁴



A peaceful protest in Enerhodar on March 20, 2022, demanding the release of abducted Deputy Mayor Ivan Samoidiuk. Source: the Telegram channel of Dmytro Orlov.

¹¹ The formation of territorial defense forces took place directly during active hostilities, when local civilian volunteers self-organized to protect their localities. On Jan. 1, 2022, these units were integrated into the Territorial Defense Forces of the Armed Forces of Ukraine, *i.e.*, the reserve military component of the Armed Forces of Ukraine formed to protect territorial integrity at the local level.

¹² Vasylivskyi raion is one of the 5 administrative units of Zaporizhzhia Oblast centered in the city of Vasylivka. Enerhodar is part of this raion.

²² Taras Hryhorovych Shevchenko was a Ukrainian poet, writer, artist, public and political figure, and folklorist, whose writings are regarded as the foundation of modern Ukrainian literature and, to an extent, modern Ukrainian language itself.

1.2.2. Three Levers of the Occupying Regime's Transformation

Between late March and early April 2022, through a combination of administrative measures, coercion, and propaganda, the occupation shifted from chaotic to structured. A rapid shift in policy can be most clearly traced in the systematic dismantling of legitimate local government structures. March 26 marked the starting point of this transformation, when an occupying "militia" began operating under Oleksii Selivanov, a former Ukrainian military officer who defected to Russia in 2014.²⁵ The establishment of this body was accompanied by the formation of so-called "Cossack squads"²⁶ subordinated to Selivanov, which patrolled the city alongside the police. Selivanov publicly called on residents to join the ranks of the "militia" and to surrender unregistered weapons, marking the beginning of systematic Russian control over the civilian population.²⁷

The next step in establishing an occupying system of control was the formation of the City Self-Organization Council on March 27, 2022, led by Andrii Shevchyk, a local council member and leading ZNPP engineer.²⁸ The emergence of this body marked a shift from *ad hoc* military governance to a formal occupying administration. This transition was accompanied by now-systematic persecution of legitimate Ukrainian authorities, reaching a critical point at the end of April, when Mayor Dmytro Orlov, facing direct threats of physical violence and arrest, was forced to flee the city. Local administrative institutions that collaborated with the occupying authorities cleared the path towards gradual, methodical reorganization of municipal services and companies.²⁹

The initial phase of occupation was characterized by active civil resistance, including demonstrations and public refusals to cooperate. On April 2, 2022, however, Russian forces violently dispersed a protest, marking the first recorded instance in the city of stun grenades and riot control weapons being used against peaceful demonstrators. This marked the start of Russian military, security, and

special forces targeting repressive actions against specific categories of the population.

From April to September 2022, the repressive component of the occupation policy manifested primarily in the systematic persecution of clearly identifiable categories of the population: members of the territorial defense forces, veterans of the war in eastern Ukraine, officials who refused to cooperate, and pro-Ukrainian activists.³⁰ Cases documented by Truth Hounds attest to the systematic nature of this approach, which followed a consistent pattern of abduction, detention, and coerced confession. For example, the head of the local State Emergency Service, Vitalii Troian, was abducted on May 19—an event sparking protest by emergency responders—and after a month-long detention, was forced to publicly "confess" to supporting Ukraine.³¹

An armed attack on Serhii Shvets, an employee of the ZNPP and a participant in the events at the checkpoint on March 3, also evidences the consistent persecution of civilians. According to the media outlet Vikna, "rumours spread in Enerhodar that somebody had 'leaked' the lists and addresses of ATO veterans [veterans of the war in eastern Ukraine] and territorial defense members to the occupiers. There was no longer any way to flee the city after the so-called purges had begun, so Serhii had no choice but to wait for them to come for him".³² This targeting of specific groups and individuals indicated a shift from the previously chaotic application of violence to its systematic use as a tool of control over the city.

To establish total control over the city's civilian population, occupying forces undertook large-scale data collection.³³ One eyewitness recounted the following:

"Thanks to local collaborators, [the Russians] gained access to video surveillance in Enerhodar, which no one had disabled. Moreover, a local boy there, a long-haired one—I don't know his first or last name—granted them access to a video archive of the Enerhodar surveillance system... Where, like, you see roads, main crossroads, even some house yards. And the 'orcs' started taking screenshots of cars, of people—that is, purging everyone, doing the so-called

²⁶ The Russian Kazak ("Cossack") movement is a modern paramilitary structure ideologically supporting the Kremlin, which is used to establish control over the occupied territories.

*'filtration', slowly purging activists involved in the resistance. Those who were among the first to be taken suffered most: beatings, mutilation, they would be shot from rubber-bullet handguns, beaten with batons or sticks...*³⁴

Simultaneously, the city's information space was undergoing a brutal transformation. Broadcasts of the local TV channel ENTS and other Ukrainian media outlets were replaced with Russian radio, digital television, and newly created regional newspapers, such as Melitopolskiye Vedomosti.³⁵ These Russian broadcasts focused on changing cultural narratives. In early May, the central library removed literature about the Ukrainian national movement, the Revolution of Dignity, and the war in eastern Ukraine. Instead, exhibitions dedicated to the so-called "Great Patriotic War"³⁶ were organized in city libraries, including school libraries.³⁷

A symbolic demonstration of the new ideological order was the "Immortal Regiment" organized by the occupying authorities on May 9, 2022, which gathered roughly 1,000 participants carrying Soviet flags and portraits of Red Army soldiers. This event holds a special place in the occupation strategy: the cult of the "Great Victory" is a cornerstone of Russia's state ideology.³⁸ The attempt to recreate the traditional Russian format of celebrating May 9 in Enerhodar aimed to demonstrate the "normalization" of life and the city's integration into the Russian ideological sphere. The head of the "occupation police", Oleksii Selivanov, characterized this event as a moment when "the ice melted" in Enerhodar—a rhetorical formula reflecting the typical portrayal of the military occupation as a "reunion" and "return to normal" in official Russian narratives.

1.2.3. The Cyclical Logic of Violence

The structure of the occupying authorities' campaign of terror is also revealed through its temporal patterns: "I understood this abduction was imminent because they took everyone for introduction first, then they took them to questioning, intimidation, then gave people two weeks to think,

and then they circled back to those they had processed and took them to the basement."³⁹

Alongside its temporal organization, this system of terror involved an element of bureaucratization. Violence became not only routine but also quasi-institutional, including detentions, interrogations, torture, and breaks between different phases, which all point to the presence of an internal, almost procedural logic. One interviewee described the experience to Truth Hounds:

*"People started being actively persecuted for their pro-Ukrainian stance. Among them were representatives of the nuclear power plant, of course. [...] Most of them, of course, are men, but there are also cases where women end up in torture chambers. Some were there for a week, some for a few months, and those who get out under certain conditions—like promising not to leave Enerhodar—then have to report regularly to the local police department organized by the occupying authorities."*⁴⁰

The cyclical logic of repression, from the initial "introduction" through a series of interviews to the deprivation of freedom, indicates a coordinated, intentional terror mechanism accompanied by an inherent, predictable "rhythm". Cycles of violence create a special temporal regime of occupation, where the constant threat of a new cycle becomes a tool in itself for controlling the city's daily life.

Studies of the institutionalization of violence in conflict zones show how systematic repression transforms terror from situational violence into an element of the "new normal".⁴¹ In the case of Enerhodar, this manifested as the formation of a parallel control system alongside the civilian administration, where violence took on the form of a highly formalized process with its own protocols, cycles, and bureaucratic routines.

³⁶ The "Great Patriotic War" is a term introduced through Soviet historiography to refer to the period of the Second World War between the Soviet Union and Nazi Germany (1941–1945). In today's Russia, the cult of the "Great Victory" is one of the cornerstones of state ideology. Different post-Soviet countries have their own interpretations of this historical period according to their individual national historical narratives and contemporary political contexts.

³⁹ "To the basement" (in Ukrainian: "на підвал") is a colloquial expression commonly used to denote (mostly unlawful) detention by security services or military personnel. The term originates from the frequent use of basement facilities as informal detention centers; Survivor ID: En-025.

These are the conditions under which the “new normal” was constructed: a system where narratives carrying ideology gradually displaced the community’s collective experience and the public space was filled with rituals that normalized and legitimized the occupation. Terror became integrated into the very fabric of the administrative system and the procedures associated with police “check-ins” and other bureaucratic formalities were inseparable from the experience of torture that preceded it. The physicality of repression, the concrete pain, fear, or agony of the detainees at this stage became not simply a consequence of uncontrolled violence, but also part of a well thought-out system of managing the population of the occupied territory.

This resulted in a change in residents’ behavioral patterns. The nature of such self-censorship practices and their use are well illustrated by the instructions that one of the eyewitnesses interviewed by Truth Hounds shared with their child: “We explain [to the child]: ‘You understand the whole situation, don’t talk to anyone too much.’ The child should already understand that you have to live as if in two worlds: don’t stand out, don’t say too much, don’t answer various stupid questions, you just listen and nod, don’t blab.”⁴²

The systematization that has been characteristic of the occupying regime in Enerhodar since April 2022 covered three main spheres: (1) administrative, through the formation of new administrative bodies and forced reorganization of municipal services; (2) information and propaganda, by transforming the media environment and implementing Russian historical narratives; and (3) repressive, through the institutionalization of terror as a tool of control. It is fundamental to understand the interconnection of these spheres: administrative procedures relied on the repressive apparatus, the propaganda campaigns produced a new “normal” of occupation, and terror coerced compliance with the new system of governance.

⁴⁴ The cold shutdown of nuclear power plant power units is a technical mode when the reactor stops completely and the coolant temperature goes below 70°C. In this mode, the power unit does not generate electricity but remains under security system control to evacuate residual heat from nuclear fuel with minimum energy consumption of the plant itself.

1.2.4. A “Dual-Control” Regime: The Specifics of Nuclear City Occupation

Unlike the rest of the occupied territories in the Zaporizhzhia and Kherson Oblasts, the status of a nuclear city, assigned to Enerhodar since Soviet times, took on an unexpected structural significance. The presence of the facility which defined the city led to a unique administrative configuration, differing from the unified work principles of military-civil administrations in other occupied cities.

Despite Russian forces’ *de facto* control over the ZNPP, the plant lacked formal status within Russia’s nuclear system, resulting in double subordination: *de jure* to Ukrainian Enerhoatom and *de facto* to Russian structures. This legal ambiguity posed unique challenges—unlike other occupied cities where military administrations operated autonomously, Enerhodar’s governance required managing complex nuclear infrastructure that remained technically integrated with Ukraine’s energy grid.⁴³

Thus, during the spring of 2022, the situation at the ZNPP still had characteristics of a “dual-control” system. Despite the physical presence of occupying forces at the plant, power was still supplied to the Ukrainian grid, albeit in very limited quantities, with only a minimal number of power units functioning, the rest having been switched to a cold shutdown mode. In addition, the personnel rotation system was preserved and Enerhoatom retained some leverage over personnel policy.⁴⁴ For example, Enerhoatom fired three employees on May 17 for collaborating with the occupying administration.⁴⁵

1.2.5. The ZNPP Undergoing an Occupying Regime Transformation

Both the occupation itself and Russian forces’ intention to expand and strengthen their control over every aspect of Enerhodar during the spring

and summer of 2022 placed ZNPP personnel and the plant's functioning under novel conditions.

First, the technological nature of the ZNPP led to a conflict between the nature of contemporary nuclear operations and the logic of military occupation. Over the decades, the plant developed a complex sociotechnical system, whereby the safe functioning of individual power units is inextricably linked to the experience of specific operators and engineers. A statement by one plant specialist corroborates this dependence:

"I worked at the NPP for [many years], but if you transfer me from my power unit to a similar position, say, in [a different] power unit, I'd be lost and may possibly make a mess, especially if you put me in charge of a reactor. On paper, it would seem like everything is the same in every unit, but there are actually many differences and, at each unit, the equipment acts differently in different situations."⁴⁶

The system's "individuality" makes personnel irreplaceable and embeds the professional community of nuclear engineers into the plant's infrastructure. Under occupation, this creates a paradox: those targeted by the regime's repressive apparatus are essential to operating the facility. Documented detentions of ZNPP employees with pro-Ukrainian views introduced serious operational risks, as each removal of a specialist disrupted the plant's technological continuity with no adequate replacement. Statements suggest these detentions were widespread, with entire departments seeing employees successively "disappear", fostering an atmosphere of expected repression.⁴⁷

In early June 2022, the head of the Russian military administration and the occupying mayor of Enerhodar informed ZNPP department heads that the plant would be transferred to Rosatom's jurisdiction in the fall, signaling a shift from military oversight to institutionalized corporate control.⁴⁸

The Russian forces' commitment to systematizing the occupation and achieving complete control led to an increase in their military presence at the ZNPP. In the summer of 2022, the plant underwent continuous militarization, becoming a permanent base for military personnel and equipment. For

example, an official IAEA report documented the presence of military equipment in the turbine halls of ZNPP power units, which are critical infrastructure areas directly related to the functioning of reactor cooling systems.⁴⁹ Recently released video evidence from the Permanent Mission of Ukraine in Vienna showed the extent of this militarization, documenting a Russian soldier firing from a plant window (footage verified by Reuters in June 2025).⁵⁰ Changes in the use of the nuclear facility's grounds are indicated by satellite images from July 19, in which BBC journalists discovered around 40 military vehicles and elements of fortifications on the of the plant grounds.⁵¹

By the end of August 2022, monitoring data from the European Space Agency had noted the presence of S-300 anti-aircraft missile systems directly next to the reactor units.⁵² At that time, the IAEA and other technical observers recorded multiple incidents in the area of the ZNPP and regular disruptions of the external energy supply, which complicated the maintenance of standard nuclear safety and security modes at the plant.⁵³

In August 2022, safety and security at the ZNPP deteriorated. A series of shellings on August 5, 6, 13, and 20 led to the destruction of objects on the plant grounds. On August 25, the plant was briefly disconnected from the electricity grid due to damage caused to the Zaporizhzhia Hydroelectric Power Plant.⁵⁴ This situation garnered a significant international response: on August 11, UN Secretary-General António Guterres called for the cessation of hostilities near to the ZNPP and the withdrawal of troops from the plant.⁵⁵ In early September, the IAEA sent an inspection mission to the ZNPP, led by agency Director Rafael Grossi, which resulted in the deployment of permanent observers in Enerhodar.⁵⁶

However, this international presence was unable to prevent further destabilization. On September 11, 2022, the power plant lost its connection to the Ukrainian power system due to damage caused to communication lines, which created additional risks to its safe operation.⁵⁷ As a result, all six power units of the plant were put into cold shutdown mode.

The situation during the early months of the occupation illustrates that controlling the ZNPP by force

was not effective enough, considering the setup of the ZNPP itself.⁵⁸ Its complexity, as well as the personnel's integrity and technical knowledge, led to a situation where a military presence was insufficient to regulate the ZNPP. In addition, in the late summer and fall of 2022, the plant's connections with the Ukrainian power system were gradually severed, which significantly impacted the plant's operation.⁵⁹ One plant employee shared:

"My colleagues and I analyzed all this shelling of the ZNPP at the end of the summer and throughout the fall of 2022, when the power plant and the power lines connecting it to Ukrainian energy systems were constantly shelled. This was all done because, for as long as we could, we provided energy from two power units to the Ukrainian system, supplied electricity to the grid, though it was quite difficult, not easy at all. We held on like this until October 2022 and when the Russians realized that we were not disconnecting from the Ukrainian energy systems, they began shelling. And we saw the results of these attacks, that in order to hit where they wanted to hit, I could advise the military where to hit so that the plant would be disconnected from the lines. Regular military personnel don't have the competency to know where they can and cannot shoot. The nuclear plant itself did not suffer critical damage during this shelling, but its work for the Ukrainian energy system stopped completely."⁶⁰

During the same period, Ukrainian special services attempted to regain control over the ZNPP. According to the head of the Main Directorate of Intelligence of the Ministry of Defense of Ukraine, Kyrylo Budanov, operations in August 2022 significantly slowed down the occupying administration's plans to connect the ZNPP with the Russian energy system. This allowed the plant to maintain links to the Ukrainian power grid longer than intended by the occupying authorities, although they were ultimately unable to prevent the severance of these links.⁶¹

The occupying authorities sought to subordinate the power plant to Rosatom, employing a combination of coercion and administrative changes. Statements gathered by Truth Hounds mention

the systematic abduction of ZNPP employees to ensure loyalty to Rosatom. The following remark by Enerhoatom President Petro Kotin on July 25 explains the idea of this process: "Only some people go back to work afterward, but with their mental health broken, having made statements that they love the 'Russian World'."⁶² These practices of individual terror created a firm foundation for the future transformation of the plant. Through psychological pressure and intimidation, Russian forces groomed a group of employees ready to collaborate with the occupying administration, with the former eventually having to facilitate the full integration of the facility into Russia's energy system.

September 2022 marked the transition to the final stage of the institutionalization of the occupying regime, when the Russian authorities began an unprecedented escalation of their policy towards the occupied territories.

1.3. The Third Stage of Occupation: Formalizing the Annexation and Systemic Reorganization of the ZNPP

1.3.1. Accelerating Institutionalization: Transition to Political Coercion and Reorganization at the ZNPP

The institutionalization of the occupying regime reached its final stage in the fall of 2022, marked by the formal consolidation of Zaporizhzhia's annexation. Referendum processes became a key mechanism in transitioning from military occupation to attempts to legalize the occupation of the territory.

The occupying authorities, with the support of the Russian Federation's Central Election Commission, began laying the foundation for the pseudo-electoral mechanism on July 23, 2022. The self-proclaimed "head of Zaporizhzhia Oblast", Yevhen Balytskyi, appointed Halyna Katiushchenko, a former Melitopol City Council member, as the head of the regional electoral commission.⁶³ The regional electoral commission later reported that 93.11% of voters voted to make Zaporizhzhia Oblast part of Russia during the referendum held on September 23–27.⁶⁴ This figure cannot be interpreted as a genuine expression of will, but rather serves as an attempt to legitimize the takeover of the region.

Miroslav Jenča, Assistant UN Secretary-General for Europe, summed up the position of the international community, stating: "The so-called elections in the occupied areas of Ukraine have no legal grounds."⁶⁵ Similarly, UN General Assembly Resolution ES-11/4 of October 12, 2022, resolutely

condemned the elections and recognized that they could not serve as a basis to change the status of Ukrainian territories.⁶⁶

The rejection of the referendum by the UN, Organization for Security and Co-operation in Europe, the North Atlantic Treaty Organization, and the EU not only reflected the international community's political position but also underscored the legal impossibility of recognizing such processes within the framework of IHL. Nonetheless, this referendum became the formal pretext for the announcement on September 30, 2022, of the annexation of 4 Ukrainian oblasts, including parts not controlled by occupying forces. After the seizure of Crimea in 2014, it became the first act of annexation through direct military seizure, opening the way for occupying authorities to implement Russian legislation in occupied territories and creating the legal basis for the complete institutionalization of the occupying regime.

The consequences of Russia's escalation also involved the ZNPP, through a combination of administrative and coercive measures implemented during the very first week following the official proclamation of the annexation. First, on October 3, 2022, ZNPP director, Ihor Murashov, was detained and deported to Ukrainian-controlled territory.⁶⁷ On October 5, 2022, Putin signed a Decree on "the Peculiarities of the Legal Regulation of Nuclear Power Use on the Territory of Zaporizhzhia Oblast". Through this document, he declared the ZNPP to be Russian state property and transferred the right to operate it to a newly created Rosatom subsidiary, the "Zaporizhzhnia

Nuclear Power Plant Operating Organization". In this way, the separation of the plant from the Ukrainian energy system and its integration into Russian structures were fully and irrevocably formalized.

In late November 2022, the ZNPP's former chief engineer, Yuri Cherniyuk, was appointed as its director.⁶⁸ Previously, pressure was exerted on ZNPP personnel to ensure the loyalty of individual employees; under Cherniyuk, a systemic reorganization of the ZNPP's entire personnel structure was implemented. Rosatom started openly encouraging ZNPP personnel to sign new agreements with the newly created organization. Even so, according to Cherniyuk himself, about half of the personnel had left as of late 2022. To overcome the personnel crisis, Rosatom also began filling vacant positions with specialists from Russia, despite the obvious security risks. This meant not only personnel turnover, but also a major transformation of the professional community that had formed over decades and whose experience had been a crucial factor to ensure the plant's nuclear safety and security.⁶⁹

The intensity of changes implemented by the occupying regime in the fall of 2022—from the pseudo-referendum to a radical reorganization in the management of the ZNPP—reflected a strategic attempt to reinforce the new situation in the occupied territories by formalizing control. This period laid the institutional foundations of the new *status quo* that remains as of June 2025 in the occupied territories of Zaporizhzhia Oblast.

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The intensity of changes implemented by the occupation regime in the fall of 2022—from the pseudo-referendum to a radical reorganization in the ZNPP management—reflected a strategic attempt to reinforce the new situation in the occupied territories by formalizing the occupation control. This period laid the institutional cornerstones of the status quo that remains as of June 2025 in the occupied territories of the Zaporizhzhia Oblast.

1.3.2. Expanding Rosatom's Influence on Management Processes

Against the backdrop of the institutionalization of the occupying regime in Enerhodar, particular attention should be paid to the evolution of Rosatom's role in the city's governance system. Statements collected by Truth Hounds demonstrate a path of transformation from Russia's initial presence at the ZNPP to the systemic administrative influence on the life of Enerhodar. Broadly speaking, there are two parallel processes that can be singled out as the basis for this expansion.

The occupation of a strategic nuclear power facility required occupying forces to engage with the relevant technical expertise, creating a special environment in terms of the interactions between the occupiers and the Ukrainian personnel, as evidenced by eyewitness statements:

"There were about ten of them at first, and they were not engaged in maintenance as such, they were monitoring the processes and actions of the Ukrainian personnel of Enerhoatom. They were in direct contact with the general director, the chief engineer, and held several joint meetings, at some of which I was also present, all this physical presence of Rosatom representatives, also representatives of the Russian Guard, and representatives of the occupying Russian Armed Forces, who were engaged, as they

say, in 'guarding the nuclear power plant'—it was like that.”⁷⁰

The system of supervision and pressure at the ZNPP involved Rosatom technical specialists, units of the Russian National Guard, and military troops. This explains the approach to establishing control over the occupied nuclear infrastructure, since the so-called “guard of the plant” essentially both protected it and pressured the personnel. Those that were interviewed confirmed that control over the facility was planned from the very beginning as a combination of supervision by Rosatom representatives with coercion of plant employees who had the knowledge and skills needed to operate the plant.

The second process took place at the city administration level through engaging ZNPP employees in transforming Enerhodar into a Russian nuclear city. Even in peacetime, ZNPP administrative staff played a noticeable role in local self-government. For example, Mayor Dmytro Orlov was part of the local trade union of energy specialists.⁷¹ This special feature of the city’s social structure was reflected in the actions of the occupying authorities: the March 27 appointment of ZNPP leading engineer Andrii Shevchyk as the head of the local city council indicated an intention to preserve the peculiarities of municipal governance by ensuring an ostensible continuity of this administrative tradition and to delegate power to a loyal individual familiar with the nature of the city and the plant.⁷²

Rosatom’s presence in Enerhodar gradually transformed from technical supervision of the ZNPP into full control of the city. This approach recreated a management model typical of Russian nuclear cities, where the functioning of the plant and urban infrastructure are closely interconnected, as decisions regarding the plant directly affect energy supply, transport systems, and public utilities. The corporation’s representatives acted in coordination with other elements of the occupying administration, systematically implementing this integrated governance model and positioning Enerhodar within Rosatom’s broader network of nuclear cities. Rosatom, which functioned as a state corporation in the system of Russian authorities, gradually expanded its sphere of influence in Enerhodar, encompassing various aspects of

life in the city, from municipal services to educational and cultural policies. At the same time, statements record manifestations of this inter-agency coordination. A striking example was the system of control over the movement of ZNPP personnel,⁷³ which required well-established interactions between the management structure of the ZNPP and the military contingent of the occupying forces in the city: “By the way, one of my acquaintances—I will not mention his name—who obtained a Russian passport, tried to leave Enerhodar and go to Russia and he was simply not allowed out of the city at the checkpoint; he was told to turn around and continue working at the ZNPP.”⁷⁴

In a situation of a sharp decline in the standard of living in the region due to active military hostilities, occupation by military forces, and the constant threat of escalation, the occupying regime views qualified ZNPP employees as a critical, scarce resource that requires special control mechanisms. These employees thus find themselves in a hybrid situation, becoming both hostages of the occupation and personnel employed by Rosatom. As such, the system of terror and the expansion of Rosatom’s powers far beyond purely technical or commercial functions act as interdependent elements: each of them enables the existence of the other within a single structure of control over the strategic facility and the region.

1.3.3. Rosatom as a Key Actor in Personnel Policy in the City

The occupying authorities ranked ZNPP employees based on how essential they were to the plant’s operation. Statements from the nuclear engineers themselves confirm this:

“We have about 150 such licensed people at the ZNPP. To obtain this license, you must meet many criteria—education, work permit, qualifications, length of service, experience, health status... That is, in peacetime, there are 11,000 people employed by the plant and the list of those who were not allowed to leave was 200 people—150 employees

*with a license to operate a nuclear reactor plus 20–30 more people who had a license from the State Nuclear Regulation Office to perform organizational and administrative jobs.*⁷⁵

ZNPP employees described in their interviews with Truth Hounds that such systemic control was executed through the use of databases. One survivor noted:

*But they no longer allowed licensed personnel to leave through Vasylivka since the end of September. So, they started trying to go to Georgia through Crimea. Some of our people somehow 'skipped' this filtration in Chonhar, but on the border with Georgia, the Russian database immediately 'blacklists' our nuclear engineers. The Russian security forces at the border there couldn't really explain the reasons for such a travel ban, but they said, like, you had access to state secrets and they couldn't let you through. What often happened in such cases was that FSB [Russian Federal Security Service] representatives arrived and said: 'You have to go back to the ZNPP. Work there and ensure nuclear safety.'*⁷⁶

Other statements demonstrate that crossing the demarcation line was at the discretion of Rosatom:

*" [...] He was also a nuclear engineer, he was leaving, the first time he wasn't let out, they wrote some papers and said: 'We need a permit that the nuclear [plant] allows you to leave.', 'But they did give me a paper.', 'Who the hell cares about Ukrop [a derogatory term for 'Ukrainian'] stamps, we need one from Rosatom that they don't need you.' This was in Vasylivka during filtration.*⁷⁷

The status of licensed personnel, which creates professional benefits and socioeconomic opportunities in the free market, underwent a paradoxical transformation in the context of occupation, becoming a factor restricting freedom of movement and other basic rights. Amid worsening living conditions due to hostilities and the occupying regime, residents of Enerhodar, including ZNPP workers, sought to leave the city, but were faced with a movement control system.

Evidence shows that the occupying authorities prioritized retaining qualified specialists. According to some reports, they monitored the movement of technical personnel using both local checkpoints and centralized tracking databases.⁷⁸ This signals the strategic significance that the occupying regime attached to retaining qualified ZNPP personnel. The complexity of operating a nuclear facility required multiple oversight mechanisms and coordination across the occupying administration.

These episodes expose an essential characteristic of the Russian occupation, namely the integration of the corporation into the system of repressive control, where Rosatom was given the authority—on a par with military and intelligence services—to decide the fate of Ukrainian nuclear engineers.

The system of control over the movement of personnel and their forcible detention in the occupied territories was only one of the key mechanisms introduced by the occupying regime to establish control over the strategic facility. No less significant was the attempt to institutionally legitimize Rosatom's presence through a system of contracts with employees. Staff statements reveal the inherent dynamics of this process:

*"When the occupiers analyzed that, in the first month [October 2022], out of 2,000 ZNPP employees who signed contracts, 90% were kitchen porters, drivers, those who were already retired, and those who held small positions, they realized that something had to be done about it and continued the tactics of terror and intimidation in November 2022."*⁷⁹

This situation created a two-fold paradox for the personnel: the biggest resistance to cooperation with Rosatom was largely demonstrated by workers, including critical specialists, who were essential to the safe operation of the plant. The reluctance of technical specialists to sign contracts with Rosatom, as noted by an eyewitness to the events,⁸⁰ contradicts the narratives of Russia and Rosatom about the alleged integration of the ZNPP into the Russian energy system and the status of Enerhodar as a Russian city.⁸¹ The chronic shortage of qualified personnel and the need to increase coercive pressure on specialists suggest that the proclaimed successes in integration were,

in fact, superficial and did not accurately reflect the real attitudes of the city's residents, including ZNPP employees.

The situation with respect to control over ZNPP personnel highlights not only the tactical steps taken by the occupying regime, but also certain differences in approaches to the management of nuclear facilities. In particular, Ukrainian nuclear engineers, who have encountered Rosatom's management approaches and heard the perspective of representatives of Russian law enforcement structures about the interaction between the nuclear and law enforcement sectors, highlight the contrast between the two systems:

*"Before the occupation, I spoke with our Ukrainian SBU [Security Service of Ukraine] officers about the nature of work at a nuclear power plant and they are different from the Russians. We have a nuclear power plant of a European country, which was a civilian facility to the highest possible degree: if you never had problems with work, you would never see or talk to those SBU officers in the first place. And the Russians perceived our system the same way they view theirs. From what I understand, if you're a shift manager of a power unit, you have to be like an FSB major at the very least. In a conversation with FSB officers, they said that we should have supervisors in the SBU, to whom we should constantly report—but we don't have such a thing and never did."*⁸²

In particular, technical specialists from the ZNPP express deep concerns about the transformation of the operating mode of the nuclear facility, which they believe is generating unprecedented risks for its technological safety:

"I believe the biggest threat to the nuclear plant and the world is that the Russians have turned the entire nuclear plant into a full-fledged military base. The plant was never designed for such use and the military sees it as sort of a large structure with thick concrete walls and the fact that it carries a nuclear, radiation, technological threat, they are not interested in that. And every-

*thing at the nuclear power plant is run by the military."*⁸³

Everyday practices provide an insight into the militarization of this critical infrastructure facility:

*"In the mornings, these military people did their group runs. It was like ten people jogging there—it felt like you were at a military base, not a protected facility, a nuclear one."*⁸⁴

This transformation of a civilian nuclear facility into a militarized one demonstrates a certain model of control over strategic infrastructure under occupation. The militarization of the ZNPP began from the moment it was captured by Russian troops and continued after the facility was transferred to Rosatom's administrative management in the fall of 2022. Despite the change in the ZNPP's formal status and management structure, the military presence remained a constant of the occupying regime, which created additional risks for the safe operation of this technologically complex facility.

Evidence highlights differences in how nuclear enterprises are organized, as reflected in the professional experiences of nuclear engineers. ZNPP employees who witnessed changes during the occupation point to major contrasts between Ukrainian and Russian management models. Ukraine's nuclear industry operates primarily under a civilian model, with security forces limited to external oversight. Under occupation, this model shifted significantly: the plant was militarized and management was restructured to fit the new realities of strategic control.

Another example of the fusion between corporate and coercive methods of the occupying regime is their approach to forcing workers to sign contracts with Rosatom, appealing to the professional duty and honor of nuclear engineers, offering financial benefits, or resorting to direct threats. Documented statements indicate the systematic engagement of former ZNPP employees by the occupying regime: after joining Rosatom structures, they came back to advocate *vis-à-vis* their former colleagues through the use of personal professional ties.⁸⁵ An interesting example of such

a synthesis of corporate and coercive practices is the documented case of a former official who held a management position at the Volgodonsk Nuclear Power Plant (also known as the Rostov Nuclear Power Plant, located in Rostov Oblast, Russia) who was involved in pressuring ZNPP personnel:

*"They came to see me at work at the end of November 2022. [...] I was at work and two individuals came to talk to me. One of them said he was a Rosatom representative, like a tech and admin person and the other one said he was Yuriy, nothing else. I would recognize both of them—I have a good memory for faces. Unfortunately, I didn't remember the name of the Rosatom employee, he was dressed in a civilian sweater and pants, not in uniform. He said that he also worked at the nuclear power plant for many years, as a head of some kind from Rostov, or as it is called correctly, Volgodonsk Nuclear Power Plant. Then he was supposedly the plant shift supervisor, then some kind of personnel manager—that's what he said about himself. [...] At first, it was mostly that old Rosatom man talking to me, but when I said I still refused to sign the Russian contract, Yuriy got involved and said it may not end well for me, like: 'Where will you go? You must understand nobody will let you out, your entry pass will be blocked. And since January, the National Atomic Energy Company of Ukraine will no longer pay you and your colleagues who refused to sign have already been taken to the basement and so will you.' This Yuriy was starting to pressure me. That is, the two of them together were like the good cop and the bad cop. They kept saying it was all politics between Zelenskyy and Putin and we had to work for nuclear safety, that it was important for them to preserve the team of the nuclear power plant. Like, that I should sign a contract with Rosatom and I would be getting two paychecks and they won't tell anyone that I signed a contract with Rosatom."*⁸⁶

This episode demonstrates both the specific mechanism of pressure on ZNPP personnel and the symbolic significance of the figure of a high-ranking manager from the Rostov Nuclear

Power Plant, himself an experienced industry expert, whose professional authority was used to reinforce the pretence of "normality" by contrasting a "political" conflict with "professional" responsibility for nuclear safety and security. Official Russian rhetoric asserts that the militarization of the management of Europe's largest nuclear power plant is justified due to the exceptional security requirements of wartime.

The Permanent Representative of the Russian Federation to International Organizations in Vienna, Mikhail Ulyanov, articulated Russia's official explanation of the need for a military presence at the ZNPP:

*"There was no heavy military equipment there, there are no army units there, except for Russian NBC Protection Troops, which are not combat troops, they are engaged in measuring radiation levels and, in the event of an accident, they will take energetic measures to neutralize the consequences as much as possible if such an accident occurs. Rosatom employees are not part of the Ministry of Defense either, it seems. What is there to demilitarize? Security? The Russian National Guard? But the nuclear power plant cannot remain unguarded—that doesn't happen. Such security exists all over the world and we are naturally not going to withdraw security units."*⁸⁷

At first glance, this explanation appears reasonable. However, documented evidence demonstrates the opposite: the synthesis of corporate governance with a repressive apparatus and military presence did not enhance the level of security. Instead, it created significant risks for the power plant's operation, as demonstrated in instances when essential technical personnel became the target of repressions:

"A colleague whose license was about to expire, [...] after his night shift ([...] at the shift, you constantly control every process and that's for three nights straight), the Russians took him from the front desk. They took him home, searched the house, beat him, physically abused him, took him to the garage, then to the police station, and told him they were giving him until the end of

the week to sign the contract because his license was expiring. After all that, [in the evening], they let him go and said: 'Don't forget, it's time to leave for your shift in two hours.' What kind of nuclear safety can we talk about? Under normal circumstances, I should undergo a pre-shift check to make sure that I am not tired, that I am ready and prepared to work—these are serious things. And in the case of my colleague, he didn't sleep all night and, during the day, the person was pressured and abused. We understand the mental and physical state of this person, who is responsible for all nuclear safety at this unit for eight hours, but the Russians were obviously not bothered by it.”⁸⁸

This demonstrates the essence of the reality of occupation: behind declarations about the protection of a nuclear facility lies the systematic replacement of professional technical management with the trauma of coercive methods, which ultimately creates new, unprecedented risks for nuclear safety and security. Under such circumstances, a nuclear power plant employee is forced to exist simultaneously in two incompatible modes: as a target of systematic violence and as a bearer of critically important technical competencies.

This system not only uproots individuals from their normal lives but also forces them to remain responsible for the safety and security of a critical nuclear facility under extreme pressure. This violates basic psychological requirements for operators and creates an internal threat to the plant's safety and security. While external risks stem from wartime conditions—such as hostilities and the presence of Russian troops—the internal threat is rooted in the occupying regime itself, which inflicts systemic violence on essential personnel while expecting them to perform critical technical duties. Justifying the militarization of ZNPP management on security grounds only obscures the fact that the occupation's control system introduces new dangers to the facility's operation.

1.3.4. Filling the Management Gap: Rosatom Reaching the Municipal Administration Level

The expansion of Rosatom's informal influence on the governance of Enerhodar, namely its evolution from a technical operator of the ZNPP to a systemic actor in the region's political processes, can be traced through the logic of appointments to the leadership of the occupying municipal administration. As noted, the appointment of Andrii Shevchyk as the head of the local city council reflected how the occupying authorities strategically used the established practice of engaging loyal personnel, particularly technical personnel from the ZNPP, into municipal governance structures.

The instability of the personnel composition is particularly pronounced in the specific trajectories of the appointed management. Ruslan Kirpichov, with his experience in the administrative structures of the so-called “Donetsk People's Republic” (DNR) was part of Shevchyk's team, responsible for establishing control over local enterprises and their assets.⁸⁹ He was replaced within a few weeks by Aleksandr Volga-Molokov, a representative of those Russian managers who built their careers in the occupied territories.⁹⁰ This career began with the position of Head of the Department of Capital Construction and Housing in the captured Alushta in Crimea in 2014. With the beginning of the full-scale invasion, he took the position of military commandant of the Kamiansk-Dnipro raion of Zaporizhzhia Oblast.⁹¹ In November 2022, the administration was headed for several weeks by Natalya Labyak, the director of the City Dairy Kitchen enterprise.⁹²

The appointment in December 2022 of Eduard Syenovoz, the former CEO of the Smolensk Nuclear Power Plant Service, reflected a qualitative shift in the occupying regime.⁹³ Unlike previous leaders, who were replaced within a few weeks or months, Syenovoz headed the city administration for over two years.⁹⁴ This stabilization of management

⁹² Military commandant offices were typically established by occupying forces in captured populated areas, sometimes with the involvement of local collaborators from law enforcement, and generally served a regulatory function in maintaining order and control over the civilian population.

coincided with the process of institutionalizing Russian control over the region and the ZNPP following the declaration of annexation in the fall of 2022. Notably, Syenovoz himself emphasized the unexpectedness of his appointment, while simultaneously highlighting his managerial experience in Rosatom structures: "I have experience in administrative work. The appointment is rather unexpected. My last workplace was the service company of the Smolensk Nuclear Power Plant, as the general director."⁹⁵

Corporation leadership explicitly acknowledged Rosatom's direct role in municipal appointments. Dzhumberi Tkebuchava, First Deputy Director General of Rosenergoatom Concern, stated: "They reproach us: 'You sent a person to be mayor of the city.' Of course we sent him. This is certainly a person who has some experience: he was the general director of one of our organizations... We directed him here and will help him in every way."⁹⁶ This statement clearly demonstrates the corporation's deliberate personnel strategy in occupied territories.

The appointment of a manager from the Rosatom system to the position of head of the occupying administration reflected the end of a period of experiments with different models of city governance. Previously, the occupying authorities tried to rely on local personnel or managers with experience in other occupying administrations. Now, the chosen appointee was a manager from the Russian nuclear corporation. This change coincided with the transition from *ad hoc* military control over the city and the ZNPP to the systemic integration of captured facilities into the Russian management and technological system. Rosatom's broader role as a Russian state corporation with dual civilian and strategic functions (as analyzed in [Section 4.2](#)) enabled seamless transitions between commercial and governance roles. Syenovoz also created the Office of the Military Commandant of Enerhodar to coordinate between various intelligence and military structures in the city.⁹⁷ Syenovoz himself acknowledges the role of Sergey Kiriienko from the Presidential Administration of Russia in facilitating the creation of the Office of the Military Commandant in Enerhodar.⁹⁸

In addition to personnel dependence on Rosatom, the establishment of financial dependence is even

more critical. In an interview with corporate media, Syenovoz spoke about this with his characteristic directness: "There is practically no profitable part in the city. The budget is formed from everything that is given to it. These are subsidies, allocations. [...] Enerhodar lives thanks to the people who work at Rosatom enterprises, execute plans, and ensure profits. It is very important that city residents should remember this."⁹⁹

In an interview with Strana Rosatom, Syenovoz outlined the corporation's defining role even more frankly: "Positive changes are taking place. And they happen, of course, primarily thanks to Rosatom. I would like to note that, in terms of changes, Enerhodar is very different from other areas of the new territories. We are moving forward in our own way and this is only thanks to the corporation."¹⁰⁰ Notably, when asked about the city's economic situation, he recognized full dependence on the corporation: "The corporation pours major funds into it. And that's great. Otherwise, the city would not be able to live at all."¹⁰¹

Beyond budget formation, Rosatom's financial influence expanded through large-scale infrastructure reconstruction. Major renovation projects for social and municipal infrastructure began in the summer of 2023, funded by Rosenergoatom. By February 2024, Alexander Shutikov, General Director of Rosenergoatom Concern, reported that approximately 3 billion RUB (approximately 36.4 million USD) had been invested in repairs to schools, hospitals, kindergartens, and other facilities during a single season, demonstrating the scale of corporate investment in the occupied territory.¹⁰²

Public presentations and statements by occupying administration officials in Enerhodar demonstrate a clear structure of subordination, where city governance appears to be a direct assignment from Rosatom. In his farewell address, Syenovoz phrased this in a rather straightforward way:

*"This decision was not easy, but it was dictated by the new tasks that Rosenergoatom concern gives me. The tasks assigned to me by the concern while appointing me to Enerhodar, related to anti-crisis management and developing the processes of municipal management, have now been completed."*¹⁰³

References to “service” and “assigned tasks” reflect the integration of civilian management into the general militarized system of occupational control. After Syenovoz’s resignation, the appointment of Maksim Pukhov as the head of Enerhodar’s occupying administration in January 2025 became the logical next step in Rosatom’s personnel policy in the city.¹⁰⁴ Unlike Syenovoz, who did not have significant political or managerial experience, Pukhov had been the mayor of the city of Polyarnye Zori in Russia’s Murmansk Oblast for 11 years. This latter is a typical Russian nuclear city built around the Kolsk Nuclear Power Plant, where Pukhov worked for 12 years in various engineering and managerial positions, receiving a corporate medal for “Merit in the Development of Rosenergoatom Concern”.¹⁰⁵ Before his appointment in Enerhodar, he resigned as the mayor of Polyarnye Zori, where he emphasized his experience developing the most comfortable city in the region and his transition to “handling important government tasks in one of the new regions”, after which he worked as the first deputy mayor of the occupying administration of Enerhodar for a time.¹⁰⁶ The sequence of appointments—first of the Smolensk Nuclear Power Plant Service’s top manager, Syenovoz, at the end of 2022, and then of the experienced mayor of a nuclear city, Pukhov, at the beginning of 2025—reflects Rosatom’s systematic approach to leadership appointments in the occupying administration, making use of its own managerial personnel.

1.3.5. Rosatom’s Educational and Corporate Aspects

Rosatom Chair Alexei Likhachev has repeatedly announced the company’s plans for Enerhodar. In 2022, the “Rosatom Together with Enerhodar” program was launched, involving more than 100 industry enterprises.¹⁰⁷ In March 2024, Likhachev announced a three-year development plan for the city, which was submitted to the Russian government for consideration.¹⁰⁸ Even the city’s educational policy is being shaped by involving experts from the Corporate Academy and the Rosatom School, structures that traditionally provide training for the nuclear industry.¹⁰⁹ These renovations included the establishment of specialized “atomic

classrooms” in each school, designed to prepare students for careers in the nuclear industry.

Career guidance events, supported by Rosenergoatom, actively promote enrollment at Sevastopol University, with guaranteed employment at the ZNPP.¹¹⁰ As part of this initiative, in 2024, more than 100 high school students from Enerhodar and nearby localities visited the Sevastopol Institute of Nuclear Energy and Industry, where they learned about the opportunities granted by the educational institution and the range of professions in the nuclear industry.¹¹¹ Following the “Path of the Nuclear Worker” preparatory program, these 100 students from Enerhodar signed targeted contracts with the ZNPP.¹¹² The agreements provide for free tuition, accommodation, an additional scholarship for students, and guaranteed employment at the ZNPP upon completion of their education. In this way, the integration of the youth of the occupied city into the Russian educational space is combined with the corporate interests of



A screenshot of the ENTV broadcast from February 23, 2023. Image source: EnTeVeShki Energodar.¹²⁰



Oleg Murashev holding a workshop for the youth of Enerhodar on April 27, 2023. Image source: Enerhodar Svyzany.¹²¹

Rosatom, which, through a system of preferential training contracts, consolidates a long-term personnel presence in the occupied territory.

This demonstrates Rosatom's plans to integrate Ukrainian youth into the Russian nuclear industry, encompassing both civilian energy and the military component, creating a system for reproducing loyal personnel in the context of long-term occupation. Integration into the corporate structure occurs not only through direct funding of social infrastructure, but also through the specific organization of urban life around a strategic enterprise.

One symbolic manifestation of Rosatom's penetration into the daily life of the city was the Rosatom School project, which introduced a single school uniform for all students of Enerhodar.¹¹³

Notably, this local issue was handled with the participation of the Strategic Communications Unit of the Zaporizhzhnia Nuclear Power Plant Operating Organization, which coordinated the process with school principals. Thus, the unification of school uniforms is not merely a symbol, but also the introduction of certain elements of corporate discipline and group identity.

In addition, occupying media in Enerhodar engage Ukrainian children in their work to disseminate militarized propaganda. This is regularly done, particularly by the ENTV channel, which creates stories glorifying Russian military personnel who carry out acts of violence against locals. An emblematic story from February 23, 2023, on the occasion of "Fatherland Defender Day", shows a girl from Enerhodar reciting poems glorifying Russian soldiers.¹¹⁴ Such practices demonstrate a systematic violation of children's rights and the use of minors for propaganda purposes in the occupied territories.¹¹⁵

The engagement of Enerhodar youth in local media work is carried out in a systematic and organized manner. On April 27, 2023, the youth center "Boiling Point: Resident" (formerly the Ukrainian "hub FreeDom") hosted ENTV workshops "for young journalists and camera operators".¹¹⁶ One example of the occupying administration training the new generation to support its information influence in the occupied territories is a class for

youth taught by Oleg Murashev, a correspondent for Russian federal channels Pervyy and Zvezda.

The "Alphabet of Regions" project, implemented as part of the literary festival "Stars over the Donbas", became yet another tool for the Russification of the youngest Enerhodar residents¹¹⁷ through the "creation of patriotically oriented learning alphabets for all regions of the Russian Federation, including ones liberated in the special military operation".¹¹⁸ Coordinator Aleksandr Kofman openly explains the tasks of this initiative targeting primary school students: "The Alphabet gave a big impetus for them to realize that they live in Russia." This statement directly indicates an attempt to change the national identity of Ukrainian children through educational materials. Work with the youth includes not only an educational and professional component, but also a political one. Rosatom sponsored youth organizations, including a "youth chamber" that Balytskyi explicitly described as creating "personnel reserves for local government bodies".¹¹⁹

This openly demonstrative behavior and the lack of any attempt to conceal Rosatom's leading role in the governance of the occupied city create a situation of a commonly known "secret". The articulation of this role can hardly be seen as a sensational revelation. However, the very frankness of this position is paradoxical because the issue of corporate responsibility becomes particularly acute in the context where a recognized world leader in nuclear energy functions as a key actor in a system of occupational control during the largest armed conflict in Europe since 1945.

1.4. Conclusion

Documentation of Enerhodar's occupation reveals the links between the military capture of the territory, the establishment of administrative control, and the nature of managing a strategic infrastructural facility.

The initial period highlighted a significant gap between physical control over the city and the inability to ensure the full functioning of the ZNPP in the face of resistance from the professional community of nuclear engineers. The next phase, the systematization of the occupying regime, demonstrated an attempt to create a system of control through a combination of ideological "work" on the population, systematic terror, and the formation of quasi-civilian administrative structures. However, this system contained internal contradictions: increased repressive pressure on the ZNPP's personnel created additional risks for its safe operation and attempts to replace qualified employees were quickly impeded by the complexity of technological processes.

The announcement of the annexation of Enerhodar and the ZNPP in the fall of 2022 marked a turning point, enabling the full integration of the captured plant into the Russian administrative and technological system. In this context, the transformation of Rosatom's role has become particularly important: from the technical operator of the captured ZNPP to the main stakeholder in the system of occupational management of the city. Documented facts of personnel appointments, financing, and administrative reorganization in occupied Enerhodar demonstrate the methodical integration of Rosatom's corporate structures into the system of Russian-backed coercion in the occupied territories. Rosatom actively contributed to establishing occupational control over the city, utilizing its management expertise, providing reliable personnel, and introducing financial leverage. In this way, the corporation underwent a transformation, from a technical operator of nuclear facilities to a key player in the administrative management of the occupied Enerhodar.

SECTION 2

Torture and Detention under the Russian Occupation



2.1. Introduction

The Russian occupation of Enerhodar transformed governance structures, as outlined in the previous section, but also brought widespread and systematic abuses against the civilian population. From the earliest days of military control, occupying forces relied on detention, torture, and intimidation, implemented both directly and through Russian administrative institutions. These practices formed a continuous thread across all three phases of the occupation's development, though the methods and intensity evolved.

This section documents a sustained pattern of international crimes against Enerhodar's civilian residents through three analytical lenses. First, it examines how occupying forces targeted and detained civilians, identifying and abducting specific population groups. Second, it maps the network of detention facilities in Enerhodar and its surroundings, detailing the conditions to which detainees were subjected. Finally, it analyzes Rosatom's role in enabling and participating in these crimes, particularly against ZNPP employees, showing how corporate structures became integrated into the occupation's repressive apparatus.

2.2. Overview of the Targeting of Different Categories of Civilians

Russian occupying authorities targeted civilians across a broad spectrum of the population, encompassing individuals who were:¹²²

- Participating in the resistance to the Russian occupation of Enerhodar¹²³ or had relatives taking part in the resistance;¹²⁴
- ZNPP staff;¹²⁵
- Former members of the Armed Forces of Ukraine (AFU)¹²⁶ or had relatives with links to the AFU;¹²⁷
- In possession of registered or unregistered firearms;¹²⁸
- State or municipal representatives;¹²⁹ and
- Ordinary civilian residents of the city (e.g., business owners).¹³⁰

Detention operations began in March 2022.¹³¹ Occupying police and security services coordinated to apply targeting criteria, using methods such as weapon registry checks and surveillance.¹³² These early operations established patterns that would characterize subsequent phases of civilian targeting throughout the period of occupation.¹³³

Between March 10 and 15, 2022, the Russian occupying administration and military forces began approaching Ukrainian ZNPP staff, singling out the licensed personnel for “interviews” (a euphemism for interrogations conducted by the FSB).¹³⁴ As a ZNPP worker stated to Truth Hounds:

“The occupiers started to search for pro-Ukrainian people at the station itself. They found out about pro-Ukrainian people through pressure. Then they started to look for those who had weapons, who even indirectly took part in the defense of the city, in territorial defense. They came to detain

people directly at the station, if they were nuclear workers, and detained them at work.”¹³⁵

Truth Hounds has documented at least two instances of ZNPP staff being “interviewed” in late March 2022¹³⁶ and at least 11 such incidents dating to no later than mid-September 2022.¹³⁷

In late May 2022, Russian occupying authorities intensified abductions and detentions of Enerhodar civilians¹³⁸ following the attempted assassination of the occupying mayor of Enerhodar, Andrii Shevchyk.¹³⁹ In late September 2022, following the Russian-organised referendum in Enerhodar,¹⁴⁰ abductions, detentions, and the infliction of inhuman treatment and torture against Enerhodar civilians, including ZNPP personnel, drastically escalated. These actions increasingly exhibited a clear, systematic pattern (see [Subsection 5.3](#) for a more detailed analysis regarding the pattern of crimes in the case of the Russian occupation of Enerhodar).¹⁴¹

Rosatom faced operational constraints to its control over the ZNPP, particularly the critical shortage of licensed Ukrainian personnel and a technical inability to replace them with Russian staff (see [Section 1](#)). These constraints led Rosatom to employ alternative coercive strategies during this period. Information gathered by Truth Hounds reveals the systematic targeting of ZNPP employees through workplace interrogations, abductions, and detentions, primarily aimed at compelling workers to sign Rosatom contracts, effectively transforming technical dependency into formal

¹²² Some targeted civilians belonged to multiple categories simultaneously, such as a ZNPP staff member who participated in the anti-occupation resistance from late February to early April 2022.

¹⁴⁰ The so-called “referendum” on the illegal annexation of Zaporizhzhia Oblast to the Russian Federation took place on September 23–27, 2022.

collaboration. This pattern of coercive recruitment, designed to resolve the fundamental disjuncture between administrative control and operational necessity, persisted throughout the occupation.

As will be further detailed in [Subsection 2.5](#), Ukrainian ZNPP personnel in the city continue to face the risk of abduction, detention, and exposure to inhuman treatment and torture through to the present day.¹⁴² On May 13, 2025, Enerhoatom, the Ukrainian entity responsible for operating all of Ukraine's nuclear power plants, reported that at least 13 Ukrainian staff members remain in Russian captivity.¹⁴³ On June 19, 2025 Enerhodar's mayor, Dmytro Orlov, reported that at least 27 Enerhodar civilians were being held captive, including 13 ZNPP employees (for a more detailed analysis related to the targeting of Ukrainian ZNPP employees and Rosatom's role in the related offenses, see [Subsection 2.3](#)).¹⁴⁴

In total, during the period of the Russian occupation of Enerhodar, Truth Hounds has documented the detention—followed frequently by inhuman treatment and torture—of at least 226 civilian residents of Enerhodar. This includes:

- 66 participants of the resistance to the Russian occupation of Enerhodar;
- Six former AFU servicepeople;
- Three relatives of AFU servicepeople;
- 78 Ukrainian ZNPP staff members;
- 11 owners of weaponry; and
- 102 ordinary Enerhodar civilian residents, such as business owners.

Some individuals in the dataset held multiple, overlapping statuses (e.g., civilian, ZNPP employee, and anti-occupation resistance participant).¹⁴⁵

Additionally, Truth Hounds documented that at least nine Ukrainian prisoners of war were subjected to inhuman treatment and torture.

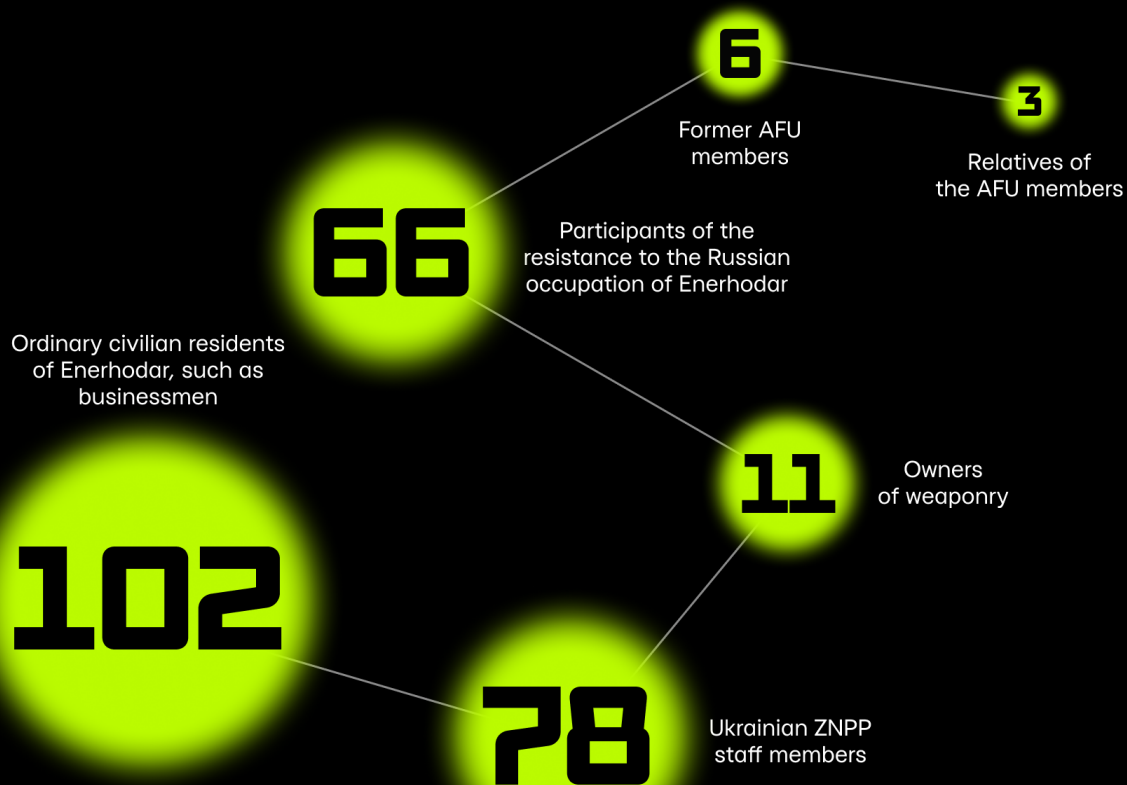
¹⁴² The most recent documented case of abduction and detention of a Ukrainian staff member is from July 2024. Survivor ID: En-031.

¹⁴⁵ In order to reflect the complexity of each person's experiences and to avoid too narrowly categorizing their status, each status was counted individually, meaning a single person may be represented in more than one category. As a result, the number of status entries may exceed the number of unique individuals.

AT LEAST

226

CIVILIAN RESIDENTS OF ENERHODAR
HAVE BEEN DETAINED, MOSTLY
FOLLOWED BY SUBJECTION TO
INHUMAN TREATMENT AND TORTURE



AT LEAST

78

UKRAINIAN STAFF MEMBERS OF THE ZNPP
WERE TARGETED BY RUSSIAN OCCUPYING FORCES
AND AUTHORITIES, INCLUDING ROSATOM
REPRESENTATIVES

20

Directly interviewed
staff members

66

Reported as
third persons *

* THIRD PERSONS – OTHER ZNPP WORKERS REPORTED BY DIRECTLY INTERVIEWED STAFF MEMBERS.

2.3. The Network of Torture Chambers in Enerhodar and its Vicinity

The systematic use of torture and detention in occupied Enerhodar relied on a network of detention sites. Survivor accounts and open-source analysis reveal that these facilities, scattered across the city and the surrounding area, were adapted to serve specific roles within the broader system of territorial control.

Truth Hounds identified a network of at least five detention facilities that the occupying Russian regime has employed in Enerhodar and its vicinity: (1) the administrative building, first and second

gates, and underground facilities of the ZNPP; (2) National Guard Unit No. 3024 ("the Pit"); (3) Enerhodar Police Station; (4) the SBU building; and (5) Kamianka-Dniprovska Custody Isolator No. 2. Alongside these detention facilities, Truth Hounds identified two smaller-scale detention sites in Enerhodar and its vicinity, namely Velyka Bilozerka Police Station and the Enerhodar Yacht Club.

The network of Russian detention sites in Enerhodar and its vicinity. Image source: Prepared in-house by Truth Hounds.



2.3.1. ZNPP Administrative Building, First and Second Gates, and Underground Facilities

Location

The first gate (47°30'24.9" N, 34°35'06.9" E) is adjacent to the ZNPP administrative building.¹⁴⁶ The second gate (47°30'49" N, 34°35'36" E) is situated far from the administrative building, near Blocks 5 and 6 of the ZNPP.¹⁴⁷ ZNPP staff members were also detained in basements of the plant, including in the basements of the nuclear reactor blocks.¹⁴⁸

Operating Period

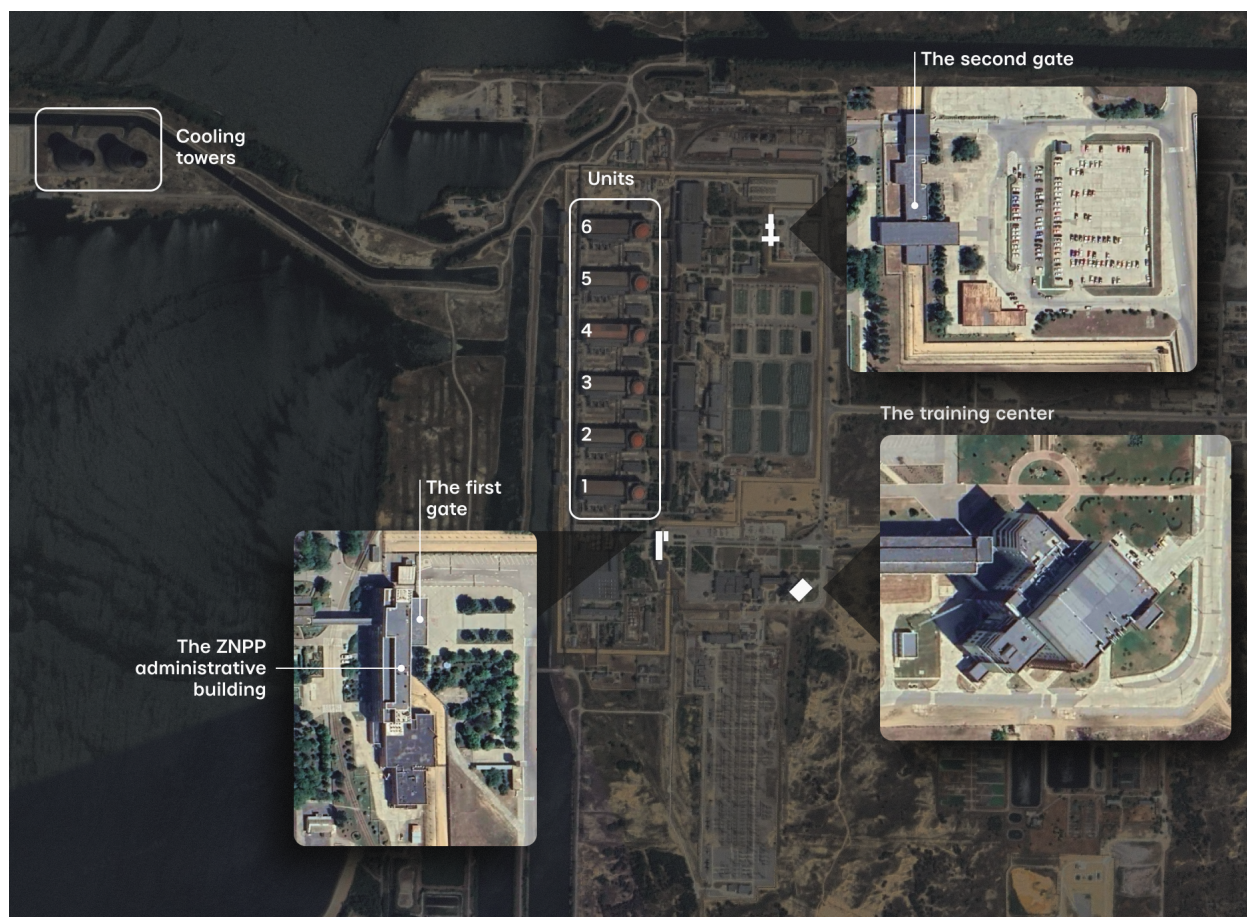
Documented evidence confirms the systematic operation of the facilities from March 2022 through April-May 2023.¹⁴⁹

The ZNPP's first and second gates and administrative building. Image source: Google Earth.

Purpose

Russian security and military forces used the ZNPP administrative building and the first and second gates to detain and interrogate Ukrainian ZNPP staff. These interrogations frequently preceded the transfer of workers to specific detention facilities in Enerhodar, including at the ZNPP itself. The interrogators were reportedly FSB officers and Russian military personnel,¹⁵⁰ sometimes accompanied by Rosatom representatives.¹⁵¹

Occupying forces sought out pro-Ukrainian individuals and anyone who had contributed, even indirectly, to the city's defense against Russian forces. If they happened to be ZNPP employees, they would be detained at work.¹⁵²



Indicators of Scale and Significance

ZNPP administrative building

Interviews conducted by Truth Hounds indicate that this facility was used to detain and interrogate several Ukrainian ZNPP employees. These include at least one employee interrogated in an office room on the first floor,¹⁵³ another in a long office room on the second floor,¹⁵⁴ and another in the office of the advisor to the director general on the fourth floor.¹⁵⁵

First gate

Truth Hounds documented at least three incidents between the spring and fall of 2022 when guards stopped ZNPP staff at the first gate and brought them to a separate office room where they were interrogated by members of Russian military and security forces.¹⁵⁶ In two of the cases, the individuals were subsequently detained in Enerhodar and were there subjected to inhuman treatment and torture.¹⁵⁷



The ZNPP's first gate. Image source: Google Earth.

Second gate

Truth Hounds documented the detention of at least three Ukrainian ZNPP employees at the second gate between Summer 2022 and Spring 2023. In two cases, the individuals were taken to an office room at the second gate and, in all of the cases, the individuals were subsequently transferred to detention facilities in Enerhodar.¹⁵⁸

Additionally, Truth Hounds documented at least one case of the abduction and further detention of a Ukrainian ZNPP staff member from one of the ZNPP gates but has been unable to establish the exact place of the person's abduction.¹⁵⁹

Underground facilities of the ZNPP

Truth Hounds documented an incident of a Ukrainian ZNPP employee being held in a basement cell under the ZNPP for several days, but has not been able to establish its precise location.¹⁶⁰



The ZNPP's second gate. Image source: Google Earth.

Facility Description

Individuals were detained and interrogated at the first and second gates, as well as in office rooms of the ZNPP administrative building. In the latter, an office room on the first floor was used, as well as a long office room at the end of a hallway on the second floor. The sign had been removed from the office, making it difficult to ascertain the exact room. Interrogations and torture also allegedly took place in the former office of the advisor to the ZNPP director general in the administrative building.¹⁶¹

Torture

Survivors report intense psychological intimidation resulting from the interrogations, with one survivor noting that “they stand in front and behind you, they sit you down, they start to interrogate you from all sides”.¹⁶² Further statements indicate that interrogators threatened survivors with being “taken to the forest”,¹⁶³ boasting that they could do anything to them.¹⁶⁴

2.3.2. National Guard Unit No. 3042 (“The Pit”)

Location

“Yama”, which translates as “the Pit,” is the codename for a basement detention site on the grounds of the former Ukrainian National Guard Unit No. 3042 at 56 Promyslova Street, Enerhodar (47°30′12″ N, 34°36′3″ E).¹⁶⁵ Russian forces were first stationed at “the Pit” immediately after the seizure of the ZNPP.¹⁶⁶ Russian occupying forces kept the location of “the Pit” secret and detainees were brought there with bags over their heads or duct tape over their eyes.¹⁶⁷ Members of Russian security forces told detainees that, if they found out that there were people who knew about “the Pit”, they would be kidnapped and detained.¹⁶⁸

Operating Period

Documented evidence confirms the systematic operation of the facility from the earliest days of

March 2022 through to at least the end of July 2022, encompassing the occupation’s critical transition from initial military seizure to the establishment of an institutionalized detention infrastructure.¹⁶⁹

Purpose

“The Pit” was primarily used as a site for detention, torture, and coercion. When the FSB arrived in Enerhodar, they searched for residents who had been involved in defense or Ukrainian checkpoints before the Russian occupation and brought them to “the Pit”.¹⁷⁰ According to former ZNPP director Ihor Murashov, the torture inflicted there was intended to “change the minds of these people”.¹⁷¹ Some detainees were subsequently transferred from “the Pit” to other detention centers, including Enerhodar Police Station.¹⁷²



National Guard Unit No. 3042 (“the Pit”). Image source: Google Maps.

¹⁶³ “Being taken to the forest” in this context is a euphemism used by Russian forces for taking a detainee to be executed.

Indicators of Scale and Significance

While it is difficult to estimate the number of individuals detained at “the Pit”, it consistently features as a detention site in survivors’ interviews. Two former detainees reported seeing 6 or 7 other prisoners when they arrived, and another estimated there were 20 prisoners during his confinement.¹⁷³ Another detainee stated that all of his fellow detainees at a different detention site had previously been held at “the Pit,”¹⁷⁴ indicating the systematic nature of its use by Russian occupying forces. Detainees included ZNPP employees.¹⁷⁵

Facility Description

“The Pit” is located under a three- to four-story military building. Detainees were kept in windowless basement rooms to which they were brought through a single guarded entrance and iron staircases, while the Russian military were living above on the first and upper floors.¹⁷⁶ In the basement, there were between four¹⁷⁷ and six rooms:¹⁷⁸ prisoners were kept between two and four of these rooms, one room functioned as a toilet, and guards occupied a further room.¹⁷⁹ Former detainees noted that the rooms in which they were held measured approximately 5 meters x 5 meters x 3 meters.¹⁸⁰ The basement rooms had rudimentary electrical wiring and exposed pipes, with a bare earth floor.¹⁸¹

Detention Conditions

Detainees suffered from cold in the basement and were made to stand and sleep directly on the earthen floor, with discarded jackets serving as improvised bedding materials.¹⁸² The basement cells were windowless and there was only one small lamp in one of the cells.¹⁸³ Prisoners suffered serious breathing problems while held captive in “the Pit”, since there was no ventilation in the basement cells and it was extremely hot.¹⁸⁴ The basement space lacked basic toilet infrastructure and, as such, prisoners were required to use an adjacent room to relieve themselves.¹⁸⁵ For example, one survivor reported: “You take a shovel somewhere in your hands, with an LED flashlight on the lighter, you know, like those lighters with a flashlight. The guys [detainees] begged the guards for it so they wouldn’t step on it [excre-

ment] and get dirty. You dig a hole, carefully relieve yourself in it, and then bury it. These are the conditions of detention in this Pit.”¹⁸⁶ Detainees at “the Pit” were systematically denied all food provisions during their confinement and were denied water for days at a time.¹⁸⁷

Treatment of Detainees

Former detainees interviewed by Truth Hounds reported that Russian soldiers, with Dagestanis featuring prominently, and FSB officers were responsible for carrying out torture at “the Pit”.¹⁸⁸ In addition, “Kadyrovtsi”¹⁸⁹ (Chechen military personnel) came to “the Pit” to torture detainees in June 2022.¹⁹⁰ Former military personnel of the so-called “DNR” were guards at “the Pit.”¹⁹¹ One detainee reported the involvement of a representative of the military commandant of Enerhodar in his torture at “the Pit”.¹⁹²

Torture inflicted upon detainees at “the Pit” included the following:

- Beatings with a police baton;¹⁹³
- Detainees reported being threatened with rape¹⁹⁴ or the rape of their relatives.¹⁹⁵ A survivor who Truth Hounds interviewed recalled that someone from the FSB threatened to use a police baton, covered with a condom, against the detainees and mentioned that he had already used it on other detainees;¹⁹⁶
- Detainees were forced to learn the Russian national anthem by heart. If they failed to do so, they would be severely beaten with a police baton and threatened with further beatings.¹⁹⁷ Detainees were also made to learn the anthem of Dagestan¹⁹⁸ by heart and were beaten if they failed to reproduce it upon request, at any time of the day or night, loudly and with feeling;¹⁹⁹
- Truth Hounds documented at least one incident of a detainee being taken to a forest, where the person was threatened with exe-

¹⁸⁹ The term “Kadyrovtsi” refers to members of forces that directly answer to Ramzan Kadyrov, head of the Chechen Republic in the Russian Federation. While they technically fall within the chain of command of the Russian National Guard, they are not subject to the same conditions as their federal counterparts.

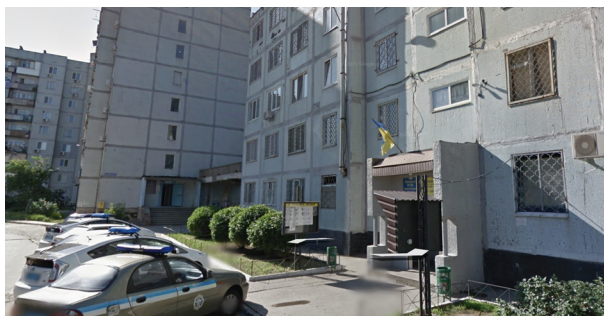
cution. Upon seeing graves in the forest, the survivor was told that “the Nazis were shot” there;²⁰⁰

- Truth Hounds documented at least 2 incidents when detainees at “the Pit” were shot with traumatic guns in different parts of their bodies. One survivor reported that when a fellow detainee was shot in the legs, the rubber bullets penetrated his trousers and became lodged in his flesh.²⁰¹
- “Kadyrovtsi” covered detainees’ heads with bags, beat them, and pointed machine guns at them. They also threatened to kill the relatives of some prisoners.²⁰²

2.3.3. Enerhodar Police Station

Location

Enerhodar Police Station is located in the city center, at 17 Enerhetykiv Avenue (47°30′08″ N, 34°39′11″ E). The building has two entrances: the



Enerhodar Police Station. The second photo shows its main entrance. Image source: Google Maps.

main (first) entrance providing access to detention cells and a second entrance where the occupying military commandant’s office was located.²⁰³

Operating Period

The police station was used continuously from the beginning of the city’s occupation through September 2023, when the last documented detention incident occurred.²⁰⁴

Purpose

Enerhodar Police Station served as the main center for detention, filtration, interrogation, and torture of civilians from Enerhodar and the surrounding area. The facility’s structure was systematically adapted to implement the occupying regime’s repressive policies.

Indicators of Scale and Significance

The central importance of Enerhodar Police Station is confirmed by the presence of a differentiated system of cells, each adapted for a specific category of detainee. The scale of operations is evidenced by the systematic overcrowding of cells.²⁰⁵ Additional evidence of this scale is the expansion of the detention infrastructure to the second floor from September 2022 in response to the increasing number of detainees.²⁰⁶

Russian security services personnel constantly occupied the facility, supervising interrogations and torture. They directed operations at other detention sites from this location, while FSB officers regularly traveled to other centers, particularly Kamianka-Dniprovska, to conduct interrogations and record detainees’ biometric data.²⁰⁷

Facility Description

The site was the two-story building of a former Ukrainian police station.²⁰⁸

The first floor comprised:²⁰⁹

- Three detention cells with differentiated functions;
- A metal cage (“*obezyannik*”) ²¹⁰ to detain prisoners near the duty officer’s area;²¹¹ and

→ Two adjacent interrogation rooms;

- Interrogation room no. 1:

One detainee reported: "In the opposite direction from the cells there was a very narrow corridor. Along the corridor, there was a big iron door and, behind it, there was an office room and there was an adjacent interrogation room."²¹²

Another detainee reported: "Yes, on the first floor of the commandant's office, there was a long room with tables and, in the same room, there was this "Tapik", to which people were taken and electrocuted."²¹³

- Interrogation room no. 2:

One detainees reported: "In the interrogation room, there was a table, a bunch of incomprehensible objects, a sofa spread out like a bed, and chairs. I realized what would happen to me in this place. It was hard to be there, especially when I had already managed to understand from my cellmates what people were doing here."²¹⁴

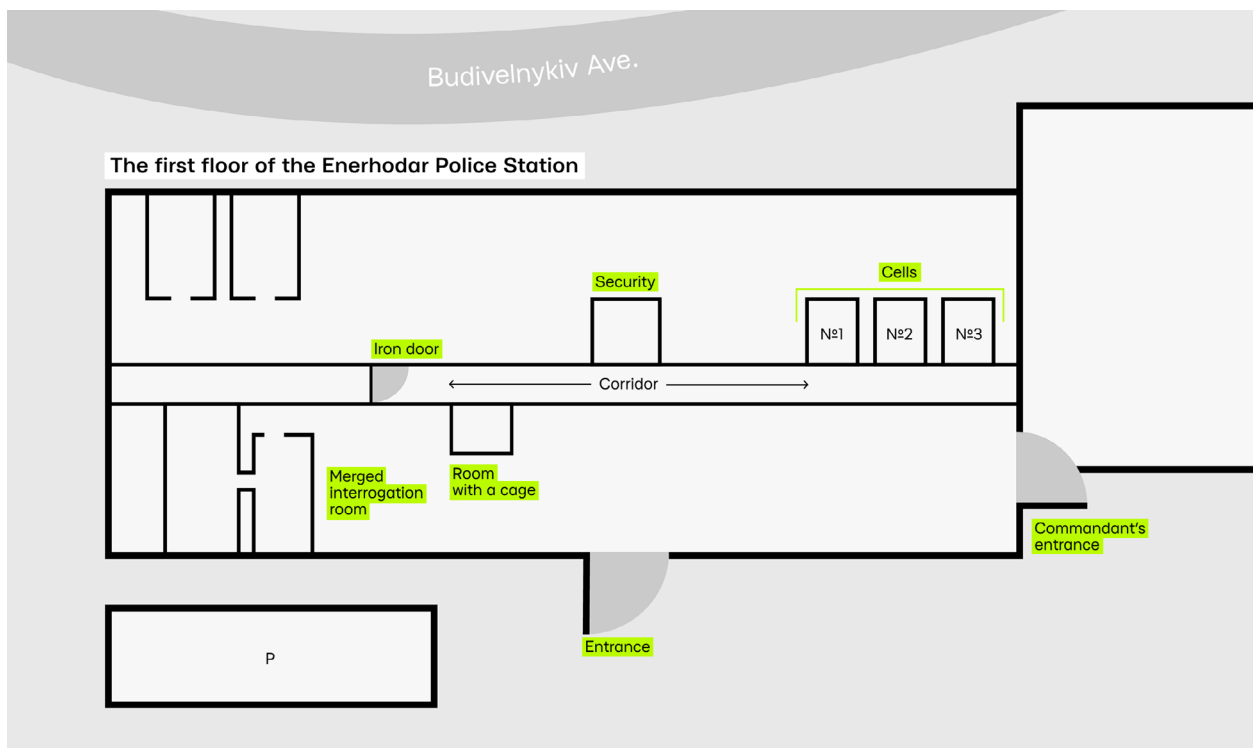


One of the rooms on the first floor of Enerhodar Police Station used by Russian occupying forces to interrogate detainees. This photo is from 2021. Image source: Enerhodar Police Station.²⁷⁴



One of the rooms on the first floor of Enerhodar Police Station used by Russian occupying forces to interrogate detainees. This photo is from 2020. Image Source: Enerhodar Police Station.²⁷⁵

A visualization of a hand-drawn plan of the first floor of Enerhodar Police Station, as per Survivor IDs: En-020 and En-032. Image source: Prepared in-house by Truth Hounds.



This interrogation room was described by some survivors as an “investigators’ office”,²¹⁵ allegedly due to the presence of key members of Russian security forces.

Both interrogation rooms were used for the interrogation and torture of detainees.²¹⁶

The second floor comprised:

- Four courtrooms where, starting from September 2022, detainees were held in glass cages;²¹⁷ and
- Judges’ offices adapted for additional detention of prisoners.²¹⁸



This first photo shows a hallway on the second floor of Enerhodar Police Station. The second picture shows the entry door to the courtroom on the second floor of Enerhodar Police Station. Image source: Court.gov.ua.



A courtroom on the second floor of Enerhodar Police Station. Image source: Court.gov.ua.

The second floor was used for interrogations of imprisoned Enerhodar civilians, accompanied by physical and psychological pain and suffering.²¹⁹ Several prisoners indicated the use of the building’s third floor for “criminal investigation”, although detailed information is limited.²²⁰

One of the survivors reported to Truth Hounds: “They took me to the second floor, threw me in. There was a glass cage in the courtroom and [redacted] told the police officers in front of me: ‘No problem, nothing, he’s sitting there until he tells his story.’ I was there alone.”²²¹ Truth Hounds obtained photographs published in pro-Russian Telegram channels that visually confirm these “glass cages”, directly corroborating the survivor’s interview.²²²

Detention Conditions

Detention conditions at Enerhodar Police Station were as follows:

- Cell No. 1 (3 meters x 3 meters to 3.5 meters x 3.5 meters).²²³ A “filtration” cell used to hold people the occupying forces would try to “filter”,²²⁴ through questioning, based on their willingness to cooperate.²²⁵ The cell had two bunks, holding up to 22 people simultaneously. It had no windows and poor ventilation. The toilet was a hole in the floor with a bottle and the cell was poorly lit.²²⁶ One survivor stated:



A recent 2025 photo of the courtroom. Image source: Novosti Enerhodara.²⁷⁶

"There was a sink, a toilet that is built into the floor, but if you look there, you could see the basement mice running, that is, there was no sewage system there, the water was not connected, no matter how you turn the taps, there was no water";²²⁷

- Cell No. 2 (3 meters x 3 meters to 4 meters x 4 meters):²²⁸ A "patriotic" cell, designed for the most pro-Ukrainian civilians (e.g., former resistance participants, former AFU members, and owners of weapons), with similar conditions to the first cell but slightly better lit.²²⁹ It accommodated 16 to 21 people;²³⁰
- Cell No. 3 (3 meters x 4 meters):²³¹ A "press cell," the most severe cell, where detainees were systematically subjected to physical violence.²³² One detainee referred to this particular cell as a "terrorist cell", indicating that it was used to hold former anti-occupation resistance participants and those possessing weapons.²³³ Another detainee reported that there were many Enerhodar residents who refused to cooperate with Russia in the cell, especially Ukrainian ZNPP staff members who refused to sign contracts with Rosatom, adding that: "They were beating people to sign contracts with Rosatom."²³⁴ There was a washbasin, water bottles, and a hole for a toilet in the corner of the cell.²³⁵ There were only two bunks in the cell,²³⁶ yet it accommodated at least 15 people.²³⁷ Some civilians were held in both Cells No. 2 and No. 3;²³⁸ and
- A metal cage ("obezyannik"): A short-term detention space with limited room to sit or lie down.²³⁹ One survivor reported: "There were two benches in the cage and the floor was made of rebar."²⁴⁰ It was impossible to walk there. The cage was 1.5 meters by 3 meters, the height was 2–2.30 meters. There were two of us there."²⁴¹ Similarly, another survivor stated: "In that room [cage], there was a welded grate, about 2–2.10 meters high, about 1.3–1.5 meters deep, and about 2 meters long. There is a grate like this somewhere. The floor is welded and all the walls and ceiling are welded with rebar. There was a bench inside, a bench, and that was it—there was nothing else inside."²⁴² Another survivor recalled that he had to request cardboard to sit on.²⁴³

Additional detention facilities were established on the second floor:

- Glass cages in courtrooms: Isolated detention spaces within court facilities where detainees were held alone for extended periods;²⁴⁴ and
- Additional detention rooms: Separate holding areas created to accommodate the growing detainee population, with some detainees held for up to a month in these spaces.²⁴⁵

General conditions were characterized by:

- A lack of proper ventilation, which, combined with overcrowding,²⁴⁶ caused breathing problems, including asthmatic attacks;²⁴⁷
- Unsanitary conditions:²⁴⁸ To wash themselves, detainees had to stand over the toilet and pour water from bottles over their bodies;²⁴⁹
- A lack of adequate nutrition: Detainees survived mainly on parcels from relatives, which were often partially confiscated by guards;²⁵⁰ and
- Gas was sprayed into cells to intensify detainees' suffering, especially in the summer of 2022. This was particularly detrimental during the summer months, when high temperatures already created suffocating conditions, directly triggering acute respiratory distress among multiple detainees.²⁵¹

Many detainees were prohibited from seeing their relatives either initially or after some time during their detention.²⁵² Those initially banned from seeing relatives reported that their families remained unaware of their location, intensifying psychological pressure on both the detainees and their families.²⁵³ On the second floor, detainees were held in "glass cages" in courtrooms,²⁵⁴ as is documented by photographic evidence on pro-Russian Telegram channels.²⁵⁵

²²⁴ "Filtration" has been defined by the Kharkiv Human Rights Protection Group as "a violent, unregulated screening of the personal data of detained people, their social contacts, views, and attitudes towards the occupying state, their safety for the authorities or services of the occupying state, as well as their willingness and consent to cooperate with the authorities or services of the occupying state".

²⁴⁰ "Rebar", short for "reinforcement bar", refers to steel rods or mesh that are used to reinforce concrete structures.

Treatment of Detainees

Enerhodar Police Station became notorious for systematic torture practices:

- Beating with a police baton;²⁵⁶
- Beating with a kettle cord and TV cable;²⁵⁷
- Electrocution of the detainees.²⁵⁸ Electrocution of male detainees' genitals in at least three documented cases;²⁵⁹
- Forcing detainees to rape a woman temporarily placed in a cell. This incident was organized by the occupation-appointed deputy head of Enerhodar Police Station;²⁶⁰
- Rape of a detainee with a police baton;²⁶¹
- Forced nudity and threatening detainees with rape by being placed "on a bottle"²⁶² with a police baton or stick;²⁶³
- Threatening detainees with rape by other detainees in at least five incidents.²⁶⁴ Survivors of rape and threats of rape included an adult female, as well as adult and teenage males;
- Shooting detainees with traumatic weapons, with survivors reporting: "In the first and second cells, there were almost no people who were not shot... Some had up to six wounds";²⁶⁵
- Forcing detainees to clean walls stained with blood and other evidence of torture inflicted on fellow detainees,²⁶⁶ while some were forced to carry the bodies of deceased detainees;²⁶⁷
- Asphyxiation (spraying gas or pepper spray²⁶⁸ inside the detention cells, forcing detainees to put on a gas mask,²⁶⁹ and strangling detainees);²⁷⁰
- Spraying pepper spray into the eyes of the detainees;²⁷¹ and
- All six documented cases of detainees tortured to death occurred at this facility.²⁷²

The institutional nature of the torture is evidenced by the appointment of "supervisors" among the prisoners, creating a hierarchical system of control and coercion within the detention environment.²⁷³

2.3.4. SBU Building in Enerhodar

Location

The SBU Building²⁷⁷ in Enerhodar is located on Kurchatova Street (47°29'31.4" N, 34°40'08.2"E). This facility had been the local SBU headquarters before the Russian occupation.²⁷⁸

Operating Period

The facility was used during the initial phase of the occupation in Spring 2022. Documented evidence indicates active operations from late March 2022, with the first detainees abducted in Enerhodar held at this former SBU building, at least until October 2022.²⁷⁹

Purpose

Based on available information, the facility served as an early detention center during the beginning of the occupation.²⁸⁰

Indicators of Scale and Significance

Similarly to police buildings, former security service buildings provide occupying forces with ready-made advantages, featuring reinforced structures, detention cells, and communications systems well suited for intelligence work. According to two former detainees, FSB officers and Russian military personnel from Dagestan used the Enerhodar SBU building.²⁸¹ Its role in early civilian detentions shows how pre-existing security infrastructure can be rapidly repurposed to support detention operations without requiring extensive structural modifications.

Facility Description

The multi-story structure included basement detention areas and operational floors. Documented evidence describes large rooms on the first floor containing scattered mattresses (15–20 per room), with at least two such rooms confirmed.²⁸² The second floor maintained interrogation capabilities, while the basement areas served as detention spaces.²⁸³

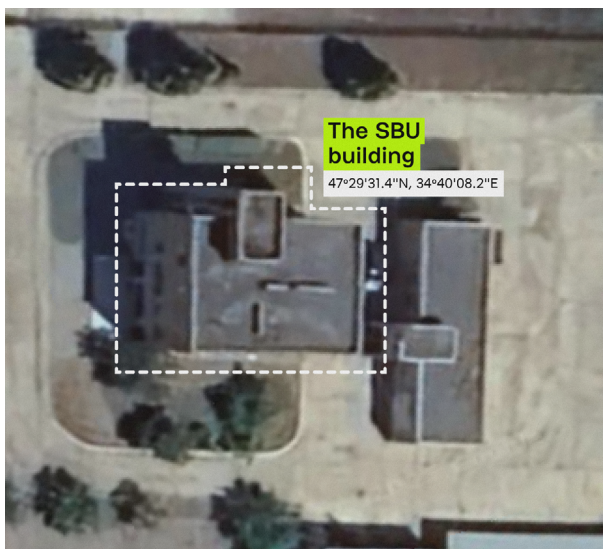
Detention Conditions

Russian military personnel from Dagestan held detainees in basement facilities under guard and mattresses were distributed across large rooms for sleeping.²⁸⁴ This information reflects the available data and may not represent the complete conditions of the facility.

Treatment of Detainees

Truth Hounds documented at least one incident of conflict-related sexual violence, when a civilian prisoner was raped with the use of a police baton at the SBU building.²⁸⁵

The available evidence provides limited information about this detention facility. The information presented in this report reflects only what has been confirmed through documented evidence.



The SBU building in Enerhodar. Image source: Google Maps.

2.3.5. Kamianka-Dniprovska Temporary Custody Isolator No. 2

Location

Kamianka-Dniprovska Temporary Custody Isolator No. 2²⁸⁶ was located at 2 Deviate Travnnya Avenue (47°29'52" N, 34°24'32" E), adjacent to the Kamianka-Dniprovska District Department of Internal Affairs building.²⁸⁷ This proximity to local law enforcement infrastructure facilitated close coordination between detention operations and the occupying administration.

Operating Period

The facility functioned as a detention center from at least July 2022 until approximately September 2022.²⁸⁸ Documented evidence indicates that operations likely ceased or significantly reduced following Ukrainian drone strikes on the adjacent District Department of Internal Affairs building in August-September 2022, which reportedly housed occupying administration personnel and a multiple-launch rocket system (MLRS).²⁸⁹

Indicators of Scale and Significance

The scale of operations is evidenced by the documented transfer of at least 21 detainees from Enerhodar Police Station to the facility on July 11, 2022,²⁹⁰ with additional reports indicating the total number of detainees reached at least 31.²⁹¹

Local Ukrainians were in charge of Kamianka-Dniprovska under the command of Russian occupying forces. These included the head of the facility, a former Ukrainian policeman from Kamianka-Dniprovska.²⁹²

Documented visits of Russian security service representatives between detention facilities indicate centralized operational control. In late July 2022, FSB operatives arrived at Kamianka-Dniprovska to conduct interrogations and register detainees' biometric data in their agency database.²⁹³ The first wave of releases occurred on August 1, 2022: at least 10 detainees were freed after being forced to sign documents pledging cooperation with the

occupying administration.²⁹⁴ The remaining prisoners were released from captivity in late August and early September 2022.²⁹⁵

Facility Description

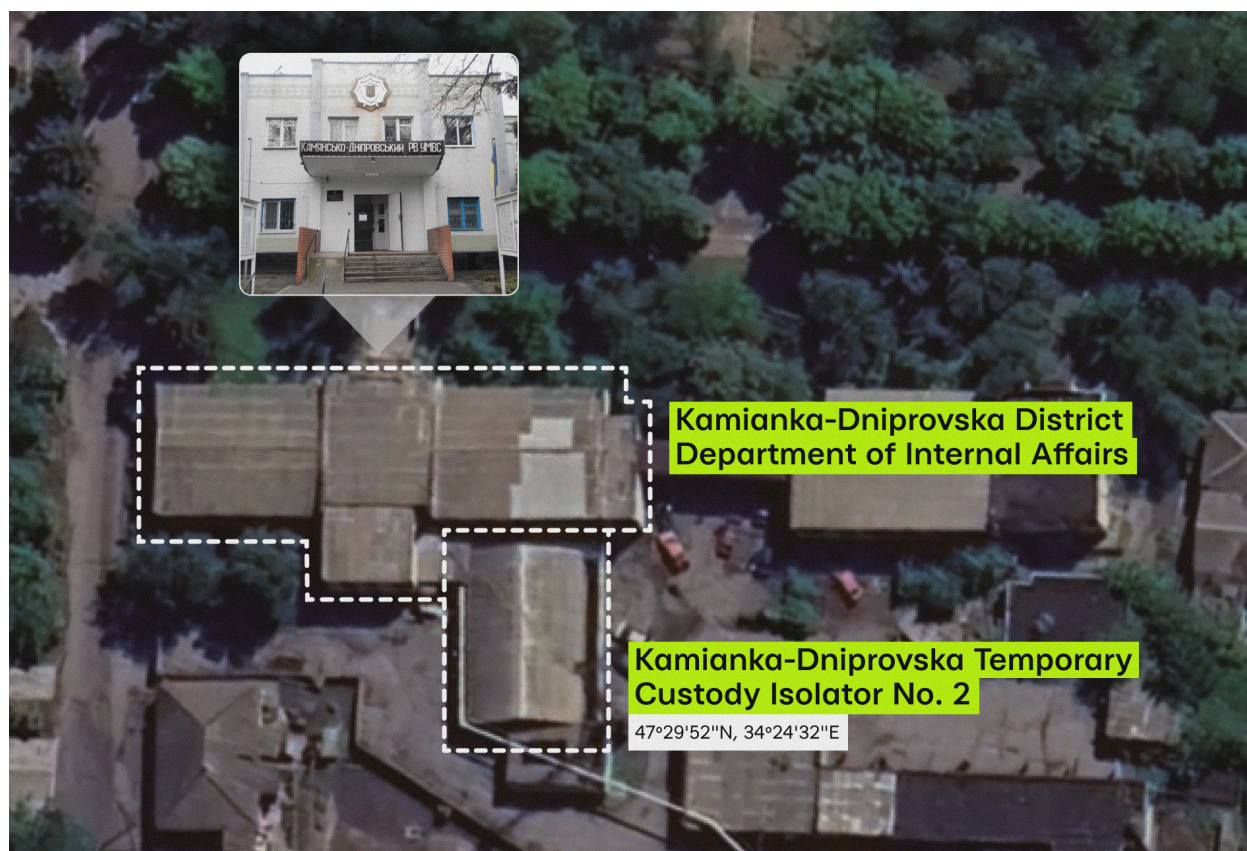
The temporary custody isolator contained approximately seven cells,²⁹⁶ with more detailed information available for two of them:

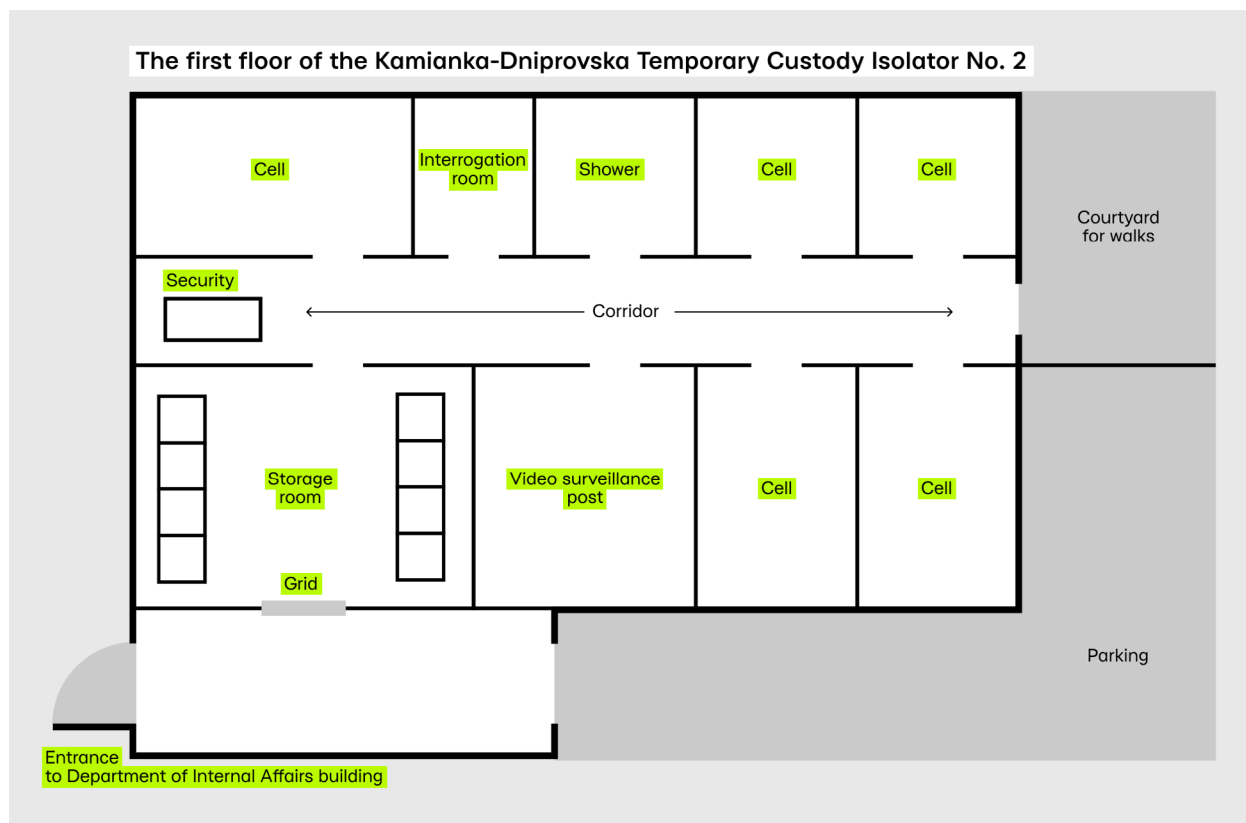
- First cell: Documented evidence indicates this was a detention cell holding multiple detainees. According to one survivor, the cell contained four bunks and 21 detainees were initially placed there. The cell configuration allowed only seven people to use the bunks, forcing most people to lie on the floor;²⁹⁷ and
- Medical cell: A separate cell was designated for detainees with serious injuries, including those suffering from traumatic weapon wounds and other deteriorating physical conditions.²⁹⁸ As one survivor described it, those with wounds “started to rot there” due to the combination of untreated injuries, heat, and humidity.²⁹⁹

There was at least one interrogation room on the first floor of the Kamianka-Dniprovska detention center.³⁰⁰ The facility also included office rooms on the second floor used for interrogations and processing detainees for release. These interrogation rooms were specifically used by visiting FSB representatives to question detainees before their release.³⁰¹ FSB representatives from Melitopol similarly visited the center and interrogated detainees at the adjacent police building, to which the detainees were escorted in handcuffs.³⁰²

Survivors reported that a Russian MLRS was positioned adjacent to the detention center, with detainees regularly hearing rocket launches and observing dust on the windows from the launches, indicating the deliberate co-location of military assets with civilian detainees.³⁰³

Kamianka-Dniprovska Temporary Custody Isolator No. 2, including the adjacent Kamianka-Dniprovska District Department of Internal Affairs building. Image source: Google Earth and Misto.ua.³⁰⁴





Detention Conditions

Detention conditions were characterized as follows:

- Extreme overcrowding: A 3 meter x 3 meter cell held up to 31 detainees.³⁰⁵ As one detainee reported: "We couldn't sleep, we couldn't even sit there at the same time. Half of us had to stand, half of us had to sit, and at night we took turns sleeping";³⁰⁶
- Inadequate sleeping arrangements: According to one detainee: "They put 21 of us in a cell with four bunks, one was two-tiered... Only 7 people could fit on the bunks and under the bunk, the rest lay between the bunks, we were "assembling Tetris" [detainees lying down with their legs towards the heads of other detainees to save space] on the floor." Another detainee stated of their experience: "There were six to seven people there, not 20 people, you could breathe, you could sleep on a bed, not on the floor";³⁰⁷
- Poor ventilation and extreme heat: Detainees reported suffocating conditions, especially

A visualized hand-drawn plan of the first floor of the Temporary Custody Isolator, as per Survivor IDs: En-013 and En-019. Image source: Prepared in-house by Truth Hounds.

during summer. One civilian detainee reported: "Everything was leaking, you were dying from the heat. On the second day, they at least opened the door a little bit so that we could at least get some air."³⁰⁸ Another civilian detainee mentioned: "And we had such an unsanitary situation there—the walls were sweaty, wet, there was nothing to breathe";³⁰⁹

- Lack of medical care: While at least one person with wounds from previous captivity in Enerhodar received medical help,³¹⁰ detainees with traumatic weapon wounds received no medical attention. According to one detainee: "Those who were shot with traumatic guns and were not taken to the hospital, we were kind of squeezing out these [their] bullets. Because of the constant moisture, the heat, you sweat, everyone started to slowly rot there... Those who did not rot much, they smeared themselves with iodine and sat in place."³¹¹

According to survivors, conditions at Kamianka-Dniprovska differed from those at Enerhodar Police Station. Some detainees reported being able to receive visits and parcels from relatives,³¹² although some were deprived of such rights.³¹³ Documented evidence indicates that certain detainees, specifically those held for “administrative offenses”, could reduce their detention period by five days through participation in “community service”.³¹⁴

Treatment of Detainees

Former detainees reported fewer beatings at Kamianka-Dniprovska than at Enerhodar Police Station, although evidence confirms at least one severe beating incident in the summer of 2022.³¹⁵ The detainees used water bottles to wash themselves in the courtyard of the detention site.³¹⁶

Detainees reported being summoned for interrogations by the security forces arriving at the site and the local guards who were in charge of the site.³¹⁷ When security forces representatives were arriving at the site to interrogate detainees, the cameras at the facility, which operated near the interrogation room on the first floor, would be repositioned to face the walls. One detainee reported: “When we were taken out or the FSB came, the camera was turned off, but everything on the camera was recorded, both video and sound. If the rotating video camera was turned down, if it was pushed into the wall, it was a sign to us that the FSB had arrived, it was a sign that they were coming, there would be some ‘fun’.”³¹⁸

The security forces and local guards in charge of the site threatened detainees as a form of psychological pressure.³¹⁹ For example, guards told detainees they would be sent to Mariupol “to clear mines and corpses”.³²⁰ During interrogations, detainees were forced to sign cooperation documents and pressured to accept Russian passports or participate in the referendum organised by the occupying administration.³²¹ Specific threat patterns included forcing detainees to learn the Russian national anthem in between interrogation sessions.³²²

Documented evidence provides grounds to believe that Russian security forces instructed detention center staff to deliberately worsen detention conditions for prisoners.³²³

2.3.6. Other Detention Sites

Truth Hounds documentation reveals the existence of other, smaller-scale detention sites operating alongside the primary network of detention sites, indicating broader detention capabilities across Enerhodar and the surrounding area during the occupation. In particular, occupying forces used the Enerhodar Yacht Club basement (47°31'22.2" N, 34°39'39.2" E) during the initial weeks following the Russian seizure of the ZNPP on March 4, 2022, when Russian military forces established positions at this riverside location.³²⁴ Detainees were kept in basement spaces in a damaged building, accessed through a metal door.³²⁵

The Yacht Club basement served as an improvised detention center before more structured facilities became operational.³²⁶ Documented evidence confirms the detention and torture of at least one ZNPP employee accused of sabotage, although evidence suggests further use of the space for detention during this early period. Documented conditions included severe cold in the basement and detainees being restrained by industrial wire used to tie their hands and feet.³²⁷ Torture methods included shots being fired above detainees’ heads and psychological manipulation through deliberate entrapment: captors would leave doors unlocked while maintaining hidden surveillance, using any subsequent escape attempts to justify intensified punishment.³²⁸



The yacht club basement facility. Image source: Google Maps.

Another improvised detention site, Velyka Bilozerka Police Station (47°16'38" N, 34°42'26" E), appears to have begun operating in September 2022, when detainees from Kamianka-Dniprovska were transferred there.³²⁹ Limited documentation possibilities prevent a comprehensive assessment of detention practices. However, the site's sustained operational status suggests that it is integrated into long-term territorial control mechanisms.

The geographical scope of detention operations extended well beyond local boundaries. Truth Hounds documentation shows that Enerhodar civilians were detained or transferred to multiple facilities across occupied territories and inside the Russian Federation itself:

- Gas station on the P37 highway between Novodniprovska and Balky (47°24'37" N, 34°49'19" E), Zaporizhzhia Oblast, occupied Ukraine;³³⁰
- SBU building in Melitopol, Zaporizhzhia Oblast, occupied Ukraine;³³¹
- Police station in Melitopol at 35 Chernyshevskoho Street and surrounding garages, Zaporizhzhia Oblast, occupied Ukraine;³³²
- Special Investigative Isolator ("SIZO") in Melitopol at 37 Chernyshevsky Street, Zaporizhzhia Oblast, occupied Ukraine;
- Unidentified detention site in Yakymovka, Melitopol District, Zaporizhzhia Oblast, occupied Ukraine;
- Unidentified detention site in Vesele, Zaporizhzhia Oblast, occupied Ukraine;³³³
- Hospital facility in Berdyansk, Zaporizhzhia Oblast, occupied Ukraine;³³⁴
- Mariupol SIZO No. 2 at 52 Kamenska Street, Donetsk Oblast, occupied Ukraine;
- Simferopol SIZO No. 2, Crimea, occupied Ukraine;³³⁵
- Donetsk SIZO No. 1, Donetsk Oblast, occupied Ukraine;
- SIZO in Donetsk, Donetsk Oblast, occupied Ukraine;
- Moscow SIZO No. 1 ("Sailor's Silence"), Moscow, Russian Federation;
- Kamensky Correctional Colony No. 23, Saratov Oblast, Russian Federation;
- Pugachev Strict Regime Colony No. 4, Saratov Oblast, Russian Federation;³³⁶
- Saratov Correctional Colony No. 10, Saratov Oblast, Russian Federation;
- Pugachev Correctional Colony No. 4, Saratov Oblast, Russian Federation;
- Rostov SIZO No. 2, Rostov Oblast, Russian Federation;³³⁷
- Police station in Taganrog, Rostov Oblast, Russian Federation;³³⁸
- *Spetspriiomnyk* (Special reception center) in Taganrog at 2 Dobrolyubovsky Lane, Rostov Oblast, Russian Federation;³³⁹
- Taganrog SIZO No. 2 at 175 Leninska Street, Rostov Oblast, Russian Federation;³⁴⁰
- Police station in Anapa, Krasnodar Krai, Russian Federation;³⁴¹ and
- Unidentified detention site in Sochi, Krasnodar Krai, Russian Federation.³⁴²

This extensive network reveals the systematic integration of local detention infrastructure within broader territorial control mechanisms, demonstrating coordinated detention policies that transcended administrative boundaries and extended operations from immediate occupation zones to facilities deep within Russian territory. Many of the interviewed Enerhodar civilians were placed in one detention facility and subsequently transferred to another. During their transfer, occupying forces covered detainees' heads with bags or injected them with something to render them unconscious so that they would not be able to identify facilities or perpetrators.³⁴³

As mentioned above, some Enerhodar civilians were detained, subjected to inhuman treatment, and tortured at detention centers in other Russian-occupied territories of Ukraine and in the Russian Federation itself. In light of this, the number of detainees, and the limited access to the city, it is likely that there are more detention facilities than those described in this report.

2.4. Orchestration of the Crimes

Based on interviews with multiple survivors who attributed their abduction, detention, and further mistreatment to different occupying structures in Enerhodar and its vicinity, the overall picture that emerges suggests that the system of repression in Enerhodar functioned in a coordinated manner:

- Russian regular and irregular military units: Unit members directly participated in the abductions and detentions, as well as further mistreatment of Enerhodar civilians;
- Russian security forces, including the FSB and its Special Intelligence Unit: Their representatives have played a leading role in orchestrating, supervising, and directly participating in the widespread and systematic abuses of Enerhodar civilians, notably their arbitrary imprisonment, inhuman treatment, and torture; and
- Russian occupying police: This group primarily comprises Ukrainian nationals from Enerhodar and other occupied territories who chose to collaborate with Russian forces. The leaders of the occupying police played a vital role in organizing the imprisonment, inhuman treatment, and torture of Enerhodar civilians.³⁴⁴ Lower-ranked personnel guarded the detention facilities and performed other related functions in Enerhodar and its vicinity.
- Russian occupying authorities, which included:
 - The occupation-appointed city council, headed by an occupation-appointed mayor and a regional (oblast) governor;
 - The commandant's office, set up after an interim period, responsible for coordination between security and military forces in Enerhodar;³⁴⁵ and
 - Rosatom representatives, including Ukrainian nationals who have opted to

cooperate with the Russian state nuclear agency.³⁴⁶

Organized groups comprising Russian military personnel, security forces, and occupying police representatives abducted and detained Enerhodar civilians. While the composition of these groups has often changed, particularly through the rotation of key security force leadership, they have consistently operated in the same coordinated manner since the start of the Russian occupation of Enerhodar. Some of these groups focused on the broader targeting of Enerhodar's civilian population, while others concentrated specifically on targeting Ukrainian ZNPP employees.³⁴⁷

The detention centers have operated under varying structures, with many led by occupying police leaders but ultimately overseen by Russian security forces. The actual acts of torture have primarily been carried out by members of the Russian military and security forces, often assisted by occupying police representatives. In the majority of cases, Rosatom representatives, acting as part of the occupying authorities, have facilitated the imprisonment, torture, and inhuman treatment of Enerhodar civilians by identifying and summoning Ukrainian ZNPP employees for interrogation, after which the employees were abducted. In some instances, the representatives have themselves conducted the interrogations and coerced the employees, often alongside members of the Russian security forces ([see Subsection 2.5](#)).

2.4.1. Means and Methods of Committing Crimes

Most civilians reported that masked Russian military men alongside Russian security forces, operating in groups of three to six, abducted them from their workplaces or apartments.³⁴⁸ At least two FSB

men were typically present, typically unmasked and wearing tactical boots, trousers, and a civilian t-shirt.³⁴⁹ Separate eyewitnesses reported having observed FSB members in multicam camouflage during the abduction process, including some in balaclavas.³⁵⁰ The abductions typically involved military forces beating civilians at their workplace or apartment with a rubber or wooden baton,³⁵¹ bat,³⁵² firearm or its handle,³⁵³ or otherwise by applying a chokehold,³⁵⁴ and handcuffing them.³⁵⁵ At times, abductees had their heads covered with a plastic bag to obscure visual identification of transport routes to detention facilities.³⁵⁶ In some circumstances, the bag had been doused with diesel fuel so that the abducted person would struggle to breathe.³⁵⁷ In some instances, abductees were shot in their legs.³⁵⁸

Some survivors reported being threatened with abduction and detention, after which most of them were subsequently taken to detention facilities, either immediately or after a specific period.³⁵⁹ In none of the documented incidents were the abductees informed of the reasons for their abduction and detention.

Russian occupying forces sometimes used planted evidence as a false basis for abducting Enerhodar civilians. Such spurious evidence often included rifle magazines and other weaponry at the civilians' homes.³⁶⁰ For example, one survivor reported that a group of Russian occupying military and security forces abducted him from his apartment in Enerhodar because of a bullet from an AK-47 rifle that they had planted there earlier. The planted bullet was used as grounds for the survivor's prolonged detention in Enerhodar.³⁶¹ Similarly, another survivor related that masked men visited his place of work and planted rifle magazines there and afterwards videotaped everything. The planted evidence was used as the basis for the survivor's arrest and further detention.³⁶²

Documented evidence reveals the systematic appropriation of civilian, state, and communal vehicles to bring detainees to detention facilities.³⁶³ Russian security services, military personnel, and occupying police units operating in Enerhodar and its vicinity coordinated these operations.

Truth Hounds documented occupying forces using various means of transportation in these

operations. Interviewed survivors frequently mentioned a custom Ukrainian National Police white Mitsubishi Outlander car,³⁶⁴ a custom National Guard of Ukraine white Ford transit bus,³⁶⁵ a civilian brown Volkswagen Amarok pickup truck,³⁶⁶ a civilian metallic Toyota Camry sedan,³⁶⁷ a civilian blue Ford Kuga car,³⁶⁸ and a civilian white Renault Duster SUV.³⁶⁹ Occupying forces would often remove the license plates after seizing cars.³⁷⁰ Enerhoatom posted a photo featuring some of the vehicles mentioned by survivors interviewed by Truth Hounds, namely a black UAZ Patriot³⁷¹ and a white Kia Sportage.³⁷²

During transportation to detention facilities, abducted civilians were further beaten across their entire body (with the use of hands, legs, and weapons).³⁷³

Some of the civilians from Enerhodar were abducted and detained while on their way to evacuate from the city, either in other occupied territories,



The black UAZ Patriot (right) and the white Kia Sportage (furthest right). Image source: Enerhoatom.⁵³¹

³⁶³ Under the Rome Statute (RS), Article 8(2)(b)(xvi), pillage constitutes a war crime. However, the pillage of property does not concern the appropriation of property necessitated by military necessity, as reflected in fn. 47 to the Elements of Crime (EoC) RS, which is a core legal text for the International Criminal Court. International Criminal Court, Katanga and Ngudjolo, ICC-01/04-01/07-717, Confirmation Decision, Pre-Trial Chamber, Sep. 30, 2008, para. 329: The Pre-Trial Chamber held that "the pillaged property, whether moveable or immovable, private or public – must belong to individuals or entities who are aligned with or whose allegiance is to a party to the conflict who is adverse or hostile to the perpetrator". See also: Sandoz Y., Swinarski C., Zimmermann B. (eds.), *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, at 1376, para. 4542 (1987): The prohibition of pillage extends to all types of property, whether they belong to private persons or to communities or the state.

such as Crimea, or in Russian state territory. All of these documented cases specifically involved Ukrainian ZNPP personnel, which, as noted in the previous section, underscores the importance for the Russian occupying forces to keep the plant's staff in the city and force them to work under Rosatom's supervision.³⁷⁴

Civilian detainees were systematically subjected to inhuman conditions, accompanied by interrogation and various forms of physical and psychological abuse, both within and outside the detention cells. Confinement took place in basement rooms, windowless spaces, or rooms with only minimal natural light. Ventilation was inadequate and detainees were compelled to use improvised sanitation facilities, such as holes in the floor or bottles, inside their cells.³⁷⁵ None of the detention facilities were equipped with functioning showers; instead, detainees attempted to wash themselves using water from bottles.³⁷⁶

Detainees consistently reported severe deprivation of food and water within detention facilities.³⁷⁷ Available provisions were minimal, with portions shared among prisoners,³⁷⁸ and water was at times withheld entirely with no justification.³⁷⁹ One survivor related going without water for 24 hours.³⁸⁰ Another survivor recalled being given crackers infested with ants and cockroaches and food that had gone moldy.³⁸¹

The majority of detainees depended on food and water deliveries from relatives or friends; those without such external support experienced acute deprivation.³⁸² These deliveries also served as a limited means of communication through concealed written notes. Multiple detainees reported that facility personnel systematically confiscated approximately half of the delivered items, further worsening the detention conditions.³⁸³ Survivors also related that occupying forces gradually imposed stricter rules on parcels sent to detainees, progressively banning numerous types of food and drink.³⁸⁴

Systematic deprivation in detention facilities created conditions that enabled more direct abuse. Evidence shows escalating violence, progressing from environmental deprivation to targeted physical and psychological assaults aimed at extracting information and enforcing compliance.

2.4.2. Systematic Torture Methods

The systematic patterns of torture of Ukrainian detainees include:

Beating different parts of the body with hands and legs³⁸⁵

Some detainees were beaten in a way that left no visible external injuries³⁸⁶ and some prisoners were handcuffed while being beaten.³⁸⁷ Some had their heads covered with bags while being beaten, causing detainees to choke.³⁸⁸ Many prisoners were beaten several times during a single day, especially after guards rotated.³⁸⁹ The detainees were also verbally abused during the beatings with, for instance, occupying forces swearing at them.³⁹⁰

Electrocution using a TA-57 ("Tapik") military field phone

In all documented instances of electrocution, Russian occupying forces used a "Tapik" military field phone (a box with a telephone handset with a wheel on the side and clips connected to an electricity cable).³⁹¹ Occupying forces would connect electrical clips from the "Tapik" to the detainees' ears, toes, head, or fingers to shock them.³⁹² Such procedures were often referred to as a "Call to Lenin" or a "Call to Ilyich".³⁹³ They were also referred to as a "Call to Putin".³⁹⁴ One survivor reported:

"'Now you're going to call Lenin', I think it was the Asian guy who told me that. They had a Tapik in the cell there, a military field phone. The senior one started asking questions again. The one who was short, kind of a 'good cop', attached a big black paperclip on my right pinkie, like a clothespin wrapped in wire, and the other clothespin with a wire on my left earlobe. I was sitting on a chair and they started twisting the Tapik. It was either the tall one, a 'jacked-up' one doing it, or the short one. That short one still held my head when I was already losing consciousness from electric discharges, when

³⁹³ "Ilyich" was Vladimir Lenin's patronymic.

*everything went black, white lightning was visible, a glow in my eyes appeared, and electricity went through me. It was difficult to keep my self control. I was drooling and crying, my body tensed at one moment. You barely have time to recover. It felt like they were running electricity through me for about five minutes, stopping, then asking questions again. Then they switched to my pinkies, attached the wire clip to the other hand and turned it on again. They even said it worked even better that way. They put some kind of military cap on my head: 'What, you like that cap?' The conversations went along those lines."*³⁹⁵

Truth Hounds documented at least three incidents involving a "Tapik" being connected to male detainees' genitals.³⁹⁶ Water or wet towels were sometimes used to amplify the effect of the electrocution.³⁹⁷ One survivor reported: "I was no longer beaten, but it was even worse—they connected a device to my ear and poured water on top and it gave me such a terrible electric shock."³⁹⁸

In addition, some detainees were tied to a chair, beaten, and handcuffed during their electrocution.³⁹⁹

Threats to execute or kill detainees

Russian occupying forces would often tell a detainee that, the next time he returned to the interrogation room, he would not survive⁴⁰⁰ or that the detainee would be killed if he did not perform the requested task⁴⁰¹ or share the requested information.⁴⁰² They also made general threats to kill detainees.⁴⁰³

Sexual violence against detainees

Truth Hounds documented at least two instances when Russian occupying forces coerced male Ukrainian prisoners to rape female detainees who were thrown into their cells. If detainees refused, they were threatened to be killed.⁴⁰⁴

Other forms of documented sexual violence include the rape of detainees with a police baton⁴⁰⁵ and threatening to rape detainees (through coerc-

ing other detainees,⁴⁰⁶ using a bottle,⁴⁰⁷ or using a police baton or stick), accompanied by forced nudity. The latter may have occurred alongside beatings of the detainee, intimidation by displaying a rubber baton, sometimes covered with a condom, or by pointing a firearm at them.⁴⁰⁸ Male detainees were also threatened with the rape of their wives.⁴⁰⁹

Use of a polygraph⁴¹⁰

While polygraphs are common in standard investigative procedures, in the circumstances of the Russian occupation of Enerhodar, polygraphs functioned as an additional mechanism for psychological coercion. In particular, polygraphs were used to increase pressure on prisoners to answer questions about their background, their pro-Ukrainian position, and related issues (e.g., information relating to the AFU), and/or to extract a confession from detainees about working with Ukrainian military and security forces, adding another source of psychological suffering.

The polygraph sessions were accompanied by beatings.⁴¹¹ Some prisoners were threatened with being beaten even more "if they were lying". In particular, one survivor reported that during the interrogation session, the perpetrators told him: "Look at the walls: there is blood. If you lie to us, you'll get it in the head."⁴¹²

Direct eyewitnesses reported other types of severe physical and mental pain or suffering being inflicted:

- Beating with a rubber police baton or wooden bat;⁴¹³
- Beating with a rifle or pistol (handle or butt);⁴¹⁴
- Beating in the head with a shovel;⁴¹⁵
- Beating with a kettle cord or TV cable;⁴¹⁶
- Scrubbing skin with sandpaper;⁴¹⁷
- Placing a chokehold on detainees' necks;⁴¹⁸
- Handcuffing to a hot heating pipe;⁴¹⁹
- Using a tourniquet to stop blood flow to a body part;⁴²⁰ Extinguishing a cigarette against the body;⁴²¹
- Placing a hot iron on a detainee's chest;⁴²²

- Shooting with a traumatic gun;⁴²³
- Spraying pepper spray into detainees' eyes;⁴²⁴
- Cutting an ear with a knife;⁴²⁵
- Cutting hair with a knife;⁴²⁶
- Asphyxiation (spraying gas or pepper spray⁴²⁷ inside the detention cells, forcing detainees to put on a gas mask,⁴²⁸ and strangling detainees);⁴²⁹
- Shaving detainees' heads to depict a cross and beating their backs to form a cross sign from the wounds;⁴³⁰
- Threats of cutting off a hand;⁴³¹ and
- Threats to detain and torture relatives.⁴³²

These torture methods occurred within broader patterns of detention facility management that structured the daily interactions between guards and detainees. This physical and mental pain and suffering occurred during the interrogations of detainees⁴³³ in separate rooms, to which the guards led them, often handcuffed and with bags over their heads.⁴³⁴ Most often, there would be three to four people in the room, including: (i) a direct perpetrator or co-perpetrators committing the physical and mental acts of torture; (ii) an assistant (aider) who would assist in the perpetration of torture; and (iii) a person witnessing the torture, as an assistant (aider) or without direct involvement.⁴³⁵ The perpetrator and co-perpetrators were usually Russian security service members, while the assistants (aiders) would typically be either Russian military personnel and/or occupying police (for a more detailed analysis relating to the individual responsibility of members of occupying Russian forces for the perpetration of crimes in Enerhodar, see [Subsection 5.4](#)).⁴³⁶

The detainees interviewed reported that when guards or their principals entered their cells, all detainees had to stand and face the wall with their hands behind their backs. They could not move until the guard exited the cell and relocked it. One survivor reported:

"When they entered our cell, they hit the iron door of the cell with an iron key, then everyone had to jump up, people had to stand along the wall, hands up, and not look into the eyes of the person who en-

*tered. And you wait for what will happen with such a detour."*⁴³⁷

Consequently, detainees were often unable to identify who entered the cell and who conducted beatings, particularly at night.⁴³⁸

2.4.3. Strategic Functions of Torture

Documented evidence reveals that the systematic infliction of physical and psychological pain and suffering served multiple strategic functions:

Obtaining information or confessions

Given that Russian occupying forces predominantly targeted civilians who participated in anti-occupation resistance and those with pro-Ukrainian views, they frequently inflicted physical and mental torture to extract information about others involved in resistance activities,⁴³⁹ any other civilians identified as disloyal to the occupying regime (e.g., Ukrainian ZNPP staff unwilling to cooperate with Rosatom),⁴⁴⁰ owners of weaponry in the city,⁴⁴¹ former AFU members,⁴⁴² those with relatives currently enlisted in the AFU,⁴⁴³ and any other information linked to the Ukrainian military, security services, or authorities.⁴⁴⁴ For example, if an individual was a former AFU member, the interrogation would be aimed at obtaining information about their past military involvement and other related information.⁴⁴⁵

Some prisoners were forced to confess to having an anti-Russian position,⁴⁴⁶ about weapons that occupying forces alleged detainees possessed,⁴⁴⁷ and about their cooperation with Ukrainian military and security forces, under threats of beatings and being killed.⁴⁴⁸

Punishment

Systematic abuse functioned as a punitive mechanism targeting civilians based on perceived disloyalty, serving both retributive and deterrent objectives.⁴⁴⁹ These acts were often coupled with attempts to extract information about other resis-

tance members and to intimidate the detainees into ceasing any anti-occupation activities.

Intimidation

Various forms of intimidation accompanied the interrogations. In addition to threats of sexual violence against detainees or their family members, intimidation tactics deployed by Russian occupying forces include prohibiting evacuation from the city (for example, due to being added to Russian security databases);⁴⁵⁰ allusions to the poisoning of Sergei and Yulia Skrypal (poisoning with the Novichok nerve agent);⁴⁵¹ threats to kill relatives;⁴⁵² threats of execution (e.g., by shooting);⁴⁵³ threats of being shot in various parts of the body;⁴⁵⁴ threats of being “taken to the forest”, implying the person’s execution;⁴⁵⁵ being “taken to the forest” and shot at near the head or ear;⁴⁵⁶ being “taken to the forest” and shot in different parts of the body;⁴⁵⁷ threats to gouge out eyes and cut off ears;⁴⁵⁸ forcing detainees to dig their own graves and threatening them with execution;⁴⁵⁹ threats of being taken to Mariupol to work to supply the Russian army;⁴⁶⁰ threats of deportation to the so-called “Donetsk People’s Republic” (DNR) or “Luhansk People’s Republic” (LNR);⁴⁶¹ and threats of deportation if detainees refused Russian citizenship.⁴⁶² Many torture survivors were warned not to speak to anyone about the detention and torture to which they were subjected.⁴⁶³

Ukrainian ZNPP workers reported having been severely intimidated either directly during interrogations at the ZNPP, and/or by the general working atmosphere, and/or by the impossibility of evacuating from the city.⁴⁶⁴

Coercion

The deliberate infliction of physical and mental suffering served as a mechanism to force detainees to collaborate with occupying authorities. Truth Hounds documented several incidents where, as a condition of release, civilians were forced to promise their cooperation with the occupying authorities and forces (often verbally⁴⁶⁵ or in writing)⁴⁶⁶ and/or their unwillingness to interfere with Russian armed forces.⁴⁶⁷ As is detailed in [Subsection 2.5](#), several Ukrainian ZNPP workers were subjected to physical and psychological pain

and suffering as a means of coercion to force them to sign contracts with Rosatom.⁴⁶⁸

Russian occupying forces filmed some survivors of inhuman treatment and torture for Russian propaganda purposes, forcing them to make recorded confessions denying that occupying forces had committed crimes, reassuring viewers about the stable security situation in Enerhodar,⁴⁶⁹ accusing themselves of activities against the occupying regime,⁴⁷⁰ inciting others to give up weapons and cooperate with the occupiers,⁴⁷¹ praising the Russian Army,⁴⁷² or claiming that Russian-speaking civilians in Enerhodar had been harassed or accusing themselves of such acts.⁴⁷³ Subsequently, pro-Russian Telegram channels and other platforms circulated these videos in an effort to persuade their audiences that Russian aggression was justified, or to legitimize large-scale actions targeting the civilian population.⁴⁷⁴

After allegedly being tortured on Russian territory in Sochi, ZNPP spokesman and Enerhodar city council representative Andrii Tuz reported having been forced to make statements on camera claiming to be on vacation in Russia and denying all his previous critical comments about the Russian occupation, including statements addressing Russian attacks on the ZNPP. A video featuring Tuz making these claims was released on June 23, 2022.⁴⁷⁵

2.4.4. Consequences of Detention

Detention accompanied by inhuman treatment and torture would last from a few weeks to several months.⁴⁷⁶ Some civilians were abducted and placed in the detention site more than once, triggering another cycle of torture against them.⁴⁷⁷ Some abductees were subjected to repeated episodes of physical and psychological abuse without ever being formally placed in detention.⁴⁷⁸

After their detention, civilians were either released or brought to trial before the occupation-appointed city courts, where they could be sentenced to further imprisonment. One notorious example is the sentencing of 56-year-old Ukrainian ZNPP employee Natalia Shulha. On March 5, 2025, at

Donetsk Special Reception Center No. 1, she was sentenced to 15 years of imprisonment for alleged cooperation with the SBU and was fined 500,000 RUB (approximately 5,500 USD).⁴⁷⁹ Shulha had initially been abducted and detained on July 12, 2024, according to Enerhodar Mayor Orlov, who reported that previously recorded staged videos transmitted publicly by Russian channels were used as evidence against Shulha.⁴⁸⁰ Similarly, on March 26, 2025, a Russian court sentenced Serhii Potynh, a Ukrainian safety engineer at the ZNPP, to 18 years in prison and fined him 700,000 RUB (approximately 8,300 USD) for alleged terrorism.⁴⁸¹

Occupying authorities coerced numerous survivors of detention and torture into assisting them in illicit activities, including the appropriation of civilian vehicles.⁴⁸² In many instances, detainees were compelled to pay a financial ransom to secure their release, a practice often referred to as a “bribe for freedom”.⁴⁸³ Abductions of civilians in Enerhodar were most frequently carried out alongside the theft of their property, including vehicles; private belongings, such as electronics; and documents.⁴⁸⁴ Many detainees later discovered that their bank accounts had been emptied during their detention,⁴⁸⁵ highlighting the material exploitation involved in these detentions.

Even after their initial release, Russian occupying forces frequently revisited Ukrainian civilians and threatened them with renewed detention if they failed to provide requested information. This cyclical intimidation pattern established an enduring system of control through persistent fear.⁴⁸⁶ Most of the survivors interviewed were forced to obtain a Russian passport after their release from detention⁴⁸⁷ and some were coerced to do so before being released.⁴⁸⁸

After their detention, Enerhodar civilians suffered grave mental and physical consequences, including weight loss,⁴⁸⁹ hematomas,⁴⁹⁰ scars,⁴⁹¹ broken bones⁴⁹² and bone-related issues,⁴⁹³ traumatic brain injuries,⁴⁹⁴ high blood pressure,⁴⁹⁵ palpitations,⁴⁹⁶ convulsions,⁴⁹⁷ mutilation,⁴⁹⁸ kidney problems,⁴⁹⁹ tooth loss,⁵⁰⁰ loss of eyesight,⁵⁰¹ memory loss,⁵⁰² insomnia,⁵⁰³ skin problems,⁵⁰⁴ fainting,⁵⁰⁵ headaches,⁵⁰⁶ back pain,⁵⁰⁷ speech problems,⁵⁰⁸ digestive problems,⁵⁰⁹ loss of the ability to walk,⁵¹⁰ breathing problems (e.g., asthma),⁵¹¹ concentra-

tion loss,⁵¹² and psychological traumas.⁵¹³ One survivor reported:

“After being in captivity, half of him [another survivor] was simply gone. I asked him: ‘Did they not feed you there or what?’ He said: ‘It’s not about food. It’s a kind of psychological state, stress.’ Well, he was also closed off—everyone was very, very afraid.”⁵¹⁴

At least six individuals are confirmed to have been tortured to death. The first, Andriy Honcharuk, nicknamed “Diver”, who worked as a diver at the ZNPP and was held in Cell No. 3 of Enerhodar Police Station, died in an ambulance on the way to the hospital.⁵¹⁵ The mayor of Enerhodar reported his death on July 3, 2022.⁵¹⁶ Another detainee, an unidentified 50-year-old man, died at a detention site immediately after having been tortured in May or early June 2022.⁵¹⁷ Similarly, a detainee aged between 50 and 60 who was held in Cell No. 1 of Enerhodar Police Station was tortured to death (his ribs were broken as a result of beating) in August 2022.⁵¹⁸ A further documented incident involved a former Ukrainian policeman, likely with the surname “Doroshenko”,⁵¹⁹ being tortured to death in Enerhodar in July or August 2022. He was held in Cell No. 1 of Enerhodar Police Station and his body was not returned to his relatives for almost a month after his death.⁵²⁰ The final two documented incidents involve the torturing to death of prisoners from Cells No. 1 and No. 3 of Enerhodar Police Station between late June and August 2023.⁵²¹

Many of the prisoners, including those mentioned above, were buried in plastic bags in the city and its vicinity, as reported by several eyewitnesses of “fresh” burial sites.⁵²² Several prisoners were forced to bury the bodies; they were transported to a burial site with bags over their heads, forced to dig graves with shovels, and then returned to the detention facility.⁵²³

In other cases, the poor detention conditions led to detainees being hospitalized.⁵²⁴ In certain situations, the first form of treatment at the hospital would be insufficient or inadequate.⁵²⁵ Survivors reported that the occupying forces would often force the detainees to carry beaten pris-

oners to the ambulance, but always prohibited detainees who had been tortured the most from being seen by doctors.⁵²⁶ Most detainees were systematically denied medical assistance, with some torture survivors refused care due to their lack of Russian passports.⁵²⁷ Instead, some were given a special pill to swallow, intended to stop the bleeding resulting from the injuries caused by the beatings⁵²⁸ or were told they would be injected with adrenaline.⁵²⁹ The occupying forces injected some detainees with medicine and forced them to take pills that left them unconscious or dizzy for some time.⁵³⁰

Truth Hounds has documented that the widespread and systematic acts of detention, inhuman treatment, and torture of Enerhodar civilians were not isolated incidents but a deliberate system of control within the occupation. These abuses served linked strategic goals: gathering intelligence on resistance networks, punishing suspected pro-Ukrainian residents, and pressuring civilians to collaborate with the occupying authorities. The targeted abuse of Ukrainian nuclear plant staff to force them into Rosatom contracts shows how torture was used to advance the integration of the plant into Russian control. Repeated cycles of surveillance, abduction, and abuse against civilians reveal a consistent, organized pattern, demonstrating that terror was deliberately built into the occupation's administrative structure.

2.5. Rosatom's Role in the Crimes Committed against ZNPP Employees

Rosatom's role expanded from technical oversight to broader administrative control, creating the framework for its representatives to participate directly in detention and coercion practices. Evidence indicates that Rosatom's growing presence at the ZNPP aligned with systematic pressure on Ukrainian specialists, making nuclear expertise both a strategic asset and a target for Russian occupying authorities.

Truth Hounds interviewed licensed ZNPP employees across various departments, as well as dozens of individuals linked to the ZNPP, including relatives of employees and local municipal representatives familiar with the situation.

Documented evidence indicates that the kidnapping, detention, and infliction of physical and/or psychological pain and suffering on Ukrainian ZNPP personnel has served the following purposes:

- To obtain more information about pro-Ukrainian ZNPP workers,⁵³² pro-Ukrainian civilians in Enerhodar,⁵³³ and/or any information linked to the AFU;⁵³⁴
- To force Ukrainian ZNPP staff to sign contracts with Rosatom⁵³⁵ and/or to collaborate with the Russian occupying administration and forces;⁵³⁶
- To punish personnel for their pro-Ukrainian position and related actions;⁵³⁷ and
- To intimidate personnel, allegedly with the purpose of compelling staff to demonstrate formal loyalty.⁵³⁸

In total, Truth Hounds has documented the targeting of at least 78 Ukrainian ZNPP employees by Russian occupying forces and authorities, in-

cluding Rosatom representatives. This number includes 20 staff members interviewed by Truth Hounds and an additional 58 people mentioned in those interviews.

Nonetheless, the available information indicates that the number of targeted Ukrainian ZNPP personnel is significantly higher. As one of the interviewed survivors stated: "These cases of signing contracts through physical coercion, blackmail through family, we will have to find out later. But the fact that all three cells in the [redacted] detention center were not empty, all were packed with people—nuclear power plant personnel were also constantly passing through these cells."⁵³⁹

2.5.1. Initial Rosatom Presence at the ZNPP

Direct eyewitness testimony confirms Rosatom's presence at the ZNPP within 10–15 days of the Russian seizure of the facility on March 4, 2022.⁵⁴⁰ Rosatom representatives were initially observed in the ZNPP's Crisis Center,⁵⁴¹ which is located in the underground part of the administrative building (47°30'24.9" N, 34°35'06.9" E). Subsequently, increasing numbers of Rosatom personnel established a presence at further locations across the facility complex, including a designated two-story building (47°30'43" N, 34°35'21" E)⁵⁴² and the engineering department (47°30'43.5" N, 34°35'19.1" E), which is adjacent to the fourth reactor block.⁵⁴³

Following the arrival of Rosatom staff, Ukrainian ZNPP personnel were targeted by Russian occupying forces in collaboration with Rosatom, who pressured them to collaborate and obtain Russian passports. The targeting was hierarchical in character, starting with senior Ukrainian

staff and progressing to lower-ranked employees. Senior management members who had agreed to cooperate then approached the lower-ranked Ukrainian personnel. This approach limited direct interaction between lower-ranked staff and Rosatom representatives.⁵⁴⁴ Other methods employed at the ZNPP to encourage Ukrainian personnel to sign contracts with Rosatom included the distribution of brochures that promised better working conditions and wages.⁵⁴⁵

Shortly after the armed seizure of the ZNPP by Russian occupying forces, the regime at the plant became stricter, with Ukrainian staff being prohibited, for instance, from bringing phones to work.⁵⁴⁶ Following the illegal takeover, Russian security forces established an immediate presence at the facility and Ukrainian personnel began to be targeted.⁵⁴⁷ Due to the specifics of the operation of Russian nuclear power plants, where Russian security forces are allegedly closely in touch with operational personnel, Russian security forces often questioned Ukrainian ZNPP operational personnel about cooperation with the SBU.⁵⁴⁸

In late March 2022, at least 2 Ukrainian ZNPP employees were summoned by Russian security services representatives for interrogation at the plant's administrative building.⁵⁴⁹ One was summoned to a meeting with an FSB representative and questioned about their willingness to cooperate with the occupying forces.⁵⁵⁰ The other ZNPP employee was summoned for a meeting with two FSB representatives, who questioned him on his views on dual citizenship and his role at the ZNPP.⁵⁵¹

Truth Hounds documented an incident from early May 2022 when Russian occupying security forces abducted a Ukrainian ZNPP staff member from his workplace and brought him to a detention site in Enerhodar. During his abduction, the person was forced to promise in writing that he would not create conflicts at the ZNPP, which allegedly implied his cooperation with the Russian occupying forces and administration. After being released from captivity, he was suspended from work. Moreover, shortly after his release, the same occupying security forces personnel forced him to sign a contract with Rosatom.⁵⁵² Truth Hounds documented one incident, from no later than mid-May 2022, where a Ukrainian ZNPP employee who

was walking through the first gate was brought to an office room for interrogation by Russian occupying forces.⁵⁵³

In addition, in early May 2022, Yurii Cherniychuk, the then director general, allegedly summoned his subordinate to an office on the second floor of the ZNPP Administrative Building, where the subordinate was interrogated in the presence of Russian occupying military and security forces. These individuals questioned the subordinate and coerced him into pledging in writing his cooperation with the occupying administration. The interrogation was accompanied by multiple threats, hinting at his execution or deportation to dangerous military zones.⁵⁵⁴

2.5.2. Attempted Assassination of Shevchyk as a Turning Point

Following the attempted assassination of the occupation-appointed Mayor Shevchyk in late May 2022,⁵⁵⁵ the Russian occupying authorities intensified abductions and detentions of civilians in Enerhodar, including Ukrainian ZNPP workers.⁵⁵⁶ For instance, Truth Hounds documented an incident from late May 2022 when Russian occupying forces abducted and detained a pro-Ukrainian ZNPP staff member from Enerhodar. During the detention, the person was subjected to physical and psychological pain and suffering, sustaining severe injuries.⁵⁵⁷ Another incident relates to Spring 2022, when a Ukrainian ZNPP employee was detained in the plant's basements and was there subjected to physical and psychological pain and suffering.⁵⁵⁸

In two documented incidents from early June 2022, Ukrainian ZNPP staff members were abducted from the second gate. They were placed in detention centers, where they were subjected to inhuman treatment and torture.⁵⁵⁹ Another incident from late June 2022 involved the abduction of a Ukrainian ZNPP employee from his workplace by occupying forces, who detained and tortured him at Enerhodar Police Station.⁵⁶⁰

2.5.3. Consolidation of Rosatom's Control

In the fall of 2022, with the arrival of new personnel from Russian nuclear power plants, Rosatom established a more defined structure at the ZNPP.⁵⁶¹ This new structure allowed Rosatom to more effectively identify Ukrainian personnel for targeting and facilitating the crimes that followed. This development coincided with the administrative consolidation documented in [Section 1](#), where Rosatom's expanding role in occupation governance created conditions for more systematic targeting of ZNPP personnel.

Rosatom's presence at the plant encompasses both supervisory and operational personnel. Russian staff at the ZNPP are paid significantly higher salaries than typical workers at Russian nuclear power plants.⁵⁶² This underscores Rosatom's strategy of addressing the shortage of qualified personnel by replacing them with their own workers, most of whom were ill-equipped to operate the ZNPP due to the differences in its operations and technology from Russian plants.⁵⁶³

For instance, one Ukrainian ZNPP staff member commented on these technical differences, explaining Rosatom's critical need for qualified Ukrainian personnel: "In terms of hardware, the equipment itself, ours and the Russians' are somewhat similar and of the same type: a pump, a gate valve, fittings, and so on. But the software is completely different from that of the Russians."⁵⁶⁴

Similarly, another Ukrainian ZNPP employee reported: "The design seems to be the same at each unit, but there are a lot of differences, and the equipment behaves differently in different situations at each unit. And the Russians also bring their specialists from RBMK power units,⁵⁶⁵ a type of reactor similar to the one we have at Chernobyl. We have completely different reactors and it's a purely formal approach to send specialists to replace them because there are huge differences, just to report to the Russians that everything is fine and under control."⁵⁶⁶

⁵⁶⁵ RBMK stands for "reaktor bolshoy moshchnosti kanalny" in Russian, which translates as "high-power channel reactor."

Staff arriving at the ZNPP from Russian NPPs to take operational roles, along with certain Ukrainian ZNPP workers who decided to cooperate with Russia, have played a significant role, being responsible for overseeing the work of Ukrainian ZNPP staff members.⁵⁶⁷ After being under surveillance at work, many Ukrainian staff members were brought in for interrogations and/or had their passes blocked.⁵⁶⁸

According to one survivor, Russian national and Rosatom representative Oleg Romanenko has been a key individual among the supervisory personnel analysing the surveillance of Ukrainian personnel and was first seen at the ZNPP in the spring of 2022.⁵⁶⁹ He personally threatened to "fuck them all", get their passes blocked, or even "send them to the basements".⁵⁷⁰

One survivor highlighted the central role played by Rosatom employees: "These civilian specialists played a very significant role in this, including torturing our staff—if you disagreed, they, including Romanenko, point their fingers at you."⁵⁷¹ In addition, direct eyewitnesses report that Russian national Eduard Atakishchev, another supervisory board representative, personally pushed Ukrainian ZNPP staff to sign contracts with Rosatom.⁵⁷²

Additionally, Truth Hounds obtained firsthand information from a direct witness about verbal directives, given from the end of Spring to the start of Summer 2022 by Rosatom leadership at the ZNPP to the plant's supervisory board (comprising Ukrainian personnel who had agreed to cooperate and Rosatom representatives), instructing them to pressure Ukrainian ZNPP workers to sign contracts with Rosatom.⁵⁷³

After July 22, 2022, when Ukraine neutralized the Russian tent camp and an MLRS stationed near the ZNPP with a drone strike,⁵⁷⁴ Ukrainian staff at the station faced increased pressure and scrutiny. Ukrainian employees who managed to bring phones to the station began having them confiscated and their personal lockers were subjected to searches.⁵⁷⁵ Truth Hounds documented at least one incident from early August 2022 involving the abduction of a Ukrainian ZNPP employee from the first gate and his subsequent detention in Enerhodar, where he was subjected to inhuman treatment and torture.⁵⁷⁶

Despite the documented instances of Ukrainian ZNPP personnel being targeted throughout the spring and summer of 2022, under pressure to sign contracts with Rosatom⁵⁷⁷ and to obtain Russian citizenship,⁵⁷⁸ this period was characterized by less overtly coercive methods than those employed in the months that followed.

2.5.4. Fall 2022: Intensified Pressure to Sign Rosatom Contracts

Truth Hounds obtained a list of Rosatom workers who arrived from Russian nuclear power plants to substitute the ZNPP's Ukrainian personnel, as well as certain Ukrainian staff members who decided to cooperate with Rosatom.⁵⁷⁹ These staff members signed contracts with Rosatom in October–November 2022, the exact period when Russian occupying security forces intensified abductions and detentions of Enerhodar civilians, including ZNPP workers, and increased pressure on the latter to sign contracts with Rosatom.⁵⁸⁰ This development directly followed the so-called “referendum” on the annexation of Zaporizhzhia Oblast to the Russian Federation,⁵⁸¹ the October 3, 2022, establishment of the “Zaporizhzhia Nuclear Power Plant Operating Organization” subsidiary, wholly owned by Rosenergoatom,⁵⁸² and Russia's illegal appropriation of the ZNPP.⁵⁸³

Survivors reported to Truth Hounds that pressure on Ukrainian ZNPP employees from Russian forces and Rosatom to cooperate with the latter in October–November 2022 focused particularly on the remaining operational personnel that were critical for the plant's functioning.⁵⁸⁴ Most ZNPP staff had Ukrainian 1-H employment status with Ukrainian state enterprise Enerhoatom, which allowed them to remain on paid administrative leave. This status maintained their formal employment with Ukrainian authorities rather than the occupying administration, providing legal grounds for non-cooperation that Rosatom and occupying forces actively sought to circumvent.⁵⁸⁵

Documented evidence further reveals a shift in recruitment strategies at this point, with Rosatom transitioning from primarily economic and admin-

istrative pressure to intensified coercive measures targeting Ukrainian operational personnel at the ZNPP.⁵⁸⁶ Indeed, one survivor stated: “In October–November of 2022, they started to ‘terrorize’ people about signing contracts with Rosatom. All this was happening on a massive scale.”⁵⁸⁷

To conduct the “hiring” process, Russian occupying forces and Rosatom used the office room at the first gate, which also functioned as an interrogation room for Ukrainian personnel.⁵⁸⁸ Similarly, the room at the end of a hallway on the second floor of the ZNPP administrative building was used for “hiring”⁵⁸⁹ and it is likely the site of some interrogations of Ukrainian workers.⁵⁹⁰ Ukrainian ZNPP staff were promised that if they cooperated with Rosatom they would receive higher pay, receiving an additional Russian salary on top of their Ukrainian one.⁵⁹¹

With the involvement of Rosatom and Russian forces, the Russian occupying administration anticipated that most of the licensed Ukrainian personnel would sign contracts more or less “voluntarily” (after light pressure). However, by November 2022, they realized that not many contracts had been signed and most of those that had been were with low-ranking workers instead of the valuable operational personnel they critically needed.⁵⁹² One survivor stated:

“In the first month, out of 2,000 ZNPP employees who signed contracts, 90% were kitchen porters, drivers, those who were already retired, and those who held small positions, they realized that something had to be done about it, and continued the tactics of terror and intimidation in November 2022.”⁵⁹³

Truth Hounds documented at least 13 incidents from September to December 2022 of Ukrainian ZNPP operational personnel being coerced to sign contracts with Rosatom, often accompanied by inhuman treatment and torture:

- In mid-September 2022, a Ukrainian ZNPP employee was interrogated on the first floor of the administrative building. He was then abducted and detained in Enerhodar, where he was subjected to inhuman treatment and torture.⁵⁹⁴

- In September-October 2022, two Rosatom representatives coerced Ukrainian ZNPP employees into signing Rosatom contracts;⁵⁹⁵
 - In early October 2022, a Ukrainian ZNPP employee was abducted from the First Gate of the ZNPP, after which he was brought to his apartment. He was then detained and subjected to inhuman treatment and torture in Enerhodar. Following his release from captivity, the individual was visited by Russian security service personnel, who forced him to sign a contract with Rosatom;⁵⁹⁶
 - In early October 2022, a Ukrainian ZNPP employee was abducted from his home and placed in a detention center in Enerhodar, where he was subjected to inhuman treatment and torture. Following his release, he was visited by Russian security forces representatives and forced to sign a contract with Rosatom;⁵⁹⁷
 - In October-November 2022, a Ukrainian ZNPP employee was detained in basement facilities at the plant for more than two weeks and subjected to physical and psychological abuse while being coerced to sign a Rosatom contract;⁵⁹⁸
 - In October-November 2022, a Ukrainian ZNPP employee was abducted from his car and taken to an unidentified basement detention center. There, he was beaten in a way that deliberately left no visible external injuries and forced to sign a contract with Rosatom;⁵⁹⁹
 - In the fall of 2022 (month unspecified), two Ukrainian ZNPP employees were abducted from their workplace, imprisoned, and subjected to inhuman treatment and torture, with at least one undergoing electrocution;⁶⁰⁰
 - In early November 2022, a Ukrainian ZNPP employee was summoned for a “conversation” with a Rosatom and an FSB representative at an unidentified location on the grounds of the ZNPP. There, he was threatened that his refusal to sign the contract with Rosatom would block his work pass. He was also threatened with his evacuation being barred and with being “brought to a basement” like other colleagues;⁶⁰¹
 - At the end of December 2022, FSB representatives brought a Ukrainian ZNPP employee who already had his work pass blocked from his home to the office of Yurii Cherniychuk, where Cherniychuk and Russian occupying forces allegedly forced the person to sign a contract with Rosatom;⁶⁰²
 - An almost identical incident occurred again at the end of December 2022, when a Ukrainian ZNPP employee present at the ZNPP was called to Cherniychuk’s office. On that occasion, only Cherniychuk and other representatives from Rosatom were present. The ZNPP employee was forced to sign a contract with Rosatom;⁶⁰³ and
 - In late 2022 (month unspecified), a Ukrainian ZNPP employee was abducted at an unidentified location and subsequently detained in occupied Crimea. The detention resulted in significant weight loss, consistent with reports of the inhuman treatment and torture to which the person was subjected.⁶⁰⁴
- Truth Hounds documentation also indicates that in October–November 2022, a Rosatom representative, accompanied by Russian security personnel, visited the ZNPP control room to pressure ZNPP operational staff to sign contracts with Rosatom.⁶⁰⁵ Through open-source investigations and eyewitness statements, Truth Hounds has further identified a Ukrainian who cooperated with Rosatom and allegedly took part in the coercion of Ukrainian ZNPP staff to sign contracts with Rosatom in late 2022.⁶⁰⁶
- Moreover, in the fall of 2022, access control systems were modified at the ZNPP, intended to prevent the entry of Ukrainian ZNPP staff holding Ukrainian passports and who had refused to sign Rosatom contracts.⁶⁰⁷ One worker reported:
- “In the fall of 2022, [...] they [Russian forces] started to remodel the control post [...] They started to change the booths, not all at once, but bit by bit [...] through them, those of us with Ukrainian passports and Ukrainian passes were not allowed to pass through these booths and those who signed up, they already had other passes, and their food vouchers were different. It all started*

to be revealed, who had signed, who had not. But we still went through one booth with our Ukrainian ones [passes], it was obvious who was who."⁶⁰⁸

In December 2022, many of the remaining Ukrainian staff who refused to sign Rosatom contracts had their passes blocked.⁶⁰⁹

Other workers were subjected to home visits involving physical violence inflicted by the FSB to force them to return to work and sign contracts with Rosatom. The documented incidents occurred principally in 2022 and 2023,⁶¹⁰ but Truth Hounds has been unable to identify the exact number. Even Ukrainian ZNPP personnel who had gone through detention were visited by representatives of the Russian security forces, who monitored their presence in Enerhodar. These individuals were interrogated about why they were no longer working at the ZNPP, why they had not signed a Rosatom contract, and why they had not yet obtained Russian citizenship. They were additionally threatened with their whole family being barred from evacuating.⁶¹¹

2.5.5. Increased Evacuation Restrictions

As an additional obstacle, Russian forces and the occupying administration prevented licensed Ukrainian ZNPP personnel from evacuating. As the number of qualified ZNPP personnel decreased due to staff fleeing Enerhodar out of concern for their safety, Russian forces divided key ZNPP personnel between a "red list", which prohibited their departure, and a "yellow list", which restricted their departure.⁶¹² The starting points for blocking evacuation from Enerhodar were the Russian "referendum" and the establishment of Russian "legal ownership" of the plant. One interviewed worker reported: "A lot of people were not allowed to leave from the very beginning, when the OO was already being set up, because there were very few licensed personnel left and they still had not brought anyone from Russia—maybe they had, but they had not yet completed any training, that is, they were completely 'green'".⁶¹³ ⁶¹⁴

From September 2022, Ukrainian ZNPP staff were prohibited from evacuating from Enerhodar through Vasylivka, the only remaining evacuation checkpoint to Ukrainian-controlled territory at that time.⁶¹⁵ Just two months later, in November 2022, the Vasylivka checkpoint was closed as an evacuation route for all categories of civilians.⁶¹⁶

Those licensed Ukrainian ZNPP personnel who managed to leave Enerhodar were very frequently stopped during their escape from occupation at security checkpoints in occupied territories of Ukraine and/or in the Russian Federation itself. At the checkpoints, Russian security forces would forcefully interrogate them⁶¹⁷ and/or force them to return to Enerhodar,⁶¹⁸ despite having been forced to obtain Russian passports,⁶¹⁹ telling them that they had to "ensure nuclear safety".⁶²⁰ In some instances, the evacuating employees were detained either in occupied Ukrainian territories or in the Russian Federation itself and, while in captivity, these employees were subjected to inhuman treatment and torture.⁶²¹

Ukrainian ZNPP staff evacuating from occupation noted that Russian security forces representatives would know about their background before starting their interrogation.⁶²² Many workers had to make several attempts to escape occupation,⁶²³ with some finally escaping only after paying a bribe to Russian security forces.⁶²⁴

After unsuccessful attempts to evacuate, on return to Enerhodar, Ukrainian ZNPP employees were questioned by occupying security force representatives, who initially summoned them to the plant and confiscated their phones.⁶²⁵

Certain Ukrainian workers were permitted to evacuate from Enerhodar only after speaking to Cherniychuk and Russian security forces at the ZNPP,⁶²⁶ indicating that Rosatom has been working closely with Russian security forces to monitor ZNPP personnel, coercing them to sign contracts with the Russian corporation and tracking their movements, particularly if they refused to sign the contracts.

2.5.6. Continued Coercion of ZNPP Employees 2023-2024 and Intensified Targeting of High-Ranking Personnel

Coercion tactics targeting remaining high-ranking Ukrainian ZNPP staff to sign Rosatom contracts intensified significantly from January 2023.⁶²⁷ In the spring of 2023, Ukrainian ZNPP staff were unable to maintain their professional licenses issued by the State Nuclear Regulatory Inspectorate of Ukraine under Ukrainian law. At that time, Rosatom representatives offered to extend licenses under their own regulations if the staff signed contracts with Rosatom, threatening to revoke workplace access for Ukrainian staff whose licenses expired without renewal under Russian regulations.⁶²⁸

Truth Hounds documented at least one incident involving the abduction of a Ukrainian ZNPP employee from one of the ZNPP gates in early 2023. He was brought to his apartment, where he was physically abused through beatings. Afterwards, he was brought to a detention center in Enerhodar for a few hours, where he was forced to sign a contract with Rosatom with a deadline, which was justified by citing the expiration of his license.⁶²⁹

Another incident took place in the summer of 2023, when representatives of Russian security forces targeted a ZNPP employee and questioned him about Russian citizenship and signing a Rosatom contract. This was followed by detention, inhuman treatment, and torture of the worker, accompanied by further threats in case of his refusal to cooperate with the occupying authorities.⁶³⁰ Truth Hounds has additionally identified an individual who allegedly took part in the coercion of ZNPP employees to sign contracts with Rosatom in the summer of 2023.⁶³¹

According to one Ukrainian ZNPP employee, describing the situation at the ZNPP in the summer–fall of 2023: “There is a lack of staff, equipment is degrading. All operations, all requests are performed with a time delay. Everything is done slowly. There is a lack of staff, the staff is losing [its form]—no one is taking exams, no one is undergoing any checks; the equipment, staff,

watchman’s reports, staff on duty is deteriorating. There are all signs that the station is... well, it’s good that it’s in a cold state, safe, but it’s very sad.”⁶³²

In July–August 2023, Russian occupying forces and Rosatom were preparing new passes for ZNPP workers based on a list of people who agreed to cooperate, preventing access to the plant for those who had refused to cooperate.⁶³³ In the same period, the Russian occupying authorities were preparing to block all Ukrainian workers holding Ukrainian passports who refused to cooperate with them.⁶³⁴ It is not clear when this policy was to be implemented, but this seems to have happened by February 2024.⁶³⁵ For example, one interviewed worker reported: “On February 1, 2024, we, Ukrainian personnel, were taken out. They [Russian forces] installed their cabins, a checkpoint, there. Russian passes were issued to people who went to cooperate with them and we, the Ukrainian staff, simply had our passes not valid for these cabins, so we could not enter the station.”⁶³⁶

Available information suggests that the remaining Ukrainian ZNPP personnel faced escalating pressure to obtain Russian citizenship in late 2023 and early 2024. There are documented incidents where individuals who refused to comply were targeted for intensified coercion.⁶³⁷ For example, Russian occupying forces visited a Ukrainian ZNPP employee in May 2024, beat him, and questioned his unwillingness to cooperate with Rosatom.⁶³⁸ In July 2024, Russian forces abducted and detained a Ukrainian ZNPP employee, where he was forced to make a verbal promise to collaborate with the Russian occupying administration and forces and to sign a contract with Rosatom.⁶³⁹

Aside from these incidents, Truth Hounds has documented six other incidents involving the alleged abduction, detention, and further subjection to inhuman treatment and torture of ZNPP personnel in Enerhodar, but with no time specification.⁶⁴⁰

The pressure on Ukrainian ZNPP personnel to sign contracts with Rosatom lasted at least until July–August 2024.⁶⁴¹ Those who continue to reside in the city remain under the strict control of Russian occupying authorities, including Rosatom representatives and military personnel.

More than a year later, on May 13, 2025, Enerhoatom reported that at least 13 Ukrainian ZNPP employees remained in Russian captivity. Enerhodar's mayor reported the same number the next day.⁶⁴²

2.6. Conclusion

Due to the ongoing Russian occupation of Enerhodar and the surrounding area, information about the current situation, including the identities of targeted individuals, remains limited. Attempts to gather information in person can be fatal, as was tragically illustrated by Ukrainian journalist Viktoriia Roshchyna. She first went missing in March 2022 while reporting from the occupied territories and was released shortly thereafter. In August 2023, Roshchyna was abducted for a second time in the vicinity of Enerhodar and died in detention in Russia in September 2024 after more than a year in captivity.⁶⁴³

Despite constraints on access to information, however, analysis conducted by Truth Hounds indicates that detention and torture in occupied Enerhodar form part of a broad system of repression targeting former military personnel, activists, and ordinary residents alike. The systematic use of torture appears to have had multiple purposes: to extract information, punish pro-Ukrainian views, to intimidate the public, and to coerce individuals to collaborate with the occupying administration.

What began as sporadic incidents in March 2022 quickly evolved into an institutionalized repressive apparatus, in which physical and psychological violence became routine tools of civilian control. Within this system of repression, Ukrainian ZNPP staff have faced targeted persecution, with torture and coercion used to advance Rosatom's corporate aims. Among the targeting of at least 78 Ukrainian ZNPP employees, most involved efforts to force survivors to sign Rosatom contracts. Corporate representatives not only benefited from the systematic torture but also took part in it, attending interrogations and working with Russian security services to identify targets.

In Enerhodar, systematic torture and detention practices have thus served both Russian occupation goals and Rosatom's specific corporate interests, blurring the line between the two. It is particularly notable that the consolidation of this repressive apparatus took place in parallel with the institutionalization of the occupation of Enerhodar and, specifically, of Rosatom's role in the occupation. In this way, the corporation's integration into the system of repressive control has been instrumental both in cementing Rosatom's influence in the occupying administration and in consolidating the use of repressive practices at the ZNPP itself.



SECTION 3

Nuclear Safety and Security Challenges at the ZNPP During War and Occupation

3.1. Introduction

The occupation of the ZNPP presents a risk of a potential radiological incident which would not only affect Ukraine and neighboring states, but could also become the most destructive trans-boundary consequence of this war, transforming what began as a bilateral military confrontation into an international nuclear catastrophe.

This situation highlights a troubling characteristic common to both nuclear operations and military conflict: the disproportionate relationship between individual actions and collective consequences. In nuclear facilities, such as Chornobyl and Fukushima, seemingly isolated human errors or technical failures cascaded into disasters affecting millions. In conflict zones, decisions by a single commander or individual member of personnel can unleash massive, destructive effects far beyond their immediate context. The convergence of these two high-risk domains at the ZNPP represents an unprecedented intersection of dangers that demand close and urgent scrutiny.

This section explains nuclear safety standards and demonstrates how the occupation and grave human rights violations have systematically undermined safety culture among technical teams, introduced military imperatives into civilian technical environments, and placed unprecedented pressures on the professionals responsible for maintaining safety systems.

3.2. Safety of Civilian Nuclear Infrastructure: Theoretical Framework

3.2.1. International Oversight of Nuclear Power Plants

3.2.1.1. Oversight and Standard-Setting Bodies

The IAEA is the world's principal intergovernmental body that promotes "safe, secure, and peaceful nuclear technologies".⁶⁴⁴ Created in 1957 as "the world's 'Atoms for Peace' organization within the United Nations family",⁶⁴⁵ the IAEA's membership totals 180 states at time of writing. Members include both Ukraine and the Russian Federation since 1957 (at that time as the Ukrainian Soviet Socialist Republic and the Russian Soviet Federative Socialist Republic).⁶⁴⁶

With a stated dual mission to "promote and control the Atom",⁶⁴⁷ the IAEA's mandate includes authorisation to work with member states and partners across the world to establish and administer safeguards, adopt safety standards for the protection of health and labor conditions, and to minimize danger to life.⁶⁴⁸ The organization publishes safety standards, including those for operating nuclear facilities and using radioactive material. These standards are not legally binding for member states but may be adopted at the national level at member states' discretion.⁶⁴⁹ Since 1982, the IAEA has also offered operating safety reviews at nuclear plants through Operational Safety Review Team visits, introduced in response to the accident at the Three Mile Island plant in the United States.⁶⁵⁰ While the IAEA is an autonomous organization, its statute requires it to report to the UN Economic and Social Council, the UN General Assembly, and, on occasion, the UN Security Council.⁶⁵¹

The primary nuclear regulatory body in Ukraine is the State Nuclear Regulatory Inspectorate of Ukraine (SNRIU), whose activities are coordinated by the Cabinet of Ministers of Ukraine. Aside from representing Ukraine at the IAEA, the SNRIU's responsibilities include formulating and implementing state policy in the field of nuclear safety and serving as the competent authority for the physical protection of nuclear material and nuclear facilities.⁶⁵²

3.2.1.2. Safety Standards

The IAEA's Safety Standards establish the foundational principles, requirements, and recommendations for nuclear safety. The fundamental safety objective put forward by the IAEA is the protection of people, individually and collectively, as well as the environment, from the harmful effects of ionising radiation.⁶⁵³ With this goal in mind, the IAEA proposes that measures must be taken to: control the radiation exposure of people and the environment; minimise the likelihood of loss of control over a nuclear reactor core, a nuclear chain reaction, or another source of radiation; and mitigate the negative impact of such occurrences.⁶⁵⁴

Central to the realization of this fundamental safety objective is the concept of "defense in depth." According to the IAEA, defense in depth is the "primary means of preventing and mitigating the consequences of accidents", requiring the implementation of multiple independent levels of protection that would each have to fail before a hazardous release of radiation could occur.⁶⁵⁵ This hierarchical approach encompasses quality design, operational controls, engineered safety systems, and severe accident management and

emergency response plans, ensuring that no single technical or human failure can compromise overall safety and that the likelihood of combinations of failures of protection levels is minimized.

3.2.2. Accidents in Complex Technological Systems

Since the first nuclear power plant was connected to the grid in 1954 in Obninsk, Russia, the nuclear industry has expanded significantly. As of 2025, there are more than 400 nuclear power plants worldwide,⁶⁵⁶ with approximately a further 70 under construction and a further 100 in the planning stages.⁶⁵⁷ However, several high-profile accidents at commercial nuclear power plants have occurred worldwide. Among the most serious accidents are Windscale in the UK, in 1957; Three Mile Island in the United States, in 1979; Chernobyl in Ukraine, in 1986; and Fukushima in Japan, in 2011. In each of these cases, there was partial to complete reactor core fuel melt.

In 1990, following the Chernobyl accident, the IAEA and the Organization for Economic Co-operation and Development's (OECD) Nuclear Energy Agency (NEA) jointly developed the International Nuclear and Radiological Event Scale to communicate the severity of incidents or accidents. The scale encompasses seven levels of severity and the IAEA encourages member states to share information on incidents of Level 2 and above through its online database.⁶⁵⁸ However, as historian Serhii Plokhyy points out, the risks associated with nuclear power remain "so sensitive for advocates of the industry that the word 'accident' does not appear even once in the 'Outline History of Nuclear Energy' prepared by the World Nuclear Association".⁶⁵⁹

When considering the risks associated with nuclear power plants, it is useful to recall Charles Perrow's "normal accidents" theory. Originally developed in the 1980s, this theory continues to influence nuclear safety analysis. Perrow argues that high-risk technologies, including nuclear plants, have characteristics that make accidents "inevitable, even 'normal'".⁶⁶⁰ Namely, designers will have likely foreseen and taken steps to mitigate the risk of the failure of one component

of a facility. However, the inherent complexity of components in high-risk facilities, in terms of parts, operating personnel, and procedures, generates unpredictable risks through the interaction of components.⁶⁶¹ Moreover, as Perrow argues, technologies such as nuclear plants are "tightly coupled", meaning that processes happen very quickly, components cannot be easily switched off, and failed parts cannot be easily isolated.⁶⁶² As such, Perrow's crucial insight into how tightly coupled systems resist risk elimination and actually generate increasingly unanticipated issues remains highly relevant for understanding the limitations of purely technical approaches to nuclear safety, even as engineering solutions have evolved significantly in recent decades.

Perrow's framework offers insights into how nuclear accidents such as Fukushima in 2011 were provoked by cascading and unexpected interactions of risk factors.⁶⁶³ Among the failures in this case was a lack of preparation for the interaction of two risk factors—a tsunami and an earthquake.⁶⁶⁴ The continued occurrence of such accidents may raise the question of whether a demonstrated learning effect mitigates risk. Nonetheless, statistical analysis conducted by Thomas Rose and Trevor Sweeting in 2018 suggests that, beyond the first few years of nuclear power's existence, there is no discernible learning effect that lowers the probability of accidents. On the contrary, they find the estimated probability of an accident at a reactor in 1963 and 2010 to be identical.⁶⁶⁵ As such, the inherent risk of an accident at a nuclear power plant remains significant, with Rose and Sweeting calculating that at least one accident should be expected in the next 25 years. Their analysis indicates that there will be 2.99 core melt incidents in the next 25 years, with a 95% confidence interval of 0.82 accidents and 7.7 accidents.⁶⁶⁶

3.2.3. Role of Professional Communities and Safety and Security Culture

Nuclear plant operators play a critical role in nuclear safety and security. In the decades following Perrow's theorization on "normal accidents", nuclear experts have also begun to attribute more importance to human factors, notably to safety

and security culture. Key similarities between the incidents at Chernobyl and Three Mile Island can be found in industry and operator complacency and disregard for safety systems.⁶⁶⁷

The IAEA makes a distinction between “safety” and “security” in the nuclear context, defining the former as being “aimed at preventing accidents” and the latter as “aimed at preventing intentional acts that might harm the facility or result in the theft of nuclear materials”.⁶⁶⁸ With this in mind, “safety culture” is defined as the “assembly of characteristics, attitudes and behaviors in individuals, organizations, and institutions which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance”.⁶⁶⁹ Similarly, “security culture” is defined as the “assembly of characteristics, attitudes and behavior of individuals, organizations, and institutions which serves as a means to support and enhance nuclear security”.⁶⁷⁰

Safety and security culture is therefore institutionalised in everyday practices, creating systems of shared knowledge and professional autonomy to respond to unpredictable situations effectively. This operator autonomy, rather than mere procedural adherence, can provide an additional layer of protection against “normal accidents” in high-risk technological systems. The importance of safety and security culture among regulators, operators, and the workforce of a plant cannot be overstated: according to Declan Butler, it constitutes “the largest single internal factor determining the safety of a plant”.⁶⁷¹

IAEA publications and guidelines repeatedly emphasize the crucial importance of nuclear plant personnel and their ability to perform tasks in a culture of safety and security. The organization’s safety standards, for example, specifically highlight the importance of leadership and management in the implementation of a safety and security culture.⁶⁷²

The International Nuclear Safety Group, convened by the IAEA, also provides recommendations on nuclear safety issues.⁶⁷³ Other international organizations that contribute to efforts to uphold safety and security standards include the World Association of Nuclear Operators, which has the sole stated goal of safety and offers technical

support to the nuclear industry worldwide.⁶⁷⁴ There is therefore no shortage of organizations and guidelines relating to safety and security culture in nuclear plants. However, the impact of each of these standards and groups depends entirely on the willingness of a plant’s management to engage. Standards of safety and security are, after all, only effective if continuously upheld and reviewed, and if a plant’s management is accountable for their implementation.

3.2.4. Nuclear Power Plants in Armed Conflict

Nuclear facilities in conflict zones face unprecedented safety challenges beyond their design parameters or “normal accidents”. Multiple vulnerability vectors threaten operational integrity: direct military strikes; critical infrastructure disruption; operational control interference; and the coercion of personnel. The possible consequences encompass transboundary radiological releases, with harmful effects on humans and the natural environment, and injury to and/or the evacuation or death of staff. While a conventional missile strike alone would risk significant harm, scientists estimate that should a nuclear weapon be used to strike a nuclear power plant, a magnifying effect would significantly increase the area of contaminated territory.⁶⁷⁵ IHL establishes protections for civilian nuclear installations, but implementation mechanisms remain insufficiently developed for contemporary conflict scenarios, creating a governance gap in nuclear safety assurance during armed hostilities.

The legal protection of nuclear facilities during armed conflicts is codified explicitly in the Geneva Conventions’ Additional Protocols (AP(I) and AP(II)), which establish distinct safeguards for installations containing dangerous forces:

- Works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population (*Article 15 AP(II)*); and

- Works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population. The special protection against attack provided by *Paragraph 1* shall cease only if they are used in regular, significant and direct support of military operations and if such attack is the only feasible way to terminate such support. These works or installations may be marked with a special sign consisting of a group of three bright orange circles placed on the same axis (*Article 56 and Annex I, Article 16 AP(I)*).

More recent attempts to further clarify international legal provisions on attacks on nuclear facilities have largely failed to reach international agreement.⁶⁷⁶ The issue was considered, for example, at the 1985 Nuclear Non-Proliferation Treaty Review Conference, after which the Conference issued the following statement:

*The "Conference recognizes that an armed attack on a safeguarded nuclear facility [...] would create a situation in which the Security Council would have to act immediately in accordance with provisions of the United Nations Charter".*⁶⁷⁷

What remains unclear, however, is what provisions are in place to deal with a threat posed by a permanent member of the UN Security Council to nuclear facilities. It must also be noted that general IAEA provisions and safeguards are, as Burrow Carnahan highlights, "at their weakest during wartime",⁶⁷⁸ when inspections of nuclear facilities become potentially dangerous or unfeasible.

Despite the difficulties in further clarifying international legal provisions on the subject, the 2009 IAEA General Conference unanimously adopted a decision stating that "any armed attack on and threat against nuclear facilities devoted to peaceful purposes constitutes a violation of the principles of the UN Charter, international law and the Statute of the Agency".⁶⁷⁹ The states offering

their consent included, significantly, the Russian Federation.⁶⁸⁰

Armed attacks on nuclear facilities are not without precedent. Iraq's Tuwaitha research reactors were attacked by Iran in 1980, Israel in 1981, and the US between 1991 and 1993. Iraq also launched strikes on Iran's Bushehr reactors between 1984 and 1987, while Israel attacked Syria's al-Kibar reactor in 2007 and Hamas launched unsuccessful rocket attacks on Israel's Dimona reactor in 2014. However, it is important to note that, in the attacks that damaged or destroyed nuclear facilities in these cases, the facilities in question were not yet operational, reducing the risk of radiation release.⁶⁸¹ This has also been the case in US and Israeli attacks on Iranian nuclear facilities in 2025, which have focused on uranium enrichment and nuclear fuel fabrication facilities,⁶⁸² rather than power plants. Strikes on the ZNPP, functional since 1985 and possessing six large commercial reactors, therefore represent an unprecedented case, with a level of risk of radiological release into the environment never before witnessed. The IAEA recognized the extraordinary nature of the case in its statement on September 6, 2022, underlining that it is "the first time a military conflict has occurred amid the facilities of a large, established nuclear power programme".⁶⁸³

3.3. Nuclear Safety and Security in the Context of the Russo-Ukrainian War

3.3.1. General Overview of the Ukrainian Case

This subsection examines the unprecedented nuclear safety challenges emerging from the military occupation of nuclear facilities during active conflict. It analyzes how established regulatory frameworks and operational protocols encounter fundamental limitations when confronted with the novel risk configurations presented by the situation at the ZNPP in Enerhodar.

While Russia's full-scale invasion of Ukraine was not the beginning of the threat posed by the Russian Federation to Ukraine's nuclear installations,⁶⁸⁴ it marked the first time that Ukraine's nuclear power plants were subject to hostilities. At 06:41 am CET on February 24, 2022, the SNRIU informed the IAEA's Incident and Emergency Centre of its loss of control over the facilities at the Chornobyl Nuclear Power Plant.⁶⁸⁵ In response, the IAEA Board of Governors adopted a resolution calling on Russia to "immediately cease all actions against and at the Chornobyl Nuclear Power Plant and any other nuclear facility in Ukraine".⁶⁸⁶

Russian forces occupied the Chornobyl Nuclear Power Plant until March 31, 2022.⁶⁸⁷ During the occupation, Russian military activities in the vicinity of the Chornobyl Nuclear Power Plant, including digging trenches in the highly contaminated Red Forest and disturbing the ground with heavy military vehicles, caused an uptick in radiation levels,⁶⁸⁸ while over 100 radioactive elements from the site remain missing.⁶⁸⁹ A further three Ukrainian nuclear power plants—the Khmelnytskyi Nuclear Power Plant, Rivne Nuclear Power Plant, and the South Ukraine Nuclear Power Plant—have remained under Ukrainian control at all times.

Since Russia's capture of the plant, the SNRIU has had no access to the site and significant concerns have been raised on numerous occasions owing to safety issues and the plant's proximity to hostilities.

In response to the unprecedented situation in Ukraine, on March 2, 2022, IAEA Director General Grossi introduced "Seven Pillars" for nuclear safety and security in Ukraine. The Seven Pillars are as follows:

1. The physical integrity of the facilities—whether it is the reactors, fuel ponds, or radioactive waste stores—must be maintained;
2. All safety and security systems and equipment must be fully functional at all times;
3. The operating staff must be able to fulfill their safety and security duties and have the capacity to make decisions free of undue pressure;
4. There must be secure off-site power supply from the grid for all nuclear sites;
5. There must be uninterrupted logistical supply chains and transportation to and from the sites;
6. There must be effective on-site and off-site radiation monitoring systems and emergency preparedness and response measures; and
7. There must be reliable communications with the regulator and others.⁶⁹⁰

Aside from the Seven Pillars, the IAEA has also adopted several resolutions and calls for action regarding Ukraine's nuclear power plants. For instance, the IAEA's report of September 6, 2022 on

the ZNPP called for the establishment of a safe zone around the plant and expressed willingness to begin consultations for such a zone.⁶⁹¹ The IAEA Board of Governors also adopted a resolution on September 15, 2022, calling on Russia to end its occupation of the ZNPP.⁶⁹² A similar position has been taken by the UN General Assembly, which adopted a resolution on July 11, 2024, condemning the Russian seizure of the ZNPP and the stationing of Russian military and unauthorized personnel at the site and expressing “grave concern” that all of the IAEA’s aforementioned Seven Pillars had been compromised.⁶⁹³

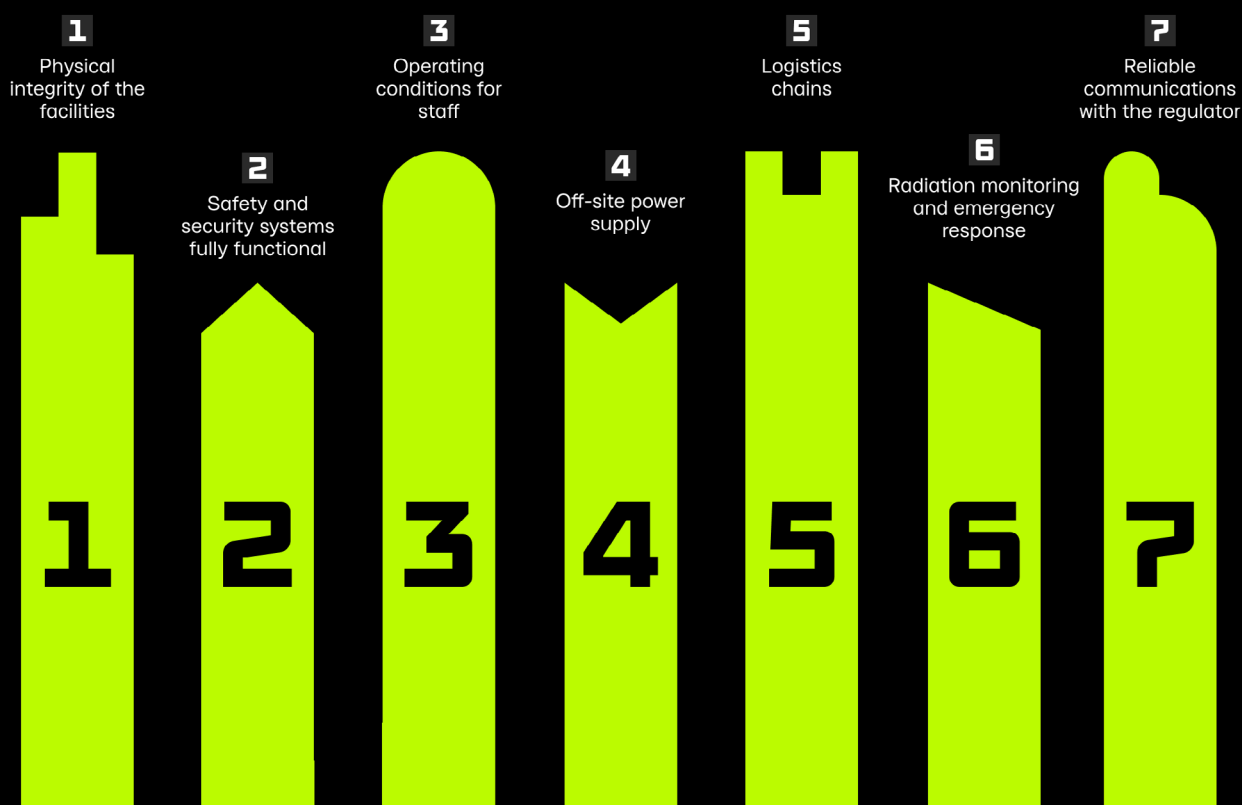
At the May 30, 2023, meeting of the UN Security Council, the IAEA’s director general introduced the “Five Concrete Principles” for the safety and security of the ZNPP. These five principles are as follows:

1. There should be no attack of any kind from or against the plant, in particular targeting the reactors, spent fuel storage, other critical infrastructure, or personnel;

2. The ZNPP should not be used as storage or a base for heavy weapons (*i.e.*, multiple rocket launchers, artillery systems and munitions, and tanks) or military personnel that could be used for an attack from the plant;
3. Off-site power to the plant should not be put at risk. To that effect, all efforts should be made to ensure that off-site power remains available and secure at all times;
4. All structures, systems, and components essential to the safe and secure operation of the ZNPP should be protected from attacks or acts of sabotage; and
5. No action should be taken that undermines these principles.⁶⁹⁴

Beyond these principles, the IAEA has provided various forms of assistance to Ukraine’s nuclear power plants since the start of the full-scale invasion. Since 2023, the IAEA’s comprehensive program of assistance for Ukraine has included:

Seven Indispensable Pillars for Nuclear Safety and Security



1. In-person assistance comprising the deployment of a continued Agency staff presence at all five Ukrainian nuclear sites and other expert missions in Ukraine;
2. Delivery of equipment needed to maintain continued nuclear safety and security in Ukraine;
3. Medical assistance for operating staff at the nuclear power plants in Ukraine;
4. Assistance for the recovery of Kherson Oblast following flooding caused by the destruction of the Kakhovka Dam;
5. Assistance on the safety and security of radioactive sources;
6. Provision of remote assistance; and
7. Provision of rapid deployment assistance.⁶⁹⁵

One of the most crucial elements of assistance has been the IAEA's constant monitoring of Ukraine's nuclear power plants. IAEA Director General Grossi has led several delegations to Ukrainian-controlled nuclear facilities and he led the first delegation to the ZNPP in Fall 2022. The deployment of IAEA Support and Assistance Missions established a continuous IAEA staff presence at the ZNPP in September 2022, which was expanded to Ukraine's four other nuclear power plants in January 2023.⁶⁹⁶ According to the IAEA, the purpose of the uninterrupted presence of their staff is to "help decrease the risk of a nuclear accident".⁶⁹⁷ Teams of IAEA personnel rotate every few weeks at all of Ukraine's nuclear power plants. During these deployments, IAEA staff hold technical meetings with plant management and conduct observations and walkdowns of various aspects of the sites.⁶⁹⁸ The IAEA has also conducted visits to several of Ukraine's electrical substations that are crucial for the safety of the country's nuclear facilities.⁶⁹⁹

However, the IAEA's efforts to monitor the ZNPP continuously face significant obstacles. IAEA personnel are frequently not permitted to conduct visits to various parts of the site. In one example from the director general's most recent report, IAEA staff at the ZNPP were reportedly "prevented [by Russian occupying forces] from visiting the western part of the turbine halls on all levels of all units [...] without justification being provided

on a sound nuclear safety and security basis".⁷⁰⁰ Such obstructions have a direct impact on the IAEA's ability to wholly and independently assess the safety and security of all parts of the plant, its materials, and equipment.⁷⁰¹ IAEA activities additionally continue to be hampered by ongoing hostilities. On December 10, 2024, for instance, a drone hit and caused serious damage to an official IAEA vehicle on its way to the ZNPP while in Ukrainian government-controlled territory.⁷⁰² While the attack did not result in direct harm to IAEA staff, the subsequent rotation of teams was significantly delayed due to the ongoing danger posed to personnel.⁷⁰³ As a result, the IAEA has repeatedly noted the compromised status of its Seven Pillars, stating in its most recent report that six of the seven were compromised "either fully or partially".⁷⁰⁴

Moreover, despite the IAEA playing a significant role in securing Ukraine's nuclear installations during the full-scale invasion, questions have been raised regarding potential conflicts of interest within the IAEA itself. In particular, Darya Dolzikova and Jack Watling have raised concerns about Russian citizen Mikhail Chudakov, who has been deputy director general of the IAEA and head of the IAEA Department of Nuclear Energy since 2015. Chudakov previously served as deputy director general of Rosenergoatom, the Rosatom subsidiary that oversees the operation of Russia's nuclear power plants. As Dolzikova and Watling highlight, given that Chudakov's department is responsible for supporting nuclear energy expansion globally and the Russian Federation places great strategic importance on the expansion of Rosatom's presence around the world, his previous role may constitute a conflict of interest in IAEA dealings with Rosatom.⁷⁰⁵

While the IAEA has been instrumental in providing technical assistance, monitoring, and sharing information with the international community and Ukrainian authorities, the unprecedented safety and security challenges posed by Russia's full-scale invasion have nonetheless clearly demonstrated the limitations of existing international oversight. In particular, the conflict has drawn attention to the lack of international enforcement mechanisms for nuclear security and safety, as numerous IAEA and UN pronouncements have failed to change the behavior of the Russian au-

thorities. The war has also laid bare conceptual challenges—the IAEA Glossary’s definition of “threat” remains a “person or group of persons with motivation, intention, and capability to commit a malicious act” rather than encompassing the possibility of hostile actions from a state.⁷⁰⁶ This definition also does not directly address attacks on nuclear facilities during extraordinary events, such as armed conflicts.⁷⁰⁷ As such, while the full-scale invasion of Ukraine has highlighted the conceptual and physical challenges surrounding international oversight, these limitations have implications reaching far beyond Ukraine.

3.3.2. Russia’s Militarization of the ZNPP

To understand the nuclear safety risks and security situation at the ZNPP, it is necessary to examine the nature of Russia’s militarization of the plant and its environs. For the purposes of this section, the term “militarization” is used to refer to the deployment of armed forces and/or military operations in the area.

Russia’s militarization of the ZNPP is clear, given evidence of the site being used to station military vehicles and personnel. While it has not been possible to conduct a consolidated vehicle count due to Russian forces’ apparent concealment of vehicles at the plant, open-source footage indicates that vehicles have been parked inside the turbine halls. In particular, footage has been analyzed of vehicles entering the turbine hall of Reactor 1. In addition, satellite imagery collected at a lower off-nadir angle suggests parked vehicles directly beneath raised platforms, most likely as a means of concealment. The images indicate that the Russian armed forces present at the ZNPP are equipped with BTR-80 wheeled armored personnel carriers and both Ural and Kamaz utility trucks.⁷⁰⁸ Open-source information from as early as August 2022 also suggests that a force of approximately 500 Russian National Guard personnel (indicating a battalion level of command) has occupied the plant.⁷⁰⁹

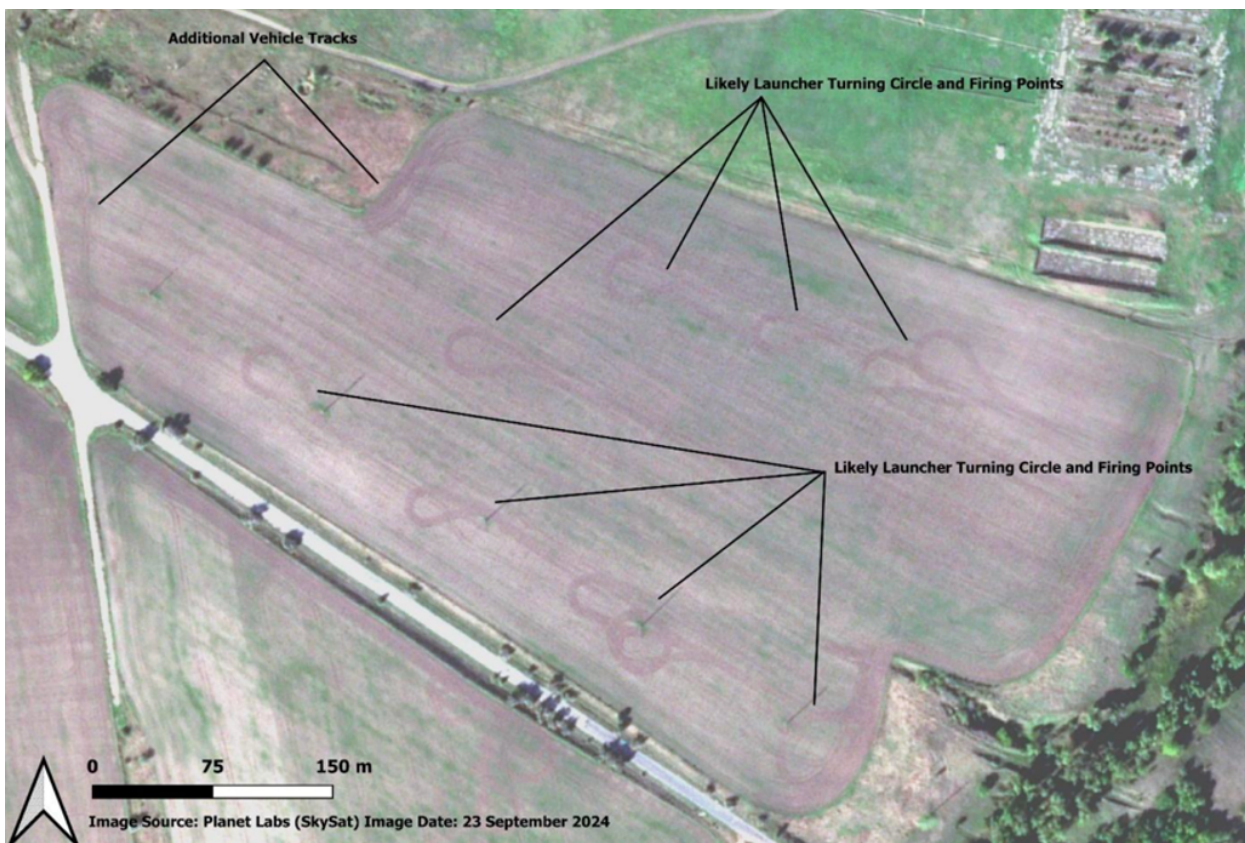
In a December 2024 analysis for Greenpeace, McKenzie Intelligence Services identified that the Russian military had extended its militarization of the ZNPP. Namely, more than 1 km of military



The ZNPP, including the cooling pond, as of December 2024.
Image source: McKenzie Intelligence Services.



Fig. 19 – Construction of Additional Trenches Near Cooling Towers, 11 October 2023



trenches for troops and fortifications such as revetments, likely for heavier weapons and/or armoured vehicles, had been constructed at the ZNPP cooling pond. This construction began in 2022 but accelerated in 2023 and 2024, and is concentrated along the northern and western banks of the cooling pond.⁷¹⁰

This analysis also reveals that the Russian military has concentrated its trench and fortification construction along the northern bank of the cooling pond. Greenpeace concluded that the militarization of the cooling pond is linked to Russia's plans to restart the ZNPP's reactors, since this is the location where Russia likely planned to build a new pumping station (see [Subsection 3.3.3](#)).

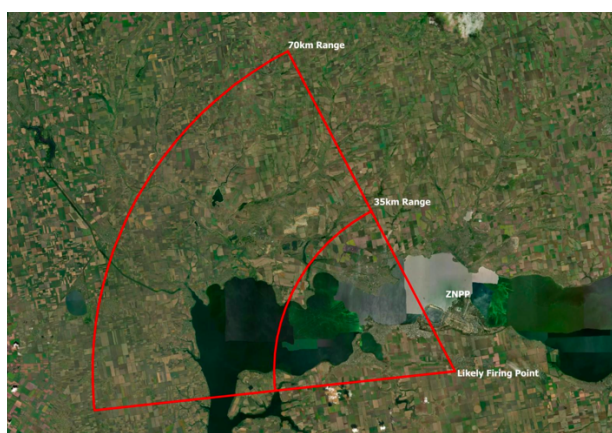
Another important element of Russia's militarization of the ZNPP is its use for the deployment of weapons. In McKenzie's September 2023 analysis, tracks for MLRS firing locations—BM-21 Grad and BM-30 Smerch in particular—were identified in close proximity to the ZNPP (between 1 km and 18 km from the plant).⁷¹¹ McKenzie also identified what is highly likely to be the firing point for a Russian MLRS artillery unit, which appears to have been used on multiple occasions between late July 2024 and late September 2024. The position consists of three adjacent fields immediately south of the village of Dniprovka and approximately 11 km south of the ZNPP. According to McKenzie's analysis, the track dimensions and dispersal pattern of the circles are indicative of a large artillery system, such as a BM-27 Uragan or BM-30 Smerch MLRS. Russian artillery units equipped with these systems are generally structured as a battalion of either two batteries of six launchers or three batteries of

four launchers. Stationing near the ZNPP would indicate the deployment of two batteries of four launchers (or two thirds of a battalion).⁷¹²

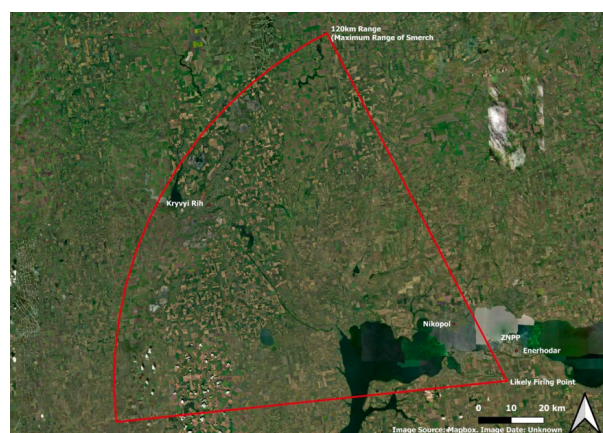
The MLRS tracks identified by McKenzie in the summer of 2024 suggest that two batteries were deployed into the field from the eastern side, driving through the field in a generally northwestern direction to firing positions. It is likely the launchers then fired a coordinated salvo before withdrawing to lay-up positions for resupply. The turning circles indicate that the vehicles turned both left and right, which strongly suggests that they were facing in a generally northwestern direction when firing. Both Uragan and Smerch launcher barrels can traverse 30° to the left and right of the centre line and have an elevation of +55°. This gives the Uragan an effective range of 35 km and a maximum range of 70 km, while the Smerch has a maximum range of 120 km. As such, the range of an Uragan firing from this location includes the city of Nikopol and communities such as Pokrovske within Dnipropetrovsk Oblast, as well as northeastern parts of Kherson Oblast. A Smerch, meanwhile, could reach as far as the city of Kryvyi Rih.⁷¹³

The BM-30 Smerch has the ability to fire up to 120 km. Given the assessed positioning of the systems in the field, the likely arc of fire and range of the salvo fired from this location are shown below.

By basing and firing their MLRS in proximity to the ZNPP, Russian armed forces significantly reduce their vulnerability to Ukrainian military attacks. McKenzie assesses that the Russian military is "using the presence of the nuclear power plant



The range of fire of a Russian BM-27 Uragan MLRS.

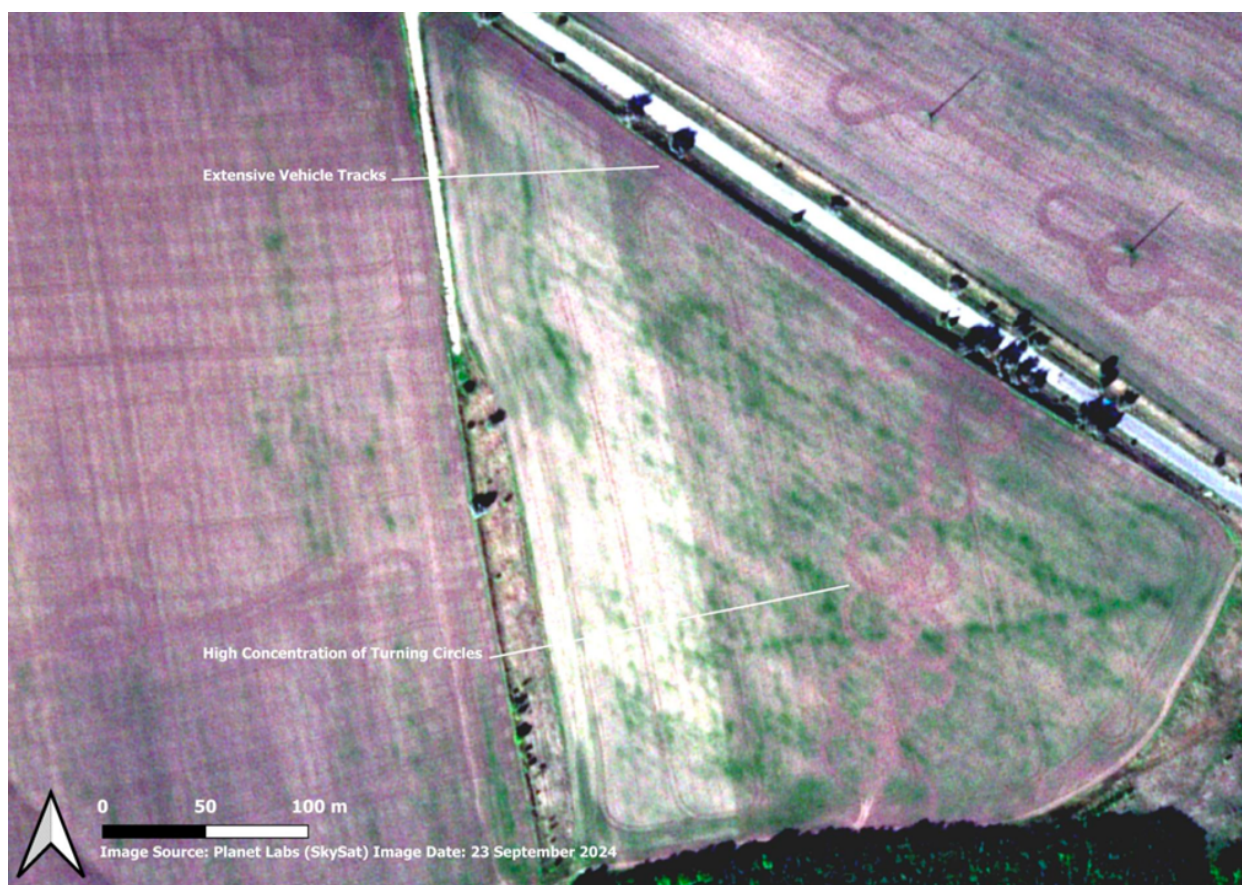


The range of fire of a Russian BM-30 Smerch.

as a shield to deter counter battery fire on to their firing positions".⁷¹⁴ The number of MLRS tracks in one of the field locations McKenzie identified indicates the location may have been used extensively, either for conducting fire missions and/or for other purposes such as practicing deployment or resupply drills. The repeated use of the same position for firing would usually risk detection and exploitation by an adversary. However, its proximity to the ZNPP significantly reduces the risk of receiving counterbattery fire.

At the same time, the location of these firing positions significantly raises the level of threat to the plant itself, such as in the case of rocket launch failures. Such uses of the ZNPP site for military purposes leave little doubt that Russia has consistently violated the second of the IAEA's Concrete Principles for the ZNPP, which states that nuclear sites should not be used to store or base heavy weapons or military personnel.

As early as April 3, 2022, the Ukrainian Government called for a 30 km demilitarized zone around the ZNPP and the withdrawal of all Russian forces from the plant.⁷¹⁵ Similarly, the IAEA unsuccessfully pushed for a Nuclear Safety and Security Protection Zone around the ZNPP.⁷¹⁶ Calls by the UN Secretary General in 2022 for demilitarization were, however, rejected by Russia as being "unacceptable" because Russian armed personnel were stationed at the plant "to ensure its smooth running and security."⁷¹⁷ Russia has also repeatedly denied that any militarization of the ZNPP has occurred. Indeed, at the IAEA General Conference in September 2022, Russia's Ambassador to the IAEA, Mikhail Ulyanov, stated in response to calls to demilitarize the ZNPP that "one cannot demilitarize something that has never been militarized in the first place",⁷¹⁸ despite clear evidence to the contrary.



3.3.3. Cooling System Issues: Critical Water Requirements

The ZNPP's safety, like that of all nuclear power plants, fundamentally depends on access to water for cooling its reactors and spent fuel. Water constitutes one of the most crucial components of nuclear facilities globally. The cooling system at the ZNPP relies on spray cooling ponds and the main cooling pond, previously replenished by the Kakhovka Reservoir. Before the destruction of the Kakhovka Dam in June 2023, the Kakhovka Reservoir both replenished the cooling pond to compensate for natural evaporation and partially purified its waters.⁷¹⁹ Indeed, the license to operate the ZNPP was premised on the availability of the Kakhovka Reservoir to supply water to the ZNPP and, in the event of an emergency, to function as a vital heat sink.⁷²⁰

Even in the present context of all six reactors at the ZNPP being in cold shutdown mode,⁷²¹ water remains crucial to the plant's safety. This is because the fuel remaining inside the reactors and in the spent fuel pools continues to release heat, due to the decay of radionuclides.⁷²² During loss of off-site power (LOOP) incidents, of which there have been nine since the start of the Russian occupation,⁷²³ the ZNPP is dependent on emergency diesel generators that operate the safety systems of the reactors and spent fuel pools, including the cooling water pumps. Water is also required to cool the emergency diesel generators when in operation.⁷²⁴

Following the rapid depletion of Kakhovka Reservoir after the destruction of the Kakhovka Dam,⁷²⁵ the ZNPP was effectively cut off from its principal water source. Given this loss of water supply and the inevitable further loss of water through evaporation, ground seepage, and ongoing cooling operations, with no external replenishment mechanisms, Rosatom began constructing underground wells at the ZNPP site in the summer of 2023. There are currently 11 such wells,⁷²⁶ which can provide enough water for the shutdown reactors' spray ponds, but not enough to maintain the water inventory in the ZNPP cooling pond. It is estimated that the water source would have to supply more than ten times the volume of water per hour than the existing 11 wells produce to

replenish the cooling pond and to compensate for its draining and filtration.⁷²⁷ Moreover, there are inherent risks in using groundwater wells, given that their use is not routine in nuclear power plants. As a result, there is insufficient planning and research to guarantee the plant's safety and the potential for the use of wells to lead to the tilting or partial collapse of the reactor units or other plant facilities. It is also possible that the wells may negatively impact the soils beneath the plant.⁷²⁸

The issue of water supply is particularly relevant to Russian officials' discussions of Rosatom's plans to restart one or more of the ZNPP reactors. In addition to problems relating to the degradation of the plant's equipment⁷²⁹ and qualified staff shortages,⁷³⁰ the structural integrity of the cooling pond, which is necessary for restarting the reactors, cannot be taken for granted. The cooling pond was built based on engineering assessments that there would be external hydrological pressure from the larger Kakhovka Reservoir, raising questions of its stability following the reservoir's depletion.⁷³¹ All design-basis events (incident scenarios anticipated and mitigated during the design process) were also examined in the context of the Kakhovka Reservoir's availability. However, potentially the most pressing issue is that operational reactors require active cooling and, therefore, far larger volumes of water than are currently available.

For over a year, Russian officials have repeatedly stated their intention to install new pumping stations on the ZNPP site to increase water supply.⁷³² Such proposals are deeply concerning in the current context of Russian occupation. The Russian military has placed mines between the inner and outer perimeters of the plant and has established an extensive system of trenches and firing positions at the ZNPP cooling pond, close to the proposed pump station locations.⁷³³ The IAEA has additionally reported landmine detonations close to the ZNPP, which have already caused damage to the plant's safety systems.⁷³⁴ As a result, constructing pumping stations close to the frontline and during ongoing hostilities would further endanger ZNPP staff. Furthermore, it carries unprecedented risks for the plant's structural integrity. The IAEA would also likely be unable to carry out effective monitoring of the

construction and operation of the pump stations, given the Russian military's use of the site and military secrecy stipulations. Moreover, pumping stations would not entirely solve the problem of water supply; it is estimated that the volume of water supplied by the proposed pumping station would only allow for the operation of one reactor at full capacity.⁷³⁵

Given that cold shutdown mode is the safest available in the context of ongoing hostilities, a return to operability of one or more of the ZNPP reactors poses a significant risk increase. In its current mode, it would take weeks, and possibly even months, before uncooled reactors and spent fuel ponds could cause an explosion without intentional sabotage.⁷³⁶ Returning even one reactor to operability in the current context would dramatically reduce this timeframe and increase both the likelihood and potential damage of a radiological release.

3.3.4. Operational Challenges: the ZNPP's Disconnection from Ukraine's Nuclear System

The ZNPP's forced disconnection from Ukraine's integrated nuclear management system creates another operational vulnerability affecting both immediate safety and long-term reliability. One of the earliest examples of this is the damage inflicted by Russian strikes on the ZNPP telecommunications network on March 1, 2022. As the SNRIU reported, "the possibility of transmitting radiation monitoring data to the International Radiation Monitoring Information System (IRMIS) was lost".⁷³⁷ This system allows for monitoring of radiation and data sharing during a radiological incident or emergency to facilitate decisionmaking.⁷³⁸ Since early 2022, shelling has repeatedly disabled several radiation monitoring stations near the ZNPP for extended periods. By mid-2024, only four of the total 14 stations were operational.⁷³⁹ These incidents demonstrate Russia's continued willingness to damage nuclear emergency systems, potentially delaying any timely international response to a nuclear crisis (see [Annex III](#)).

Electricity supply is another crucial aspect of operational challenges the ZNPP is currently facing. All nuclear power plants require a continuous electricity supply to power pumps and safety systems, as well as to supply water for cooling the nuclear fuel inside the reactor pressure vessel and the adjacent spent nuclear fuel pool. This electricity is delivered to the nuclear power plant via substations,⁷⁴⁰ transmission lines, and switchyards.⁷⁴¹ Before the Russian occupation, there were ten external transmission lines connecting the ZNPP to the Ukrainian electricity grid, comprising four 750kV lines and six 330kV lines.

Damage inflicted by Russia to one of the ZNPP's 750kV transmission lines was first reported on March 7, 2022. The SNRIU reported that one of the lines had sustained damage the previous day and had been "disconnected in the area of Vasylivka, Zaporizhia [*sic*] region, during fierce fighting".⁷⁴² By March 10, 2022, two of the 750kV lines were disconnected due to damage,⁷⁴³ while a third 750kV line was damaged on March 16, 2022. With only one 750kV transmission line operational until a second was restored on March 18, 2022,⁷⁴⁴ the SNRIU issued its first public warning of the risk of a station blackout (SBO), in which both on-site and off-site power fails.⁷⁴⁵ For an operational nuclear power plant, an SBO can lead to the boiling of cooling water in the reactor vessel within hours, resulting in core damage and radiological releases both within the reactor containment building and into the environment due to overpressure within the containment.

On the night of September 9, 2022, the switchyard of the ZTPP was damaged by artillery fire.⁷⁴⁶ The ZTPP played a vital role in the safety systems of the ZNPP, as it was responsible for supplying emergency electrical power to the reactors in the event of a LOOP incident. Although the ZTPP switchyard was repaired within 24 hours, the outage highlighted the nuclear safety risks posed by Russia's invasion, particularly since one ZNPP reactor was still operational at the time.

At time of writing, the ZNPP has experienced nine LOOP events during Russia's full-scale war. Particularly alarmingly, during a period of ten days in October 10–18, 2022, the ZNPP experienced two LOOPS as well as losses of connection via the

750kV line.⁷⁴⁷ Since the beginning of May 2025, only one of the ZNPP's external transmission lines remains operational.⁷⁴⁸ As was mentioned in [Section 1](#), information from ZNPP employees further indicates that the damage to these power lines was most likely not accidental. One interviewee directly connected Russian shelling to attempts to disconnect the ZNPP from Ukraine's energy infrastructure, relating that "when the Russians realized that we were not disconnecting from the Ukrainian energy systems, they began shelling".⁷⁴⁹

Importantly, some interviewees emphasised Rosatom's potential involvement in planning the damage to the power lines. One interviewee with in-depth knowledge of ZNPP operations during the occupation stated that "Rosatom is directly responsible for this [shelling of the ZNPP], as it advised the military on where to shoot in order to disconnect the plant from the Ukrainian grid".⁷⁵⁰ The same interviewee further explained:

*"Near the power units, there is an open switchgear. Roughly speaking, it is a place where five to six lines converge, through which the nuclear power plant supplies electricity to the Ukrainian system. The target was fired precisely at this device, which is a rather large and technically complex facility, with many transformers and switches, power lines, electrical equipment, and it takes a lot of expertise to know where to hit. [...] If our collaborators were involved, they may have found vulnerabilities at the suggestion of these people, but Rosatom had to coordinate further actions with the occupying military."*⁷⁵¹

While damage to the lines powering the ZNPP and its safety systems is a serious concern in itself, the deliberate targeting of these systems is more alarming still. Such actions display Russia's disregard for upholding nuclear safety norms and even the specific principles laid down by the IAEA regarding the ZNPP under occupation.

Currently, while a serious nuclear accident stemming from a loss of power remains a significant threat, the potential for radiological release is limited by the fact that all ZNPP reactors are in a state of cold shutdown. It is therefore particularly alarming that Russia appears to be preparing to

restart one or more of the reactors and is constructing electricity lines to facilitate this. In May and June 2025, Greenpeace released an analysis of satellite imagery demonstrating that Russia has already constructed over 90 km of electricity lines and pylons in occupied Ukrainian territory between Mariupol and Berdiansk.⁷⁵² The direction of construction suggests that the new line will ultimately be used to connect the ZNPP to Russia's own electricity grid, despite the well-documented dangers of restarting the plant. Moreover, as of June 2025, Russia has reportedly started to build a floating modular pumping station at the ZNPP, further confirming their plans to restart the plant.⁷⁵³ If Russia proceeds unchallenged with these plans to restart the ZNPP, the gravity of any potential incident will be severely worsened.

A further issue stemming from the ZNPP's disconnection from Ukraine's nuclear system is the progressive degradation of the plant's equipment under Russian occupation. It is not possible to fully assess the extent of the degradation of the ZNPP's nuclear technologies while the plant remains under occupation. However, the lack of appropriate maintenance has been flagged on several occasions through the IAEA's repeated reports that maintenance at the ZNPP has "not yet reached the comprehensiveness that would typically be expected under normal operating conditions".⁷⁵⁴ In October 2024, a potentially radioactive water leakage was detected from an impulse line to the primary circuit of one of the ZNPP's reactors. In response, IAEA Director General Grossi stated: "We have identified regular equipment maintenance, which is vital to ensure sustainable nuclear safety and security, as a challenging area for the Zaporizhzhia Nuclear Power Plant during the conflict."⁷⁵⁵ The IAEA has also noted that non-critical maintenance has been postponed at the plant due to a lack of personnel and replacement parts, as their delivery is only possible on a case-by-case basis due to the Russian occupation.⁷⁵⁶ Although non-critical maintenance issues may not pose an immediate threat of significant radiological release, their implications can compound over time. For this reason, Rosatom's negligence with respect to non-urgent maintenance is creating grave long-term risks for nuclear safety and security.

While IAEA Director General Grossi has noted that “what was once virtually unimaginable, that a major nuclear power plant would repeatedly lose all of its external power connections, has unfortunately become a common occurrence”.⁷⁵⁷ it is essential that the elevated risk of radiological release at the ZNPP does not become accepted or normalized. As the above demonstrates, Russian activities at the ZNPP regarding off-site power and maintenance, in which Rosatom is complicit, have repeatedly violated the first and fourth of the IAEA’s Five Concrete Principles for the plant. Those principles stipulate, respectively, that there should be no attack from or against the ZNPP (including critical infrastructure) and that off-site power should not be compromised.

3.3.5. Nuclear Safety and Security Implications of ZNPP Working Conditions

The ability of qualified and highly trained personnel to perform their duties without intimidation and psychological or physical stress is undoubtedly a fundamental requirement for the safe operation of any nuclear power plant. The violations of nuclear safety and security at the ZNPP under Russian occupation therefore also stem from the conditions under which its employees have been made to work.

The third of the IAEA’s Seven Pillars specifically stipulates that “operating staff must be able to fulfill their safety and security duties and have the capacity to make decisions free of undue pressure”. Information collected by Truth Hounds, however, shows that this principle has been undermined consistently and on a large scale under Russian occupation. According to Truth Hounds’ data alone, dozens of ZNPP employees have been subjected to detention, torture, and intimidation before being forced to return to work and carry out critical functions at the plant. For instance, interviewees have related being forced to return to work shifts directly after being subjected to torture and inhuman treatment, as well as being deprived of sleep. In one illustrative example, an interviewee described a colleague being made to complete an eight-hour night shift during which he was responsible for nuclear safety at the ZNPP

immediately after returning from being beaten by the Russians and being deprived of sleep (see [Section 1](#)).⁷⁵⁸

In many cases, this widespread, systematic treatment has had severe psychological and physical consequences, further impeding employees’ ability to perform their professional duties safely. Moreover, other staff members are aware of these practices and understand that they or their relatives could receive similar treatment if they are perceived as disloyal, reinforcing an atmosphere of intimidation. These conditions at the ZNPP cannot be separated from—and exist in symbiosis with—the broader climate of fear and pressure created by the occupation of the city itself, since conditions in the city remain an integral part of the lives of the plant’s employees.

The documented atmosphere of fear and intimidation at the ZNPP is particularly relevant when considering emergency scenario management. In any accident or serious incident scenario, nuclear power plant operators play a crucial role in mitigating the impact of the incident and in the early notification of an emergency. Under normal operating conditions, the intervention of ZNPP personnel in an emergency would be critical to determining the sequence of events and, to some extent, their severity. The Russian military and Rosatom’s systemic abuse of ZNPP staff therefore poses a risk not only to the lives and wellbeing of ZNPP personnel, but also to the plant’s safety systems.

3.3.6. Serious Incident Risks

In light of the pervasive nuclear safety and security issues highlighted in this section, it is important to consider their implications for the risk of serious radiological incidents. While the full range of potential incident scenarios is beyond the scope of this report, an important scenario to consider is the loss of all cooling function to the reactor core nuclear fuel, particularly in light of the numerous LOOP events at the ZNPP.

Even when a nuclear power plant is not operating, a substantial amount of residual heat remains in the fuel core, requiring continuous cooling by the ultimate heat sink (UHS). The UHS comprises the

complex of water sources necessary to shut down a reactor safely and remove residual heat from it.⁷⁵⁹ A UHS for a nuclear power plant in generation mode is dependent on an electricity supply, so loss of the UHS is an inevitable consequence of a LOOP followed by an SBO. In this scenario, the nuclear fuel would heat up over several weeks before reaching a temperature at which it would undergo a meltdown.

In the case of the ZNPP, spent fuel in the cooling pond would heat up and evaporate its cooling water. If the water level were to drop to a level where the fuel was exposed to air, a highly exothermic reaction between the nuclear fuel, assembly cladding, and reactor core would occur, potentially leading to fuel melt. This runaway zirconium oxidation reaction, also known as a zirconium fire, would release even larger amounts of radiation than the reactor core itself.

If the ZNPP reactors were to become operational again, the loss of cooling function would lead to fuel meltdown in hours, not weeks. The time available to recover from the loss of the UHS before fuel damage in the worst-case scenario at ZNPP-type reactors is only two and a half hours. The time until the water in the spent fuel pools starts boiling is two hours, while the time available until the fuel is uncovered is 20 to 30 hours.⁷⁶⁰

This is a possible sequence of events leading to core damage in generation mode:

Phase 1: Grid collapse

- Damage to one or several main substations.
- Critical disruption to the grid, pushing frequency or voltage beyond acceptable limits with no additional generation capacity available.
- LOOP for one or several nuclear power plants.
- Reactor scram: Electricity at the plant required for safety systems is provided by on-site diesel generators, batteries, and/or trip to house load by one reactor at minimal power.
- Due to the loss of generation capacity of one or multiple nuclear power plants, the limited remaining generation capacity in the grid cannot compensate. This causes a general blackout.

Phase 2: Not possible to restart the grid (black start)

- As most hydroelectric and coal-fired plants are damaged and nuclear power plants do not have a black start capability, it is impossible to restart the grid. This leads to a prolonged blackout.
- Diesel generators run out of fuel or malfunction, while house-load production at the nuclear power plant fails.
- Nuclear power plant SBO: All safety functions at the nuclear power plant cease.
- Reactor core damage and large-scale release of radiation.

When considering these serious incident scenarios in the context of Russia's war in Ukraine, there is also the possibility of deliberate sabotage by Russian forces. This is a new element, since the risk factors of deliberate intent and opportunity to damage a nuclear power plant have never been included in formal regulatory reviews of nuclear power plant safety assessments.

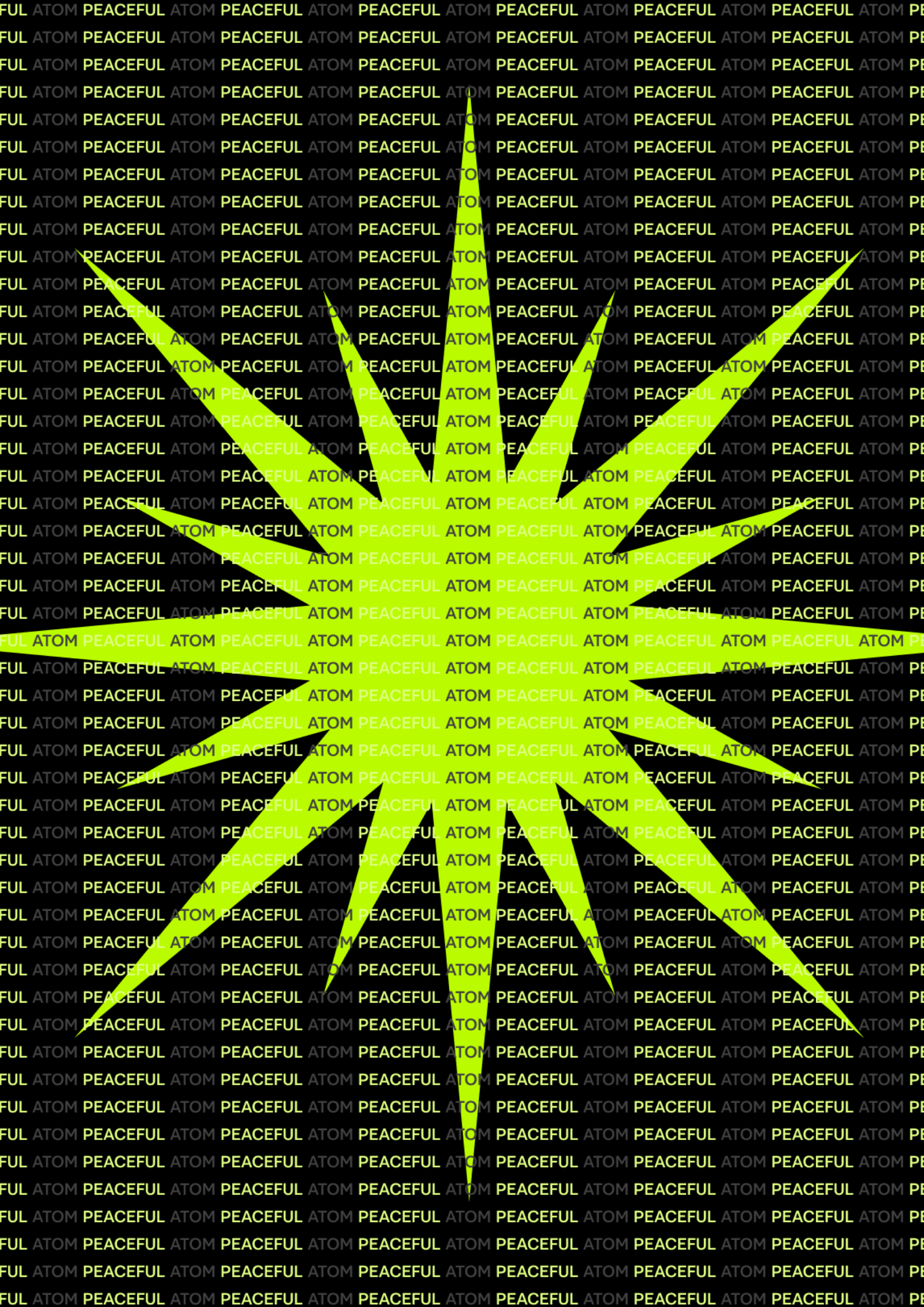
As the ZNPP is landlocked, in the event of a serious radiological release, most of the radioactive contamination would be deposited on land and into river systems, such as the Dnipro. By contrast, at Fukushima Daiichi, approximately 80% of the radioactive contamination was released into or deposited onto the Pacific Ocean.⁷⁶¹ Any incident at the ZNPP therefore risks a massive concentration of radioactive contamination staying in water systems and land primarily used for agriculture, with far-reaching consequences for the environment and wildlife.

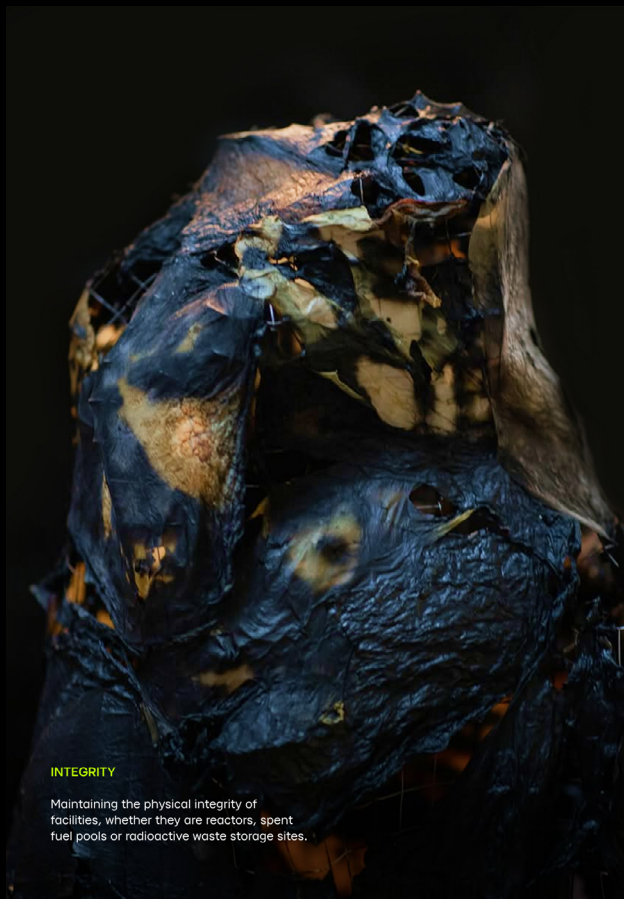
In the case of a nuclear reactor event, atmospheric modelling simulations indicate that the highest risk of contamination would be within a radius of a few hundred kilometers, primarily in Ukraine, but also in neighboring countries. At a lower level of contamination, still requiring protective measures, it would affect much of Central, Eastern, and Southern Europe, including western Russia.⁷⁶² These are, however, models for only single reactor events. Multiple reactor failures at the ZNPP are also credible scenarios.

3.4. Conclusion

In light of the collected evidence, it is difficult to suggest that Russia is upholding any of the IAEA Seven Pillars, or, indeed, its Five Concrete Principles for the ZNPP. While it is not possible to provide a comprehensive assessment of the true extent of the Russian occupation's impact on nuclear safety and security at present, the actions of Rosatom and the Russian military have consistently placed both ZNPP employees and the safety of the ZNPP site at risk. As such, the nuclear safety and security violations detailed in this chapter must be viewed together, given that their capacity to compound one another increases both the likelihood and severity of a potential emergency.

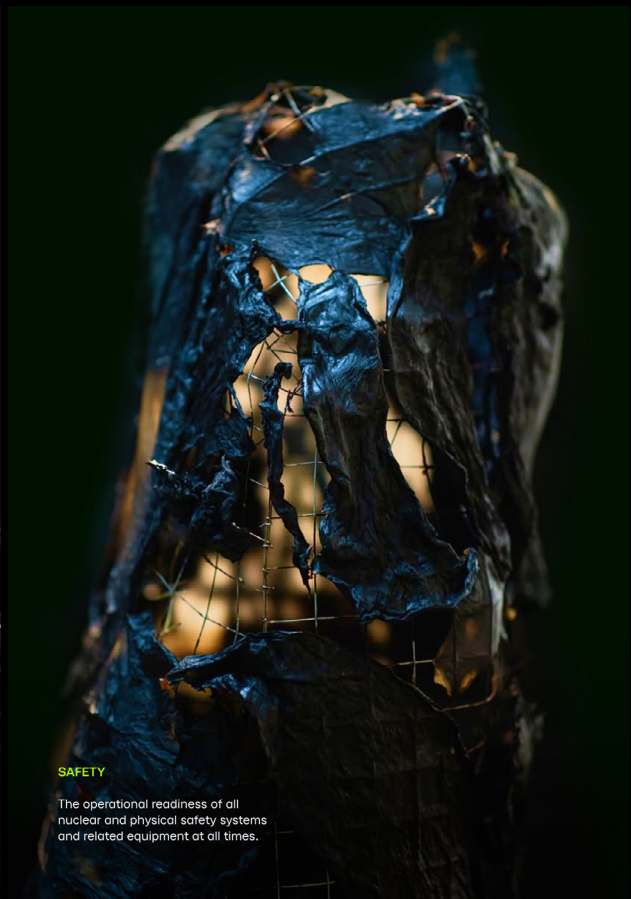
The conduct of Rosatom in this regard is particularly alarming. The corporation has demonstrated not only an inability to protect personnel and safely manage the plant, but also blatant disregard for nuclear safety and security standards in pursuit of Russia's broader political and military objectives. However, as the next section details, both Rosatom's conduct at the ZNPP and its integration into the repressive system of occupation in Enerhodar are not entirely unanticipated, given the corporation's role in Russia's strategic statecraft more broadly.





INTEGRITY

Maintaining the physical integrity of facilities, whether they are reactors, spent fuel pools or radioactive waste storage sites.



SAFETY

The operational readiness of all nuclear and physical safety systems and related equipment at all times.



ROAD

Ensuring uninterrupted logistics supply chain to nuclear facilities and transport in both directions.



MONITORING

Ensuring the operation of the radiation monitoring system on and off site, as well as emergency preparedness and response measures.



STAFF

Operational staff performing their duties to ensure nuclear and physical safety and making decisions without undue pressure.



EXTERNAL SUPPORT

Providing all nuclear facilities with a reliable external power supply from the electricity grid.



COMMUNICATION

Reliable functioning of communication channels with the regulatory authority and other participants.

89 SECONDS

Installation made of fermented kombucha, 2025.

YEVHENIIA HRYHORYAN AND KATERYNA SHAVANOVA

This installation was first exhibited as part of the 'Serendipitous Events' initiative within the framework of the 'EU for Gender Equality: Together against Gender Stereotypes and Gender-Based Violence' (phase 2), funded by the European Union and implemented in cooperation with UN Women Ukraine and UNFPA Ukraine. The exhibition was organised in cooperation with the Ukrainian House, under the curatorial supervision of the agency and the NGO Port of Culture.

Photos by Danylo Antoniuk

SECTION 4

Rosatom: Strategic Dimensions of Nuclear Power

4.1. Introduction

Rosatom is one of Russia's largest state-owned corporations. Established in 2007, it encompasses more than 360 enterprises operating in the nuclear energy and related technologies sector. In recent years, the corporation has pursued significant business diversification beyond nuclear activities, expanding into engineering, digital technologies, and other sectors, with strategic plans to derive at least 40% of revenues from these new business areas by 2030.⁷⁶³ Rosatom holds a privileged position even among Russian state corporations due to its direct legal subordination to the President of the Russian Federation, who is responsible for defining the strategic objectives of the corporation's activities.⁷⁶⁴

The corporation operates with notable flexibility across the seemingly distinct spheres of global energy markets, Russia's domestic governance structures, and administrative functions in occupied territories, particularly around the ZNPP, as illustrated in the previous section. This pattern becomes even clearer when viewed within the broader context of Rosatom's international expansion and integration into Russia's strategic statecraft. This section analyzes the corporation's role within Russia's state system, focusing on how its technical expertise aligns with and serves broader strategic political objectives. It also explores Rosatom's international presence, namely its position in global nuclear markets, control over uranium resources, and development of nuclear infrastructure across multiple continents. These

activities reveal distinct patterns of how nuclear infrastructure shapes interstate relations.

This analysis draws on various sources, including an examination of financing agreements, technical partnerships, and governance structures, revealing consistent patterns in Rosatom's operations across different contexts.

While the preceding sections documented Rosatom's direct role in occupying the ZNPP, this section examines the broader institutional architecture that enabled such actions. Understanding Rosatom's dual function—as both a global commercial enterprise and an instrument of state policy—is essential to comprehending how the same corporation that builds reactors worldwide could seamlessly transition to administering an occupied territory. The analysis reveals how institutional characteristics that facilitate international nuclear expansion also enable rapid deployment for strategic political objectives.

The aim of this section is to demonstrate that, despite Rosatom's direct involvement in administering the occupying regime and exerting pressure on ZNPP personnel, the corporation has simultaneously continued to expand its global influence. By examining its activities, the section highlights how Rosatom leverages its dual role—as an instrument of coercion in occupied territories and as a key player in global nuclear markets—to advance Russia's broader strategic objectives.

4.2. State Corporation Logic: Rosatom within Russia's Governance System

4.2.1. The State Corporation Model

Rosatom operates as a “state corporation”,⁷⁶⁵ a specific legal category under Russian law. The relevant legislation defines a state corporation as a non-commercial organization established through individual federal laws to perform “social, administrative, or other socially beneficial functions”.⁷⁶⁶ While its legal basis was formed in 1999, the state corporation model emerged during the mid-2000s as part of a broader recentralization of key economic sectors under Putin’s administration.⁷⁶⁷

Russian state corporations enjoy a distinct legal status, with accountability primarily to high-level state bodies and are subject to government reporting requirements, as well as audits by the Accounts Chamber, rather than regular ministerial supervision. This centralized oversight is exemplified by Rosatom’s governance structure. Supervisory board members maintain direct ties with the presidential administration, including a deputy director of the FSB. This underscores the corporation’s integration within Russia’s security apparatus. For strategic corporations like Rostec and Rosatom, their operational mandate spans civil and military domains. Russian state corporations also possess statutory authority to manage allocated state assets independently, while being required to publish annual reports on asset utilization.⁷⁶⁸ Unlike publicly traded companies, state

corporations cannot declare bankruptcy and follow fewer disclosure requirements.⁷⁶⁹ Property transferred from the Russian Federation becomes the corporation’s own, enabling Rosatom to manage these assets without government approval for each transaction.⁷⁷⁰ The corporation can establish its own procurement rules and has authority over state reserves of fissile materials while participating in government defense contracts, creating overlap between civilian nuclear operations and military-strategic functions.⁷⁷¹

The very structure of Russian state corporations integrates civilian and military functions within single corporate entities. This integration is explicit in the founding documents of state corporations like Rostec,⁷⁷² which specify functions for “demonstrating civilian, military, and dual-purpose products” and “facilitating foreign trade activities related to military products”.⁷⁷³ Rostec has created specialized structures with Vnesheconombank, including NPO Conversion, designed to transfer technology between the defense and civilian sectors.⁷⁷⁴ As Rostec CEO Sergei Chemezov has noted, their priorities include “achieving parity between military and civilian products” and enabling technology transfers between sectors.⁷⁷⁵

Rosatom operates through a vertically integrated organizational structure with specialized subsidiaries managing distinct segments of the nuclear value chain. Rosenergoatom oversees domestic power generation, TVEL controls fuel cycle operations from uranium enrichment to waste management, and Atomstroyexport handles international reactor construction projects. Additional divisions manage uranium mining, research activities, and fleet operations, including specialized vessels.⁷⁷⁶ This comprehensive corporate architecture positions the corporation as a critical component of

⁷⁶⁵ In Russian: “государственная корпорация.”

⁷⁷² Rostec is a Russian state corporation established in 2007 to promote the development, production, and export of high-tech industrial products. It operates across numerous sectors including aviation, the automotive sector, electronics, medical equipment, and arms manufacturing, serving as a government partner in technology and industrial development.

Russia's technological infrastructure, enabling coordinated implementation of state priorities across multiple sectors and international markets.

The state corporation model holds strategic significance in the context of Russia's war on Ukraine and the resulting economic restructuring. Russia's Technological Development Concept through 2030, adopted by the government in May 2023, puts "technological sovereignty" at its centre.⁷⁷⁷ Technological sovereignty is described as "the presence in the country (under national control) of critical and crosscutting technologies, proprietary development pathways, and production conditions" that ensure Russia can independently achieve its national goals.⁷⁷⁸ The Concept explicitly designates state corporations for the implementation of technological sovereignty, requiring the establishment of "chief designers and chief technologists for critical technologies in each state corporation" and mandating a "reassembly and relaunch of innovation development programs for state corporations".⁷⁷⁹

These provisions position state corporations alongside other institutional actors—including state-owned enterprises, politically aligned private companies, and research institutes—in Russia's broader efforts to reduce technological dependence on foreign sources. State corporations represent one particularly distinctive mechanism within this complex system, combining specialized technical mandates with governance advantages not enjoyed by conventional enterprises. Crucially, this same institutional structure also proved advantageous for Russia's occupation of the ZNPP and the surrounding area, enabling Rosatom to extend its functions beyond the energy sector into the direct administration of occupied territory.

4.2.2. Personnel and Media Networks

Rosatom leverages its status as a state corporation to develop mechanisms of international influence through the energy sector worldwide. Rosatom leverages its status as a state corporation to develop mechanisms of international influence through the energy sector worldwide. With Russian Government support, the corpo-

ration offers various operational models, most commonly "Engineering, Procurement, Construction" or "Build-Operate-Transfer" arrangements. However, the full «Build-Own-Operate» model—as implemented at Türkiye's Akkuyu Nuclear Power Plant—represents a more comprehensive approach that ensures complete Russian control over construction, financing, and long-term operations. This arrangement creates an unprecedented situation of Russian operational control over nuclear infrastructure within a North Atlantic Treaty Organization member state, particularly significant given the alliance's 2022 Strategic Concept designation of Russia as «the most significant and direct threat to Allies' security".⁷⁸⁰

This approach is strengthened by substantial state credits covering over 80% of project costs—10 billion EUR (approximately 11.5 billion USD) for nuclear plants in Belarus and Hungary and 25 billion USD for Egypt—which create relationships of financial dependency with partner countries.⁷⁸¹ Through its subsidiary TVEL, Rosatom maintains a monopoly on fuel supply for many reactors, controlling approximately 30% of EU nuclear fuel deliveries as of 2023.⁷⁸² The corporation's coordination with governmental and diplomatic structures is also systematic: as the International Centre for Defence and Security notes of Rosatom's international projects, "all saw the direct involvement of the Russian government during the negotiations", with state engagement continuing through project implementation via government loans, operational support, and long-term technical assistance programs.⁷⁸³

The structure of Russian state corporations facilitates the direct implementation of strategic initiatives while maintaining close alignment with executive priorities. Since Russia's full-scale invasion of Ukraine, the concept of "sovereignty" has gained particular prominence in official discourse. In a December 2023 address, Putin articulated this priority explicitly, stating that "for Russia, the main thing is sovereignty".⁷⁸⁴ Putin clarified this concept as encompassing three pillars: high consolidation of Russian society, stability of the financial and economic system, and increasing the capabilities of the security forces, including the army and security agencies.⁷⁸⁵ With its concentrated expertise and distinctive governance arrangements, Rosatom naturally embodies this

intersection, with technological capabilities that official discourse consistently frames as essential foundations to national independence.

Among the seven conditions for economic sovereignty outlined by then First Deputy Prime Minister Andrei Belousov in his 2023 lecture “Sovereign Economy: Steps that made Russia strong”, at least two directly involve Rosatom.⁷⁸⁶ Belousov presented these conditions as necessary for Russia’s economic sovereignty. The conditions include having “effective production and self-sufficiency in essential resources”, including energy, and developing “modern infrastructure across several domains”, including energy systems. This framework shows why Rosatom’s activities go beyond ordinary business operations. By positioning energy infrastructure as foundational to national independence, this doctrine extends logically to international operations. The corporation’s international energy projects create dependencies that extend beyond commercial relationships, putting Russia’s sovereignty doctrine into practice through technical infrastructure.

Rosatom’s integration into Russia’s governance system, as a state corporation balancing economic flexibility and direct subordination to presidential authority, has created favourable conditions for developing extensive communications capabilities. This institutional status allows the corporation to establish media structures that further industry developments and strategic narratives through specialized channels. Indeed, Rosatom’s extensive media infrastructure extends well beyond typical corporate communications, demonstrating its strategic approach to public relations and positioning. The corporation’s flagship publication “*Strana Rosatom*” (Country Rosatom) functions as its primary news resource, systematically documenting corporate developments while contextualizing them within broader strategic narratives.⁷⁸⁷ Several specialized publications supplement this central platform, each targeting different audiences, including the analytical journal “*Noviy Atomnyi Ekspert*” (New Nuclear Expert), which focuses on technical developments, “*Vestnik Atomproma*” (Atomic Industry Herald), which highlights Rosatom’s achievements, and “*Luch*” (Ray) magazine, which specifically targets residents of nuclear cities.⁷⁸⁸ This coordinated media ecosystem allows Rosatom to shape public perceptions of nucle-

ar energy while securing its strategic position in Russia’s information space.

Russia’s state corporation model functions within a strategically designed institutional ecosystem that systematically integrates specialized expertise with governance authority. Operating alongside state-controlled joint-stock companies like Rosneft and Gazprom, state corporations participate in coordinated networks where technical knowledge and political decisionmaking converge through deliberate personnel circulation and institutional alignment, creating amplified capacity to pursue complex strategic objectives across multiple critical sectors.

The strategic circulation of key figures between corporate and government positions underscores these integration patterns. Igor Sechin’s movement between government positions (deputy chief of the presidential administration from 2000 to 2008 and deputy prime minister from 2008 to 2012) and Rosneft leadership roles (chairman of the board from 2004 to 2011 and CEO since 2012) is emblematic of this pattern. Similarly, Sergei Chemezov, who served alongside Vladimir Putin in Dresden in the 1980s, has led state corporation Rostec since its formation in 2007, while maintaining significant informal influence within government circles. Igor Shuvalov’s transition from first deputy prime minister (2008–2018) directly to chair of the state development corporation VEB.RF further exemplifies how high-ranking officials move seamlessly between strategic corporate positions.⁷⁸⁹ This circulation of personnel creates governance mechanisms that maintain strategic continuity across formally distinct institutional frameworks.

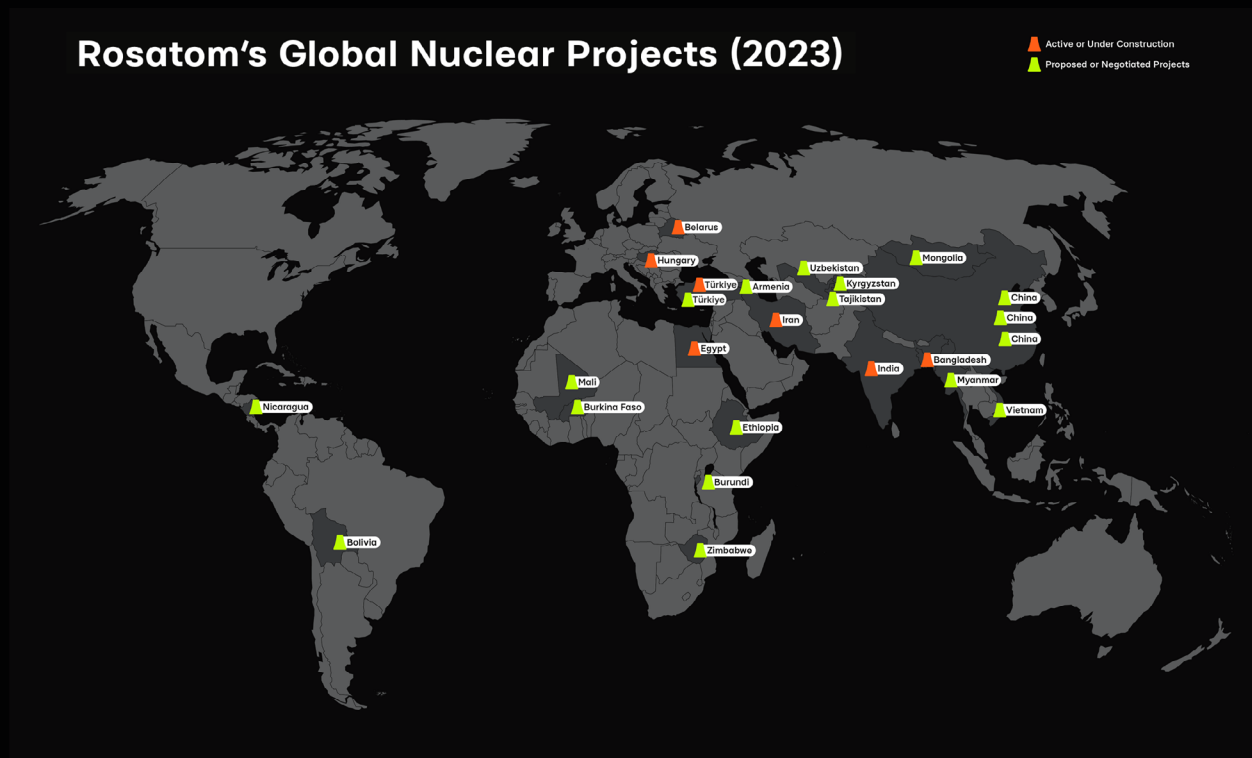
Rosatom’s development under Sergei Kiriyenko offers a clear example of how corporate governance connects with state priorities. Although less internationally visible than other figures in Putin’s system, Kiriyenko led the Federal Atomic Energy Agency from 2005 until it was reorganized as Rosatom in 2007, a position he held until 2016. During this period, he established a vertically integrated structure with a global reach. After becoming first deputy chief of the presidential administration in 2016—one of the most powerful positions in the Russian Government—Kiriyenko

maintained his connection to Rosatom by staying on as chair of its supervisory board.

This dual role is typical of the system within which Rosatom operates, since power in Russia derives from both official positions and personal access to the leadership. Kiriienko's influence extends through his ability to position various sectors as requiring political oversight, thereby expanding his administrative reach.⁷⁹⁰ Strong evidence exists that Kiriienko's activities reach far beyond the nuclear sector; in September 2024, the US Department of Justice alleged he directed Russian firms in the "Doppelganger Operation" to covertly disseminate Kremlin propaganda aimed at reducing support for Ukraine and influencing foreign elections.⁷⁹¹ In addition, according to former Ukrainian National Security and Defence Council Secretary Oleksiy Danilov: "The main ideologue and lobbyist for the destruction of Ukraine's energy infrastructure is Russian Presidential Administration Deputy Head Sergei Kiriienko, who through his work at Rosatom has developed strong expertise in the energy sector."⁷⁹² While this assessment requires critical examination and additional verification, it indicates the former Rosatom leader's role in coordinating strategic aspects of Russia's war on Ukraine.

Rosatom exemplifies how one of the world's key energy companies was deliberately structured to serve dual functions within Russia's strategic architecture. Its ambiguous legal status enables it to operate simultaneously as a commercial enterprise in global markets and as an instrument advancing broader state objectives. When strategic priorities shift, the corporation's institutional frameworks adapt to new functions beyond conventional commercial operations. This governance pattern, where specialized industrial knowledge serves broader state purposes, defines Russia's state corporation model and distinguishes it from standard corporate arrangements in market economies.

4.3. Global Nuclear Presence: Rosatom's International Operations



Many states increasingly view nuclear power as a practical option for supporting energy transition goals, offering low-carbon baseload capacity despite high up-front costs, regulatory complexity, and waste management challenges. However, in the case of Rosatom, its extensive international economic activities and international presence lend it a particular strategic importance. This section analyzes Rosatom's international commercial activities, revealing how the intertwining of economic and strategic interests serves as a geopolitical instrument for the Russian state. This analysis must navigate between two analyt-

ical traps: neither dismissing Rosatom's activities as mere commercial ventures nor treating every contract as evidence of malevolent geopolitical design.

Over the past decade, power plants have provided around 10% of global electricity generation, remaining on a consistent level with an additional 69.8 GW(e) nuclear capacity connected to the grid since the beginning of 2013.⁷⁹³ In other words, nuclear capacity expanded in proportion to overall electricity demand growth. As of 2024, 413 reactors were operating in 31 countries, contributing

to a global capacity of 371.5 GW(e). Another 25 licensed for operation remained suspended.⁷⁹⁴ Annual nuclear operations require approximately 80,000 tons of uranium, sourced primarily through mining, spent fuel recycling, and downblending weapons-grade material.⁷⁹⁵

According to the most recent data from the IAEA, as of 2024, 59 reactors with a total capacity of 61.1 GW(e) were under construction in 17 countries.⁷⁹⁶ Additionally, as previously noted, as of 2025, approximately 65 plants are under construction,⁷⁹⁷ with plans for a further 90.⁷⁹⁸ Most operational nuclear facilities are concentrated in industrialized regions, such as North America and Europe, as well as in China and Japan, where financial resources, technical expertise, and governance structures have historically supported complex nuclear development. Meanwhile, South America, Africa, and much of Asia have limited nuclear generation capacity despite growing energy demands.⁷⁹⁹ This geographic disparity presents strategic opportunities for established nuclear actors to expand their influence. The expansion of nuclear energy has the potential to reshape regional energy governance relationships and alter regional power dynamics, influencing the geopolitical landscape of global power generation.

The Russian Federation, uniquely positioned through the concentration of Soviet-era nuclear expertise and the establishment of a centralized state corporation, used this as a foundation to secure a leading role in emerging nuclear markets and in established and strategically important regions. The first factor—the nuclear complex inherited from the former Soviet Union—enabled Russia to maintain continuity in its nuclear strategy throughout the 1990s, despite severe economic challenges. During this period, Russia secured new reactor export agreements with Iran, China, and India, laying the groundwork for future market expansion. Later, Russia formalized its nuclear sector development through the Federal Target Program, adopted in 2006, which outlined ambitious goals to expand nuclear capacity by 2–3 GWe annually through 2030.⁸⁰⁰ The second factor—Rosatom’s establishment as a state corporation in 2007, amid a broader consolidation of “sovereignty-forming” industries—created an institutional architecture capable of pursuing both commercial objectives

and strategic state interests across increasingly diverse global markets.

Rosatom’s activities and their connection to Russia’s broader geopolitical interests have been the subject of extensive scholarly analysis.⁸⁰¹ Pami Aalto *et al.* find that the Russian state furthered its foreign policy interests by reinforcing and extending diplomatic relationships in the nuclear energy sector through Rosatom’s ventures in Hungary and Finland.⁸⁰² In particular, they highlight how Russia pursues nuclear energy diplomacy when sanctions make gains harder to achieve elsewhere—specifically, commercial profits, economic modernization benefits, and foreign policy influence (pathways that have become increasingly crucial since Russia’s 2022 invasion of Ukraine intensified Russia’s international isolation).

Kasper Szulecki and Indra Overland of the Norwegian Institute of International Affairs argue that Rosatom develops strategic influence through the integration of infrastructure. Their framework proposes “a continuum of energy statecraft tools” that operate through incremental dependencies rather than fitting into the binary framework of “energy weapon” versus “soft power”.⁸⁰³ Nonetheless, they find that even Rosatom’s activities that can be considered soft-power diplomacy create “dependencies that can be further expanded and exploited and thus should not be overlooked”.⁸⁰⁴

Szulecki and Overland’s framework isolates three critical dimensions of Rosatom’s approach:

- The strategic cultivation of technical integration that creates enduring operational relationships;
- The development of institutional frameworks that extend influence beyond direct energy supply; and
- The systematization of “second-order” dependencies through personal and informal ties that facilitate lobbying and information access.

Their analysis reveals that countries where Rosatom-built reactors generate significant proportions of electricity (>10%) are predominantly former Soviet republics and Eastern Bloc states with estab-

lished technical relationships with Russia's nuclear sector.⁸⁰⁵ These enduring institutional connections have created infrastructure dependencies that persist despite shifting geopolitical alignments, demonstrating how technical integration transcends conventional political boundaries.⁸⁰⁶ Rosatom's activities in Türkiye provide further evidence: the Akkuyu Nuclear Power Plant, of which the first unit is expected to come online in 2025,⁸⁰⁷ will remain owned and operated by Rosatom throughout its operational lifecycle. A Russian state corporation's ownership of strategic nuclear infrastructure in a North Atlantic Treaty Organization member state, lending the plant what Szulecki and Overland term a "peculiar extra-territorial status",⁸⁰⁸ is unprecedented and raises important questions regarding long-term security.

Examining Rosatom's global activities reveals an approach to international influence that operates through multiple, complementary channels simultaneously. Rather than relying solely on direct control over energy resources, the corporation establishes technical relationships that create structural dependencies through specialised training programs, distinctive financing arrangements, and comprehensive infrastructure partnerships.⁸⁰⁹ These mechanisms reflect a calibrated approach to energy statecraft that demonstrates remarkable resilience even during periods of heightened geopolitical tension.

Rosatom's business model, centred on constructing and exporting reactors, and selling uranium supplies and services,⁸¹⁰ ensures a sustained flow of revenue. According to its 2023 annual report, Rosatom has 459 subsidiaries and 343,000 employees.⁸¹¹ Its global revenue in 2023 was reported to be 2.572 trillion RUB (approximately 28.3 billion USD), with 443 billion RUB (approximately 4.9 billion USD) contributed as taxes to Russian government budgets at all levels, with around 16 billion USD generated from foreign markets.⁸¹² As a vast diversified entity, Rosatom relies heavily on numerous subsidiaries to manage its operations both within and beyond the Russian Federation. These subsidiaries enable Rosatom to expand its influence in targeted countries and strengthen its grip on their economies, thereby gaining power on the regional and global scale.⁸¹³ Rosatom's key subsidiaries play a crucial role in Russia's nuclear industry, including the TVEL Fuel Company (in-

involved in nuclear fuel production and uranium enrichment), Techsnabexport/TENEX (involved in the export of uranium products), Rosenergoatom (involved in nuclear power plant operations), Atomstroyexport (involved in the export of nuclear power equipment and services), Atomenergoprom (a holding company unifying civil nuclear assets), Atomredmetzoloto (involved in uranium mining), and specialized design and engineering organizations. Together, these subsidiaries form a vertically integrated structure spanning the entire nuclear fuel cycle from uranium mining to power generation and waste management.⁸¹⁴

Rosatom's competitive advantage stems from its distinctive business model, which contrasts sharply with Western nuclear vendors. The corporation offers a comprehensive «turnkey, full-cycle» approach, which encompasses design, construction, fuel supply, and waste management under single-point responsibility, supported by Russian government-backed concessional financing at 2–4% annual interest rates and compressed 5–7 year build timelines.⁸¹⁵ This streamlined package appeals to countries seeking rapid, affordable nuclear power development, especially when compared to Western projects that typically require stringent independent regulatory oversight, rely on commercial debt at 5–7% interest rates, involve multiple contractors with divided responsibilities, and extend over 8–12 years with higher overall capital costs.

As of 2024, Russia's dominance in the nuclear power industry has not only persisted but intensified, with Rosatom's average annual revenue growing by 24% from 2023.⁸¹⁶ This growth has occurred despite countries including the UK, US, and Canada imposing limited sanctions on parts of the Rosatom leadership and on certain Rosatom subsidiaries following Russia's full-scale invasion of Ukraine.⁸¹⁷ In particular, this expansion occurred despite its defensive strategic character, evidenced by a twofold increase in European imports of Russian nuclear fuel between 2022 and 2023—a surge driven by EU operators' systematic stockpiling to ensure supply security during their anticipated transition away from Russian dependence.⁸¹⁸

Rosatom's systematic engagement in three core domains has facilitated its growing international

presence, including dominance in key fuel-processing technologies, the development of nuclear construction projects with innovative financing models, and the establishment of long-term operational relationships. These strategies enable Rosatom to utilize its technical capabilities to establish enduring relationships with partner countries.

4.3.1. Dominance in Key Fuel-Processing Technologies

Global reliance on Russian nuclear services remains substantial, particularly in uranium conversion and enrichment. Russia accounts for nearly 40% of global conversion services⁸¹⁹ and approximately 44% of global enrichment capacity, while also possessing the ability to meet up to 50% of worldwide nuclear fuel demand.⁸²⁰

Trade data from 2023 reveals a sharp rise in Russian nuclear fuel exports to Europe, with total nuclear fuel imports to the EU reaching 707 tons, of which 573 tons came from Russia—up from 314 tons in 2022. This surge represents a strategic stockpiling effort by European utility companies, who now maintain an average of two to three years of fuel reserves to mitigate potential supply disruptions during their transition to alternative suppliers.⁸²¹ The uptick in trade and increased reliance on Rosatom’s fuel and technological expertise, which also involves countries like Egypt, Iran, China, and India, signals an economic boost for Russia and highlights an expansion of Russian geopolitical influence.⁸²² For example, Rosatom supplied over 375 million USD worth of fuel for a Chinese reactor at the Xiapu Nuclear Power Plant,⁸²³ raising concerns within the then US Department of Defense about its potential contribution to Beijing’s nuclear weapons stockpile.⁸²⁴

The global nuclear fuel cycle depends upon enriching approximately 80,000 tons of mined uranium annually for use in reactors.⁸²⁵ A handful of companies across the globe dominate the enrichment process, with almost all commercial enrichment being conducted by Rosatom, the China National Nuclear Corporation, Orano (in France), and Urenco (jointly owned by the British and Dutch Governments, as well as the German energy com-

panies RWE and E.ON).⁸²⁶ Among these, Rosatom remains dominant, accounting for approximately 44% of global enrichment capacity and 17% of fuel fabrication.⁸²⁷ This dominance translates into a substantial market presence across continents, with Russian suppliers providing 27% of American and 38% of European utilities’ enrichment services.⁸²⁸ Yet, this dominance masks significant vulnerabilities: Rosatom’s enrichment facilities rely heavily on Western-manufactured centrifuge components and control systems, creating potential chokepoints that sanctions regimes have yet to fully exploit.⁸²⁹

Importantly, Rosatom’s network of 31 specialized facilities spans the complete fuel cycle, from conversion and enrichment to fabrication and waste management. Additionally, established partnerships with Kazakhstan, the world’s leading uranium producer, have created enduring supply chain arrangements throughout Russian territory.⁸³⁰ This integrated infrastructure enables Russia to maintain dominant market positions despite accounting for only 5% of global uranium production. As highlighted by Rosatom’s position in global markets, processing capabilities, rather than resource ownership, are the main determinants of power dynamics in nuclear markets.⁸³¹

The uranium market continues to evolve through new extraction projects and processing arrangements in various regions, including countries like Namibia and Niger.⁸³² While operating through formal commercial frameworks, these developments carry profound implications for regional stability and geopolitical positioning. Niger’s political transformation, for example, offers a striking illustration of resource geopolitics in action. Following a 2023 coup, military leaders promptly revoked the uranium mining permit held by the French company Orano, citing contractual violations and allegations of disproportionate resource extraction. While not resulting in confirmed agreements, this development generated speculation about potential openings for alternative international partnerships, including reported early-stage contacts between Russian entities and Niger’s transitional

⁸³⁵ Pressurized heavy-water reactors utilize heavy water as a moderator and natural uranium fuel without enrichment, providing nuclear technology pathways that reduce reliance on the concentrated global uranium enrichment market, which is dominated by a small number of international suppliers.

authorities. This disruption casts a shadow over previously approved Western ventures, including Canadian firm Global Atomic's promising uranium project that received government authorization in 2020 and was expected to yield approximately 50,000 tons of uranium ore from 2026.⁸³³ Despite reassurances from Niger's transitional authorities, such projects now face deep uncertainties as resource governance becomes increasingly aligned with shifting geopolitical affiliations rather than established commercial relationships.

Efforts to challenge Rosatom's processing dominance face substantial technical barriers and capability gaps. Despite significant investment, the recent flagship US Piketon facility in Ohio produced only 900 kg of enriched uranium in 2024.⁸³⁴ This insignificant fraction of global requirements further underlines the advantage of established Russian infrastructure. While alternative approaches exist—from Australia's untapped reserves, to Kazakhstan's potential transportation diversification, to PHWR⁸³⁵ technologies that bypass enrichment entirely—each faces formidable implementation challenges.⁸³⁶ Rosatom's integrated dominance across the complete nuclear fuel cycle continues to resist fragmentation precisely because meaningful alternatives require synchronized interventions across technical, regulatory, and infrastructure domains that few competitors can coordinate effectively.

4.3.2. Construction Projects with Dependency-Creating Financing Models

To date, Rosatom is responsible for the construction of 33 nuclear power units across 10 countries spanning Africa, Asia, Europe, and South America, with a further 22 units actively under construction in seven countries.⁸³⁷ Alongside this, Rosatom dominates global uranium enrichment services and has a significant share in uranium production, conversion, fuel fabrication, and recycling.⁸³⁸

At time of writing, Rosatom has built, is building, or operates nuclear power plants in Armenia, Bangladesh, Belarus, China, Egypt, Hungary, India, Iran, and Türkiye. In particular, the construction

of the Belarus Nuclear Power Plant represents a significant recent expansion with VVER-1200⁸³⁹ reactors.⁸⁴⁰ There are further plans and ongoing discussions regarding the construction of Rosatom plants in Azerbaijan, Burkina Faso, Guinea, Myanmar, and Zimbabwe, among others. In June 2025, Kazakhstan's Atomic Energy Agency selected Rosatom to lead an international consortium for construction of the country's first nuclear power plant, determining that the Russian corporation provided "the most optimal and effective proposals", despite competing bids from the China National Nuclear Corporation, France's EDF, and South Korea's Korea Hydro & Nuclear Power.⁸⁴¹ Yet more countries, including Finland and Czechia, previously had projects with Rosatom. This strategic distribution across continents reflects deliberate positioning across markets with varying levels of nuclear infrastructure development.⁸⁴²

Rosatom's international project portfolio illustrates its strategic approach to establishing influence through varied financial and contractual arrangements. The Rooppur Plant in Bangladesh, for example, operates through an 11.38 billion USD Russian loan covering 90% of construction costs, with repayment structures designed to create long-term financial obligations.⁸⁴³ Egypt's El-Dabaa employs a 25 billion USD state loan with extended 22-year repayment terms beginning in 2029.⁸⁴⁴ Different again is Türkiye's Akkuyu facility, which represents Rosatom's first "Build-Own-Operate" model, whereby Russia retains ownership while securing guaranteed electricity purchase agreements.⁸⁴⁵ Comprehensive workforce management strategies complement these financial frameworks. At Türkiye's Akkuyu plant, Rosatom funded the education of more than 120 Turkish specialists at Russian universities. Simultaneously, the corporation maintains direct operational control with Russian personnel in key positions during the entire 60-year operational cycle.⁸⁴⁶

The case of Hungary illustrates how Rosatom utilizes nuclear partnerships to establish a lasting influence and presence in other countries. In 2014, the Hungarian government invited Rosatom to construct two new reactors without any public tender.⁸⁴⁷ Under the terms of the contract, Russia is financing 80% of the construction costs through a 10 billion EUR (approximately 11.5 billion USD)

loan, with Hungary starting repayments only after the reactors are connected to the grid.⁸⁴⁸ By the time construction is completed in the next decade, the project will rank among the most significant foreign investments in Eastern Europe.

Rosatom's operations in the context of sanctions demonstrate practical adaptation through "displacement strategies" in the uranium market. Trade data shows clear shifts, with measurable increases in Russian uranium exports to countries maintaining open trade relations. This is particularly true of China, which likely serves as an intermediary in global supply networks.⁸⁴⁹ The approach taken by Rosatom mirrors patterns displayed by Russian companies in other sectors, where products are routed through third countries to maintain market presence despite restrictions. Beyond market repositioning, Rosatom has pursued strategic diversification through targeted acquisitions in adjacent sectors, from battery manufacturing to titanium production. Despite sectoral restrictions, this has afforded Rosatom multiple pathways to maintain technological access and revenue streams.

Despite European efforts to diversify away from Russian nuclear fuel supplies, Rosatom has deployed adaptive strategies to maintain market presence. While 19 VVER units across the EU have awarded new fuel-supply contracts to Westinghouse or Framatome, Rosatom is pursuing a hybrid approach through Lingen, Germany, where Framatome's subsidiary seeks to fabricate VVER-type fuel under TVEL/Rosatom's technology license.⁸⁵⁰ This arrangement would localize production of Russian-designed fuel within the EU while maintaining dependence on Rosatom's intellectual property. The project has attracted over 11,000 public objections and extensive environmental hearings, exemplifying Rosatom's strategic adaptation to preserve long-term market access amid geopolitical tensions.

Rosatom also continues functioning through a specific institutional structure; while most board members, including Sergey Kiriienko, face personal sanctions, the corporation itself remains largely unrestricted in European markets.⁸⁵¹ The EU and UK first sanctioned Sergei Kiriienko on October 15, 2020, for reasons unrelated to Ukraine, while the US imposed sanctions on March 2, 2021, fol-

lowed by additional restrictions in February 2022 during Russia's full-scale invasion of Ukraine.⁸⁵² Alexey Likhachev, Rosatom's director general, avoided US sanctions for much longer, although the UK, Australia, New Zealand, and Ukraine had previously imposed restrictions against him.⁸⁵³ It was only on January 10, 2025, that the US finally sanctioned him and other Rosatom executives for their involvement in Russia's nuclear weapons complex and occupation of the ZNPP.⁸⁵⁴

Despite these personal sanctions and sanctions on select Rosatom subsidiaries, Rosatom itself remains unsanctioned. This selective sanctions approach does not reflect Western oversight, but is a deliberate policy calculation: European utilities' continued reliance on Russian nuclear services demonstrates how energy dependencies constrain even well-intentioned sanctions regimes. Concrete evidence of this resilience appears in market data: nuclear fuel shipments to European clients have reportedly doubled between 2021 and 2023, while negotiations with approximately ten countries for new reactor projects continue, according to Director General Alexey Likhachev.⁸⁵⁵

Political volatility in sanctions enforcement is illustrated by the Trump administration's June 2025 decision to lift restrictions on Hungary's Paks nuclear expansion project. Despite the project's reliance on a 10 billion USD Russian state loan and VVER-1200 reactor technology, American sanctions targeting Rosatom's construction role were rescinded within months of their implementation under the Biden administration, enabling the corporation to resume lucrative international nuclear construction activities.⁸⁵⁶

The Finnish Hanhikivi-1 project, on the other hand, offers a notable counterpoint to the resilience of Rosatom's global portfolio. In May 2022, following Russia's full-scale invasion of Ukraine, Fennovoima terminated its contract with Rosatom, despite having made approximately 600 million EUR (approximately 693 million USD) in prior investments and after nearly a decade of development. This decision demonstrates that countries can disentangle themselves from established nuclear partnerships when political determination aligns with immediate security concerns, as Finland did in response to imminent risks. Technological dependencies, despite their complexity, remain

subject to national recalibration when geopolitical circumstances fundamentally change.⁸⁵⁷

At the same time, many countries continue to rely on Rosatom's exports and are actively discussing future cooperation. According to Rosatom CEO Alexey Likhachev, the company is in negotiations with about ten countries for new projects, with three or four close to signing intergovernmental deals.⁸⁵⁸ Russia remains a dominant player in the global nuclear market, having exported more reactors and provided a wider range of services in the nuclear fuel cycle in recent decades than any other country.⁸⁵⁹ Such projects secure Russia's economic interests and ensure its strategic presence in countries where it builds nuclear power plants, raising questions about long-term implications for regional autonomy and security.

4.3.3. Creating Lasting Operational Relationships

Rosatom systematically develops operational partnerships—the third dimension of its influence architecture—beyond established energy markets through the integration of diversified infrastructure. In African states, including Burkina Faso, Guinea, and Zimbabwe, the corporation has signed memoranda of understanding for deploying technologies ranging from small modular reactors to floating nuclear plants, tailored to regional constraints. Rosatom engages in a similar way in Latin America, exemplified by Bolivia's 300 million USD radioisotope facility, where technology transfers and specialized training establish enduring technical dependencies beyond conventional market relationships.⁸⁶⁰

The resilience of Rosatom's global position is further reinforced by its strategic diversification beyond the nuclear sector. The value of the corporation's assets increased by 60% from 2021 to 2023 through the systematic acquisition of strategic industrial capabilities, while maintaining access to international technologies despite broad sanctions against Russia's technical sector.⁸⁶¹ Through its subsidiary RENERA, Rosatom secured 98.32% ownership of the South Korean battery manufacturer Enertech, planning battery production in Kaliningrad, while also investing 6.2 billion

RUB (approximately 68 million USD) in JSC Kama for electric vehicle development.⁸⁶² Additionally, the corporation strengthened its industrial base by acquiring the Tugansk Ore Mining and Processing Plant "Ilmenite" for titanium and zirconium production, the JSC Plant "Kirov-Energomash" for power engineering equipment, and stakes in Kraftway for electronics manufacturing.⁸⁶³ This systematic expansion into critical technological domains illustrates how Rosatom leverages its unique international position to advance broader strategic industrial objectives.

Rosatom implements multitiered training programs through specialized subsidiaries like DZHET, which has developed full-scale control room simulators and technical training facilities for specific VVER reactor types.⁸⁶⁴ At Bangladesh's Rooppur Plant, this approach is manifested through a comprehensive training regimen: Bangladeshi specialists undergo certification at the Novovoronezh Nuclear Power Plant training center in Russia, establishing direct professional linkages that may persist throughout the facility's 60-year operational lifecycle. These personnel development programs extend beyond technical training to include management protocols, regulatory compliance methodologies, and safety culture practices specifically calibrated to Russian technical standards, creating institutional dependencies at operational and administrative levels.⁸⁶⁵

In Bolivia, Rosatom's 300 million USD Center for Nuclear Technology Research and Development demonstrates the company's strategic focus on building comprehensive nuclear ecosystems rather than isolated facilities. This center integrates medical radioisotope production, agricultural irradiation technologies, and neutron science facilities with specialized maintenance systems that require ongoing technical support from Russian experts. Similarly, Rosatom's agreements with Ghana, Nigeria, and Egypt establish phased nuclear development roadmaps beginning with research reactors and regulatory framework development before advancing to commercial power generation.

The diversification of Rosatom's operations worldwide enables the creation of long-term, incremental dependencies on Russian technologies, financing, and personnel that extend far beyond civil nuclear power generation. Despite Russia's

war in Ukraine and limited sanctions on Rosatom affiliates, this pattern is only becoming more evident, as Rosatom's initial technical collaborations establish precedents for larger subsequent engagements, each requiring continued Russian operational expertise.⁸⁶⁶

Rosatom possesses a distinctive institutional architecture where technical capacity converges with strategic state priorities. Russia's state corporation model institutionally combines commercial nuclear operations with military-industrial functions within a single entity. This dual mandate enables seamless transitions between market-oriented activities and state strategic objectives. Externally, its global footprint—controlling 44% of uranium enrichment worldwide and constructing reactors across four continents—establishes dependencies through technical integration, specialized long-term financing, and operational partnerships that extend far beyond conventional energy relationships.

This dual capacity affords Rosatom remarkable resilience. Despite targeted sanctions against select Rosatom executives and subsidiaries following Russia's full-scale invasion of Ukraine, Rosatom's international portfolio continues to expand, particularly in developing regions. Finland's decision to terminate the Hanhikivi-1 project in 2022 represents a notable exception, demonstrating that a comprehensive reassessment of nuclear partnerships remains possible when political determination and security risks overcome considerable financial and contractual commitments. The corporation's ongoing activities demonstrate how nuclear partnerships create multi-generational relationships that integrate into governance systems, establishing, as per Szulecki's and Overland's framework, "a continuum of energy statecraft tools"⁸⁶⁷ rather than simply an energy weapon or economic soft power.

Rosatom thus represents a sophisticated model of technological influence that operates effectively across shifting geopolitical contexts, creating an enduring institutional presence without relying solely on direct political control or market dominance. This strategic integration of technical expertise and governance reveals an often overlooked dimension of Russia's global influence that extends well beyond the more visible oil and gas sectors.

4.4. Conclusion

Rosatom possesses a distinctive institutional architecture where technical capacity converges with strategic state priorities. Russia's state corporation model institutionally combines commercial nuclear operations with military-industrial functions within a single entity. This dual mandate enables seamless transitions between market-oriented activities and state strategic objectives. Externally, its global footprint—controlling 44% of uranium enrichment worldwide and constructing reactors across four continents—establishes dependencies through technical integration, specialized long-term financing, and operational partnerships that extend far beyond conventional energy relationships.

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SECTION 5

The Realm of International Law: Examining the Pattern of Crimes in Enerhodar and its Vicinity

5.1. Introduction

This section provides an overview of the special status of the ZNPP under IHL and outlines the relevant provisions of IHL and ICL.

Next, the section moves into a detailed legal analysis of the offenses identified in [Section 2](#) of this report, namely arbitrary detention, inhuman treatment, and torture. These offenses are examined as war crimes and crimes against humanity under ICL. Particular attention is devoted to the pattern of such crimes, emphasizing their widespread and systematic commission in Enerhodar and its vicinity. It then considers modes of liability applicable to the alleged perpetrators of the offenses, including Rosatom's representatives, as well as corporate liability, before exploring potential avenues for accountability.

Through a thorough examination of the relevant provisions of IHL, ICL, and other applicable international instruments, this section demonstrates conclusively that Russian occupying forces, in collaboration with Russian state corporation Rosatom, are responsible for numerous violations committed in Enerhodar and its vicinity.

5.2. International Humanitarian Law and International Criminal Law Perspectives

5.2.1. Special Status of the ZNPP under IHL and Respective Violations

International humanitarian norms concerning the protection of nuclear facilities during armed conflicts are particularly relevant to the initial seizure of the ZNPP by Russian armed forces and the accompanying attacks on the plant. The norms continue to be of critical relevance in light of the ongoing Russian occupation of Enerhodar and the continued military use of the plant.

The principle of distinction, considered to be the “cardinal principle”⁸⁶⁹ of IHL, requires the parties to an armed conflict at all times to distinguish between civilians and combatants, between civilian objects and military objectives.⁸⁷⁰ The principle of distinction is codified in Article 48 of AP(I) and other provisions of the Protocol that protect civilians and civilian objects.⁸⁷¹ Articles 52(1) and 52(2) of AP(I) provide definitions of civilian objects and a military objective, respectively.⁸⁷²

Like Article 48, Article 52(2) of AP(I) provides that attacks should be limited to military objectives. Although Article 52(2) refers only to military objects, military objectives certainly include combatants. Hence, the term “military objective” encompasses both military objects and combatants.⁸⁷³

Article 56(1) of AP(I) further extends the protection of civilian objects from attack by prohibiting dams, dykes, and nuclear electrical generating stations from becoming “the object of attack”.⁸⁷⁴

Even if such objects are military objectives, they cannot be attacked “if such an attack may cause the release of dangerous forces and consequent severe losses among the civilian population”. While “severe” must be interpreted in good faith, considering objective elements, like the proximity and density of inhabited areas, it can be defined as “important” or “heavy”.⁸⁷⁵

Article 56(1) of AP(I) also mentions that other military objectives that are located at or in the vicinity of these works or installations “shall not be made the object of attack if such attack may cause the release of dangerous forces from the works or installations and consequent severe losses among the civilian population”.⁸⁷⁶ Consequently, such military objectives do not encompass military forces guarding or defending the works or installations, which are addressed under Article 56(5) of AP(I). They refer only to objects that are incorporated in the installation, such as a hydro-power plant station, or located in its immediate vicinity, such as civil engineering works (e.g., a bridge or a railway line), an attack on which may result in the release of dangerous forces.⁸⁷⁷

Article 49 of AP(I), which defines attacks, specifies that AP(I) “applies to all attacks in whatever territory conducted, including the national territory belonging to a Party to the conflict but under the control of an adverse Party”. While the commentary to this article leaves out attacks within a belligerent’s own territory,⁸⁷⁸ the latter should not be automatically excluded from the definition of “attack” as long as they are directed “against the adversary”.⁸⁷⁹ This is particularly relevant given that even after Russian armed forces seized the ZNPP, they allegedly targeted it, claiming that the Ukrainian Armed Forces committed those attacks (see [Subsection 1.2.5](#)).

⁸⁷⁰ AP(I), Art. 48. See also, AP(I), Art. 51(2) provides protection to civilians, and AP(I), Art. 52(1) provides protection to civilian objects.

Under Article 85(3)(c) of AP(I), launching an indiscriminate attack against works or installations containing dangerous forces, such as a nuclear power plant, in the knowledge “that such attack will cause excessive loss of life, injury to civilians or damage to civilian objects” constitutes a grave breach of AP(I).⁸⁸⁰ This concept is reflected in the Rome Statute of the International Criminal Court (ICC), which prohibits both intentionally directing attacks against civilian objects under Article 8(2)(b)(ii) and intentionally launching an attack with the knowledge that it will cause widespread, long-term, and severe damage to the natural environment disproportionate to the expected military advantage under Article 8(2)(b)(iv).⁸⁸¹

At the same time, Article 56(2)(b) of AP(I) provides that the special protection from attacks granted to works and installations containing dangerous forces, particularly nuclear electrical generating stations, ceases “only if it provides electric power in regular, significant and direct support of military operations and if such attack is the only feasible way to terminate such support”.⁸⁸² The term “significant” connotes support that is neither negligible nor incidental, but is sizable enough to have a real and effective impact on respective military operations. “Direct” indicates there should be a close and immediate relation between the act and its effect.⁸⁸³

Electricity is generally supplied to different destinations, including civilian and military, which are closely interconnected due to the integrated nature of electricity grids. A simple supply of electricity does not constitute direct support for military operations, as defined in Article 56(2)(b) of AP(I). Given the nature of electricity, it is unlikely that “direct support” would include factories producing armaments, ammunition, and military equipment or factories producing civilian products that happen to be used by the military. The commentary to Article 56(2)(b) of AP(I) emphasizes that “in the

case of nuclear electrical generating stations, it is relatively easy to stop electricity reaching its destination by attacking the electricity lines. In this way the desired result is achieved without the risk of releasing dangerous forces”.⁸⁸⁴

Moreover, Article 56(3) of AP(I) highlights that, in all cases, the civilian population and individual civilians are protected under international law, including their protection under the party’s obligation to take precautionary measures under Article 57 of AP(I) both before and during an attack.⁸⁸⁵

Article 56(3) of AP(I) specifies that even if the protection of an installation containing dangerous forces, such as a nuclear electrical generating station, ceases and it is attacked, the precautionary measures should be followed to avoid the release of the dangerous forces.⁸⁸⁶

Article 56 of AP(I) embodies a high threshold through principles of military necessity and proportionality for a lawful attack on nuclear facilities⁸⁸⁷ such as the ZNPP. It is difficult to imagine any military advantage that could outweigh the potential severe nuclear consequences resulting from an attack on a nuclear power plant’s key structures, such as the reactors and other facilities that, by definition, contain dangerous forces.

Article 56(5) of AP(I) additionally highlights that the parties to the conflict must avoid locating any military objectives in the vicinity of the works or installations containing dangerous forces. Nevertheless, installations erected for the sole purpose of defending the protected works or installations from attack are permissible. They may not be made the object of attack, provided that they are not used in hostilities except for defensive actions necessary to respond to attacks against the protected works or installations and their armament is limited to weapons capable only of repelling hostile action against the protected works or installations. The commentary explains that it is certain that any works or installations of any importance would be assigned a picket guard and probably the protection of an anti-aircraft battery, which may be employed solely against aircraft attacking the protected work or installation, but not against another military objective. The commentary notes that if the protecting work or installation is located in a combat area, it would

⁸⁸⁰ Rome Statute, Article 8(2)(b)(iv): “Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.”

⁸⁸⁴ Before an attack: AP(I), Art. 57(2)(a)(i) [verification of targets]; AP(I), Art. 57(2)(a)(ii) [minimization of harm]; AP(I), Art. 57(2)(a)(iii) [proportionality]; AP(I), Art. 57(3) [choosing the least harmful option]; AP(I), Art. 57(2)(c) [issuing of warnings]. During an attack: AP(I), Art. 57(2)(b) [re-evaluating targets and re-evaluating proportionality].

be challenging to distinguish between military deployments guarding the work or installation and other fighting in the area. The commentary suggests that a party to the conflict may consider the option of not defending such works or installations, allowing them to be occupied by the adversary without destructive attacks that could release dangerous forces.⁸⁸⁸

By initially conducting a combination of attacks against the ZNPP during its seizure, followed by alleged attacks on the plant during the occupation phase aimed at intensifying nuclear blackmail, Russian armed forces violated Article 85(3)(c) of AP(I), read in conjunction with Articles 52 and 56 of AP(I), thereby committing a war crime under Article 8(2)(b)(iv) of the Rome Statute concerning disproportionate attacks. Although such a crime has a high threshold, leading to challenges in proving the elements, it is clear that the Russian attack on the ZNPP constitutes at least the war crime of attacking civilian objects under Article 8(2)(b)(ii) of the Rome Statute. Russian armed forces have also allegedly stationed a significant number of military equipment and their forces at the ZNPP and its premises, both inside and outside the ZNPP's structures. The alleged continued use of the ZNPP as a military base to conduct strikes on Ukrainian armed forces (see [Subsections 1.2.5 and 3.3.2](#)), rather than as a protected nuclear facility, further constitutes a violation of IHL norms set out in Article 56(5) of AP(I).

5.2.2. Arbitrary Detention as a Crime against Humanity and a War crime

Under the Rome Statute, arbitrary detention can constitute both a crime against humanity and a war crime. In particular, the Rome Statute prohibits arbitrary detention as the war crime of unlawful confinement in Article 8(2)(a)(vii) and as the crime against humanity of imprisonment and other severe deprivation of liberty in Article 7(1)(e).

⁸⁹⁰ In line with this approach, since unlawful confinement is a grave breach under GC(IV) and not under GC(III), the analysis in this subsection is limited to the detention of Enerhodar civilians, excluding any isolated acts of the detention of prisoners of war at the detention centers in Enerhodar and its vicinity.

International jurisprudence establishes that the elements of these two crimes are identical, except for the contextual element of the crimes against humanity (see [Subsection 5.3](#)).⁸⁸⁹ At the same time, the crime against humanity of imprisonment and other severe deprivation of liberty may exist independently of unlawful confinement as a war crime, since it is not limited to the grave breaches of the Geneva Conventions.⁸⁹⁰ The Rome Statute reflects this by prohibiting both imprisonment and "other severe deprivation of liberty", extending the narrow definition of imprisonment. Since the Russian occupation of Enerhodar involves standard practices of imprisonment through the detention of civilians, this analysis focuses on the scope of grave breaches.⁸⁹¹

While imprisonment and unlawful confinement can be defined as a physical deprivation of liberty of the individual without due process of law (*i.e.*, as an arbitrary detention),⁸⁹² the formulation "other severe deprivation of liberty" has a wide meaning of imprisonment under customary international law. This wide meaning covers different forms of deprivation of liberty that would not usually fall under the narrow definition of imprisonment—for example,⁸⁹³ the house arrest of civilians, or their restriction to a closed city.⁸⁹⁴

In addition to the correlation between elements of the crime of unlawful deprivation of liberty in the form of imprisonment as a crime against humanity and unlawful confinement as a war crime, it should be mentioned that the term "confinement" encompasses not only acts of imprisonment or detentions in prisons or detention camps, but also acts of assigned residence.⁸⁹⁵ Even if the acts of "the other severe deprivation of liberty" in this case do not fall under the definition of "confinement" under Article 8(2)(a)(vii) of the Rome Statute, the number of acts of imprisonment certainly do and constitute the respective war crime.

The addition of the term "severe" before "deprivation of liberty" in Article 7(1)(e) of the Rome Statute, however, does entail a distinction between "imprisonment" and "other deprivation of physical liberty" and only highlights that imprisonment is severe by definition.⁸⁹⁶ The preparatory works to Article 7(1)(e) of the Rome Statute do not reveal the meaning of "severe". However, factors like subjecting people to torture or other inhuman

treatment and whether an individual instance of detention was part of a series of detentions, would likely help the court establish severity. In any event, there is no requirement to prove the severity of the crime under Article 7(1)(e) of the Rome Statute *per se*, just that the gravity of the conduct violated fundamental rules of international law.⁸⁹⁷ The assessment of the legality of an individual's initial detention should consider factors such as whether there is a valid arrest warrant, if detainees were informed about the reasons for their detention and any procedural rights, and whether there are any formal charges.⁸⁹⁸

Since this report concerns the situation of occupation, Article 78 of Geneva Convention (GC) IV is relevant to determine whether the detention of the civilian (protected person) was lawful or if it violated IHL.⁸⁹⁹ Article 78 of GC(IV) provides that the confinement and assigned measures are lawful if considered "necessary, for imperative reasons of security".⁹⁰⁰ While this allows a margin of discretion, the Detaining Power has to establish that the actions of the protected person are such that there are "reasonable grounds to believe that the security of the State is at risk".⁹⁰¹

In practice, the actions of the protected person should involve material, direct harm to the adversary, rather than merely providing support to the forces of the party with which the civilian is aligned.⁹⁰² For example, sabotage, espionage, direct participation of a civilian in hostilities, and other actions that meet the same threshold would be considered to be hostile to the security of the detaining power.⁹⁰³ However, the mere fact that a person holds the nationality of or is aligned with an enemy party or has a particular political attitude towards the detaining party cannot be considered a threat to the security of the detaining power. A protected person can only be interned or placed in an assigned residence by such a party if their activities, knowledge, or qualifications represent a real threat to its present security.⁹⁰⁴ For example, in *Krnjelac*, the International Criminal Tribunal for the former Yugoslavia (ICTY) found that the only characteristic which featured in the decision to detain males was their non-Serb ethnicity,⁹⁰⁵ an important factor in the ICTY's conclusion that the deprivation of liberty constituted imprisonment.⁹⁰⁶ Similarly, a man of drafting military age should not necessarily be regarded as threatening the

security of such a party.⁹⁰⁷ The Detaining Power holds the burden of proof of the risk arising from the actions of a particular protected person to its security.⁹⁰⁸

Hence, measures of internment and assigned residence are exceptional and can be taken towards protected persons only "after careful consideration of each individual case", excluding any decision-making on a collective basis.⁹⁰⁹ As an illustration, in the *Delalić* case, the ICTY held that, even in light of the Detaining Power's measure of discretion in assessing what may be detrimental to its own security, "several of the detained civilians could not reasonably have been considered to pose any sufficiently serious danger as to warrant their detention", highlighting that several civilians had not participated in any military activity or even been politically active.⁹¹⁰

Nevertheless, the initial legal basis for detention must apply throughout the whole period of detention—if at any moment it ceases to apply, the detention becomes unlawful.⁹¹¹ The unlawfulness of the detention may also arise from violations of the detainee's procedural rights.⁹¹² Paragraph 2 of Article 78 of GC(IV) provides that decisions on internment and assigned residence measures "shall be made according to a regular procedure to be prescribed by the Occupying Power in accordance with the provisions of the present Convention". This procedure has to include the right of appeal for the parties concerned, which shall be decided with the least possible delay. If the decision on measures is upheld, "it shall be subject to periodical review, if possible every six months, by a competent body set up by the said Power". As a result, no civilian can be interned or subjected to assigned residence for a longer time than the security of the detaining party requires.⁹¹³ The final paragraph of Article 78 of GC(IV) adds that "the protected persons made subject to assigned residence and thus required to leave their homes shall enjoy the full benefit of Article 39 of GC(IV)" (on means of existence).

Article 75(1) of AP(I) complements GC(IV), providing fundamental guarantees to protected persons, by requiring that any person arrested, detained, or interned for actions related to an armed conflict must be informed promptly, in a language they

understand, of the reasons why these measures have been taken.⁹¹⁴

Therefore, the detention of a civilian would be unlawful if:

- The civilian was initially detained in contravention of Article 78 of GC(IV); and
- Even if the civilian was lawfully detained, the procedural safeguards under Article 78 of GC(IV) and Article 75 of AP(I) were violated.

In the case of the Russian occupation of Enerhodar, even if some civilian prisoners had been conducting activities prejudicial or hostile to the security of the occupying power, the majority of documented incidents involve the detention of former participants of the anti-occupation resistance,⁹¹⁵ other pro-Ukrainian civilians, and Ukrainian ZNPP employees. The detention of these specific categories of civilians, whether or not they constituted a threat to Russian security in the given moment, signals that their detention was conducted on a collective basis.

During the documented incidents, none of the detained individuals were informed of the reasons for their detention or the location to which they would be taken. In most cases, they were abducted from their workplaces or homes, accompanied by beatings, and/or handcuffing, and/or blindfolding, and transported to a detention site. Some of the civilians were allegedly detained based on “planted evidence”, such as rifle bullets, in their homes or workplaces, to create a “legal” basis for their detention. The relatives of the detainees were not informed of their detention and the reasons for confinement were not adequately

communicated to them. Hence, in all documented incidents, the detention of civilians was already initially unlawful, either due to a lack of reasons for their detention and/or a failure to provide information about such reasons.

When assessing the “other severe deprivation of physical liberty” in terms of the crime against humanity, the fact that the occupying Russian authorities prohibited civilians from leaving Enerhodar should also be taken into account.⁹¹⁶ The right of civilians holding the nationality of the occupied territory to leave the occupied territory voluntarily is not explicitly recognized under GC(IV).⁹¹⁷ Nevertheless, Article 49(5) of GC(IV) implies the existence of such a right, which can be only limited “by the security of the population” or “imperative military reasons” of the occupying power.⁹¹⁸ Thus, if there is a higher risk of injury to civilians during their departure or their departure impedes the ability of the Occupying Power to maintain military operations, they may be prevented from leaving the occupied territory.⁹¹⁹ This suggests that only a significant adverse effect on the Occupying Power, arising from the voluntary departure of certain civilians from occupied territories, could justify prohibiting their departure.⁹²⁰ Hence, such preventive measures must stem from a real necessity and not constitute arbitrary infliction or merely serve the Occupying Power’s interests.⁹²¹

The mass departure of operational nuclear physicists from Enerhodar could arguably have significantly jeopardized Russia’s ability as an Occupying Power to support its occupation force and fulfill its governmental functions under GC(IV), in addition to the significant benefit it may have provided the opposing party, Ukraine, in its war effort. In particular, at least during the early stages of occupation, the ZNPP’s operational personnel were crucial for maintaining the plant’s safety, given the specifics of its operations and the scarcity of Russian workers that could substitute Ukrainian operational personnel (see [Subsections 1.2.5 and 2.5.3](#)). The departure of Ukrainian operational staff to Ukrainian-controlled territory might have allowed them to work on other Ukrainian nuclear power plants, providing electricity for both Ukrainian civilian and military needs. In this light, prohibiting the departure of certain civilians correlates with Article 51 of GC(IV), which

⁹¹⁴ Although some detainees may have been part of the armed resistance to the Russian occupation of Enerhodar as a *levée en masse*, these civilians were no longer combatants under IHL after the occupation of the city—they were civilians. Under IHL, a *levée en masse* are inhabitants of a non-occupied territory who, on the approach of the enemy, spontaneously take up arms to resist the invading forces, without having had time to form themselves into regular armed units, provided they carry arms openly and respect the laws and customs of war: GC(III), Art. 4(A)(6).

⁹¹⁵ Although the notions of “imprisonment” and “other severe deprivation of liberty” are disjunctive, proving both notions helps to establish the crime under Rome Statute, Article 7(1)(e).

⁹¹⁶ GC(IV), Article 48 recognizes the right of protected persons who are not nationals of the power whose territory is occupied to leave the occupied territory, referring to GC(IV), Article 35 on the right of protected persons to leave the territory of one of the state parties to the conflict, unless their departure is contrary to the national interests of the state.

does not forbid the compulsory labor of certain civilians over the age of 18 in occupied territories, (*i.e.*, those whose work is necessary to satisfy the needs of the population).⁹²² At the same time, International Committee of the Red Cross (ICRC) commentary to Article 51 of GC(IV) stipulates that these civilians will normally continue to carry out their work and that the “Occupying Power may not in any circumstances or in any manner employ protected persons to serve its own national economy”.⁹²³

As such, prohibiting ZNPP staff, at least those responsible for maintaining the Plant’s operations, from departing from occupied territories might initially have been justified. However, having been prevented from leaving Enerhodar and, at the same time, prevented from entering their workplaces at the ZNPP, the Ukrainian licensed employees were trapped and restricted to the city’s boundaries. This conduct violated fundamental rules of international law, (*i.e.*, IHL rules protecting civilians in occupied territories). As such, the acts of the alleged perpetrators against ZNPP staff constituted “other severe deprivation of [their] physical liberty”, which is a crime against humanity under Article 7(1)(e) of the Rome Statute.⁹²⁴ Moreover, as [Subsections 3.3.4](#) and [4.2](#) illustrate, occupying Russian authorities have sought to exploit Ukrainian licensed personnel to the benefit of Russia’s national economy, notably by contracting such personnel under Rosatom, a Russian company, and, simultaneously, working on connecting the ZNPP to Russia’s energy grid.

5.2.3. The War Crime and Crime against Humanity of Torture and the War Crime of Inhuman Treatment

At the forefront of this report is the crime of torture, which is subject to absolute prohibition under international law, regardless of the status of the victim. The Rome Statute prohibits torture both as a war crime under Article 8(2)(a)(ii) and as a crime against humanity under Article 7(1)(f). Unlike the definition of torture in the 1984 UN Convention against Torture (CAT),⁹²⁵ neither the crime against humanity, nor the war crime of torture under the

Rome Statute require the perpetrator to be a public official, a person acting in an official capacity, or a person acting at the instigation of a public official or person acting in an official capacity.⁹²⁶ This Rome Statute definition of torture aligns with the position that the defining characteristic of torture lies in the nature of the act itself, rather than in the status of the person committing it.⁹²⁷

However, there are certain minor distinguishing features (elements) of torture as a crime against humanity as opposed to a war crime under the Rome Statute. While torture as a crime against humanity presupposes the contextual element of a widespread or systematic attack against a civilian population and the commission of the crime “over a person or persons in the custody or under the control of the perpetrator”, the war crime of torture has the additional element of specific purpose, which is clarified in the elements of the crimes.⁹²⁸

Both war crimes and crimes against humanity of torture require the infliction of severe physical or psychological pain or suffering upon one or more persons as a material element (*actus reus*).⁹²⁹ There is no specific threshold for “severity”, which has to be assessed individually in each case. However, there has to be a certain degree of pain and suffering for the act to qualify as an act of torture.⁹³⁰ In practice, the international jurisprudence,⁹³¹ supported by UN findings,⁹³² indicates different types of practices that rise to the required level of severity and could amount to the crime of torture. The following list is not exhaustive, but comprises the most common types of torture practices:⁹³³

- Beatings (including systematic and to specific body parts, such as genitals);
- Electric shocks (including genital electrocution);
- Burns;
- Extraction of nails and teeth;
- Suspension or extended hanging by hand or leg chains;
- Suffocation;
- Exposure to excessive light or noise;
- Administration of drugs in detention or psychiatric institutions;

- Prolonged denial of rest or sleep;
- Prolonged deprivation of food and water;
- Prolonged denial of sufficient hygiene;
- Prolonged denial of medical assistance;
- Total isolation and sensory deprivation;
- Being kept in constant uncertainty in terms of space and time;
- Forced witnessing of executions;
- Forced burial of the bodies of friends and neighbors;
- Threats to torture or kill relatives;
- Total abandonment;
- Mock (simulated) executions and amputations;
- The “thumb press” method;⁹³⁴
- Repeated immersion in blood, urine, vomit, and excrement (“submarino”);
- Standing for prolonged periods; and
- Sexual violence (including rape, sexual aggression, and sexual humiliation);

Several *ad hoc* judgments have found that rape as such gives rise to severe pain or suffering, whether physical or psychological and, in this way, can be characterized as the crime of torture, provided the other elements of the crime of torture are met.⁹³⁵ For example, in *Furundzija*, the ICTY highlighted the use of rape in the course of detention and interrogation as a means of torture.⁹³⁶

Torture is not limited to the infliction of physical pain or suffering.⁹³⁷ For example, the interrogation of a person under threat to his life constitutes torture.⁹³⁸ In addition, the psychological suffering or pain caused to an individual who is forced to watch severe mistreatment inflicted on a relative would rise to the level of gravity required to establish the crime of torture.⁹³⁹ For example, in *Furundzija*, the ICTY found that being forced to watch severe sexual attacks inflicted on a female acquaintance was torture for the forced observer.⁹⁴⁰

Some factors may assist in determining whether an act amounted to torture, both objective, such as the nature, purpose, and consistency of the acts committed and subjective, such as the physical or mental condition of the victim, the effect of the treatment, and, where relevant,

the victim’s age, sex, health state, and position of inferiority.⁹⁴¹ Any prolonged nature of the act serves as a factor in favor of its qualification as torture. For example, while solitary confinement, or deprivation of food, is not an act of torture *per se*, it can amount to torture by reaching the gravity threshold depending on its strictness, duration, and the purpose for which the act is inflicted.⁹⁴²

The acts described above indicate that, in most cases, torture is committed through positive acts. However, omission can also constitute a material element of the crime of torture, as long as it meets the required level of severity and was intentional.⁹⁴³ For example, the intentional denial of nutrition and medical assistance to prisoners, when perpetrated for a specific purpose such as coercing confessions from detainees, can constitute torture.⁹⁴⁴

The distinguishing features of the crime against humanity of torture are the requirement of the contextual element (“widespread or systematic attack against a civilian population”; see [Sub-section 5.3.3](#)), no requirement to prove special intent (see below on specific intent), and the necessity to establish that the crime was committed against a person or persons in the custody or under the control of the perpetrator. The latter is an ICC-specific requirement, which is not affirmed in customary international law, and it reflects the control-based torture approach. The term “custody” refers to any form of detention or imprisonment, such as an arrest, while the term “under control of the perpetrator” is broader and covers any form of restraint over a victim with no possibility to escape.⁹⁴⁵

As mentioned, to constitute a war crime, the acts of torture should be inflicted with a specific intent. In particular, the ICC Elements of Crimes (*i.e.*, the official “interpretative guide” of the crimes codified in the Rome Statute that the Court shall apply “in the first place”)⁹⁴⁶ specify that such purposes may include: obtaining information or a confession, punishment, intimidation or coercion, or for any reason based on discrimination of any kind.⁹⁴⁷ This list mirrors the CAT, which prescribes the same list of prohibited purposes.⁹⁴⁸ Nonetheless, this list of prohibited purposes is non-exhaustive, as reflected in the phrase “for such purposes”.⁹⁴⁹ Although there is no explanation about which other

purposes could also be regarded as “prohibited”, it is clear that they have to be along the lines of those contained in the Elements of Crimes.⁹⁵⁰ At the same time, in the absence of a “prohibited” purpose, even a very severe infliction of physical or mental pain would not qualify as the war crime of torture,⁹⁵¹ although they may qualify as the war crime of inhuman treatment. It is sufficient that the prohibited purpose forms part of the motivation behind the conduct and does not need to be the predominant or sole purpose.⁹⁵²

In the case of the Russian occupation of Enerhodar, detainees were, in all of the documented cases, subjected to physical and/or psychological pain and suffering for different purposes. As indicated in [Subsection 2.4.3](#), the most prevalent purposes for which suffering was inflicted were to obtain information, for example, about participants in anti-occupation resistance or to force confessions, such as admitting cooperation with Ukrainian military and security forces. These were often accompanied by punishment, intimidation, and coercion, including forcing individuals to sign contracts with Rosatom.

At the ICC, the *actus reus* of the war crime of inhuman treatment requires the same level of physical or psychological pain and injury as the crime of torture (“severe”).⁹⁵³ By contrast, the *ad hoc* tribunals before and after the Rome Statute’s adoption⁹⁵⁴ have consistently held a lower threshold (*i.e.*, acts causing serious mental or physical suffering or injury or constituting a serious attack on human dignity).⁹⁵⁵ Just as torture, inhuman treatment can be committed through an act or omission.⁹⁵⁶ The *ad hoc* tribunals’ case law provides guidance through examples of inhuman treatment: forcing individuals to dig trenches under dangerous conditions or using prisoners of war as human shields;⁹⁵⁷ beatings; imposing inhuman living conditions in detention centers; attempted murder; and other similar acts.⁹⁵⁸ Similarly, the objective and subjective factors described in the context of torture should assist in the assessment of the severity of acts that may constitute inhuman treatment.⁹⁵⁹

In the case of the Russian occupation of Enerhodar, all of the documented incidents appear to amount to acts of torture. As was highlighted in [Subsection 2.4.2](#), detained Enerhodar civilian residents were subjected to various forms of physical pain and suffering, including beatings to different parts of the body with hands and feet, electrocution, beating with the use of a rubber police baton or wooden bat, beating with the handle or butt of a rifle or pistol, beating with the use of a kettle cord or TV cable, extinguishing a cigarette against the body, scrubbing skin with sandpaper, handcuffing to a heating pipe, and shooting with a traumatic gun. They were also subjected to psychological pain and suffering, such as mock executions, threats of execution, threats of the detention of relatives, and threats of deportation. On many occasions, detainees were also subjected to conflict-related sexual violence, such as electrocution of the genitals, rape, or threats of rape of themselves and their relatives.

Even where imprisoned Enerhodar civilians were not directly subjected to physical or psychological torture, the conditions of detention themselves were inhuman. These included prolonged denial of food; lack of proper ventilation, which caused breathing difficulties and asthmatic attacks, especially when combined with overcrowding; unsanitary conditions; and the spraying of gas into cells to aggravate the suffering of detainees, among other forms of inhuman treatment. The confinement of civilians under such conditions, combined with various forms of physical and psychological torture, was often prolonged, with some individuals subjected to repeated cycles of captivity due to being detained more than once.

Following their captivity and exposure to torture, Enerhodar civilians have suffered a wide range of both physical and psychological repercussions, which are detailed in [Subsection 2.4.4](#). Accordingly, imprisoned Enerhodar civilians were subjected to multiple forms of torture and inhuman treatment, causing severe physical pain and suffering, much of which has resulted in long-term or even chronic physical and psychological harm.

5.3. Pattern of Crimes: The Crimes Were Committed as Part of a Widespread and Systematic Attack against Any Civilian Population

Under the Rome Statute, both unlawful deprivation of liberty and torture constitute crimes against humanity if, besides the objective and subjective elements, it is proven that the acts were part of a widespread or systematic attack against any civilian population.⁹⁶⁰ This contextual element is key in distinguishing crimes against humanity as crimes of a collective nature from other international and “ordinary” crimes.⁹⁶¹

5.3.1. “Attack” Against Any Civilian Population

The Elements of Crimes⁹⁶² provides that an “attack directed against a civilian population” means “a course of conduct involving the multiple commission of acts referred to in Article 7, Paragraph 1, of the [Rome] Statute, pursuant to or in furtherance of a State or organizational policy to commit such attack”.⁹⁶³

The definition of attack through “a course of conduct involving multiple commission of acts” foresees that the attack comprises multiple acts, meaning more than a single act. An attack can be composed either of different crimes against humanity⁹⁶⁴ (e.g., multiple incidents of torture and unlawful deprivation of liberty) or acts comprising the same crime against humanity (e.g., multiple incidents of the crime of murder).⁹⁶⁵ Consequently, a certain pattern of acts should be established to prove the contextual element of crimes against

humanity.⁹⁶⁶ While there is a requirement of the multiplicity of acts, there is no corresponding requirement for multiple perpetrators.⁹⁶⁷

Since crimes against humanity do not need to be committed during an armed conflict or have any connection to it,⁹⁶⁸ the attack can happen before, during, or after the armed conflict and does not have to be a part of it.⁹⁶⁹ In this respect, the concept of “attack” for crimes against humanity differs from that of IHL, as it can include non-violent acts⁹⁷⁰ and those unrelated to the armed conflict.⁹⁷¹ For example, an attack can consist of several acts of mistreatment of persons taking no active part in the hostilities, such as detainees.⁹⁷²

Although the definition of an attack by multiple acts may suggest a certain scale, there is no minimum threshold, such as a specific geographical area or number of individual targets (see [Subsection 5.3.3](#)). For example, in *Tadić* (an ICTY case), the geographical area under consideration of an attack was a 20-km zone,⁹⁷³ whereas in *Sarić* (a Bosnian domestic case), the attacked population under assessment comprised only 300 individuals.⁹⁷⁴ Similarly, in *Katanga*, the ICC Trial Chamber found that multiple offenses committed over a single day against the strategically located village of Bogoro on February 24, 2003, which was home to over 800 civilians, resulted in 200 deaths, thereby constituting an attack.⁹⁷⁵

Additionally, the course of conduct should be committed pursuant to or in furtherance of a

State or organizational policy. While this is not an element under customary international law, it inevitably follows from the “systematic” nature of the attack, which presupposes the organized nature of the crimes and the improbability of their random occurrence (see [Subsection 5.3.3.](#)).⁹⁷⁶ The existence of a policy for widespread, yet not necessarily systematic, crimes could be established by omission rather than positive acts, for example, through the deliberate withholding of protection from victims, which effectively tolerates such crimes.⁹⁷⁷

The ICC examined this policy requirement, emphasizing that the “organization” is distinct from the “state” as a concept.⁹⁷⁸ For example, an “organization” might include non-state actors or private individuals.⁹⁷⁹ Given that the Russian occupation of Enerhodar involves the Russian state acting through occupying authorities and forces to commit the crimes, the following analysis is confined to state policy.

While the term “state” is self-explanatory, the policy does not need to originate from the highest levels of state authority, but may, for example, be adopted by regional or local state organs.⁹⁸⁰ Both the *ad hoc* tribunals and the ICC have highlighted that the policy does not need to have been adopted as the policy of the state,⁹⁸¹ nor declared expressly or stated clearly and precisely, meaning it can be implied or be a *de facto* policy.⁹⁸² The ICC went further by reiterating that a “planned, directed, and organized” attack, opposed to one which is “spontaneous or composed of isolated acts”, fulfills the policy requirement.⁹⁸³ Notably, the Elements of Crimes provides that a policy may be implemented through deliberate inaction, where the conscious failure to intervene is intended to encourage the attack, as illustrated in the above-mentioned example of intentionally denying help to multiple civilians. However, the Elements of Crimes highlights that the existence of such a policy cannot be concluded solely based on a lack of governmental or organizational action.⁹⁸⁴

In the case of the Russian occupation of Enerhodar, the analysis in [Section 2](#) demonstrates that a Russian state policy of targeting the civilian population through imprisonment or other severe deprivation of liberty and torture is not merely implicit or a *de facto* policy. A broader and deeper

assessment of the situation in Russian-occupied territories of Ukraine, especially since Russia’s 2022 full-scale invasion of Ukraine, reveals a clear Russian state policy to target the Ukrainian civilian population through an array of different crimes against humanity. The first comprehensive UN report published after the Russian full-scale invasion of Ukraine was based on an analysis of 687 recorded incidents of arbitrary detentions of civilians in the Donetsk, Kharkiv, Kherson, Luhansk, Mykolaiv, and Zaporizhzhia Oblasts between February 24, 2022, and December 31, 2023. This report, which included incidents of the arbitrary detention of ZNPP workers, concluded that all incidents were “orchestrated as part of a policy by the Russian Federation to intimidate, instill fear, punish, or extract information and confessions”.⁹⁸⁵ The latest report of the UN Independent International Commission of Inquiry on Ukraine of March 2025 emphasizes that enforced disappearances, which fall under the scope of imprisonment or other severe deprivation of liberty,⁹⁸⁶ and acts of torture by Russian authorities against the civilian population in occupied territories of Ukraine “were perpetrated ... pursuant to a coordinated state policy”.⁹⁸⁷

Hence, the multiple acts of imprisonment or other severe deprivation of liberty, followed by torture, in Enerhodar were conducted pursuant to and in furtherance of the “coordinated [Russian] state policy” of targeting the Ukrainian civilian population through numerous crimes against humanity, employed all over the Russian-occupied territories of Ukraine.

5.3.2. Attack “against Any Civilian Population”

The formulation “directed against” indicates that the civilian population should be the primary target of the attack, not an incidental victim of the attack.⁹⁸⁸ This contextual subelement highlights the collective nature of crimes against humanity.⁹⁸⁹ The focus must be on demonstrating that the attack as a whole, rather than each of the perpetrator’s acts, was directed against the civilian population.⁹⁹⁰ This implies that the entire attack, not individual acts, is relevant to whether the civilian population was the primary object of the attack.⁹⁹¹

While “population” refers to a multiplicity of persons sharing common attributes, it is not necessary to demonstrate that the perpetrator targeted the entire population within a given geographical area.⁹⁹² Unlike with war crimes,⁹⁹³ the civilian population for Article 7 of the Rome Statute connotes “any civilian population”,⁹⁹⁴ regardless of the nationality, ethnicity, or other distinguishing characteristics of its members.⁹⁹⁵ Respectively, there is no need to prove a link between the civilian population and any side of the conflict,⁹⁹⁶ just as there is no requirement to prove it is targeted based on any distinguishing characteristics (discriminatory intent), such as ethnicity or nationality.⁹⁹⁷

In certain circumstances, the targeting of a specific group of individuals within the civilian population based on its distinguishing characteristics, such as ethnicity or nationality, can be used as a determining factor in proving that the civilian population was the primary target of an attack.⁹⁹⁸ For example, in *Đorđević*, the ICTY found that Serbian forces specifically directed attacks against Kosovo Albanians because of their ethnicity and no distinction was made, or attempted to be made, between civilians and combatants. The tribunal subsequently stated that the civilian population was the primary, not the incidental, object of an attack.⁹⁹⁹

While the term “civilian” is undefined by the Rome Statute, according to IHL,¹⁰⁰⁰ as refined by international jurisprudence,¹⁰⁰¹ a civilian population comprises all persons who are not combatants.¹⁰⁰² It is also widely accepted that the presence within the civilian population of individuals who do not fall within the definition of civilians does not deprive the population of its civilian character if such population was “predominantly civilian in nature”.¹⁰⁰³ The *Šainović* case is illustrative. The ICTY found that, even if some of those who were killed may have been combatants, that fact did not deprive the Kosovo Albanian population of its “civilian” status. Thus, the “directed against any civilian population” element was met.¹⁰⁰⁴

However, despite numerous judgments by the *ad hoc* tribunals, the definition of the term “civilians” as per crimes against humanity remains unclear, at least concerning some aspects. Initially, the ICTY highlighted the need for a broader definition of “civilian” in the context of crimes against hu-

manity a year before the Rome Statute’s adoption. While acknowledging the absence of a universally accepted definition, the tribunal stated that the broader definition reflected “elementary considerations of humanity” as foreseen by Common Article 3 of the Geneva Conventions and Article 51 of AP(I), along with its commentary.¹⁰⁰⁵ ICTY judgments issued after the Rome Statute’s adoption followed the *Tadić* approach.¹⁰⁰⁶ In these cases, especially in *Blaškić*, the ICTY reiterated the broad humanitarian scope and purpose of the prohibition of crimes against humanity, stressing that crimes against humanity do not solely concern crimes committed against civilians in the strict sense of this term, but also crimes against two categories of people: (i) those who were members of a resistance movement (*levée en masse*); and (ii) former combatants, regardless of whether they wore or wear a uniform (*i.e.*, those who were no longer taking part in hostilities when crimes were perpetrated, either due to having left the army or no longer bearing arms or because they were *hors de combat*).¹⁰⁰⁷

However, the ICTY swiftly began to shift from a broad definition of “civilian” to a narrower one. The Appeals Chamber in *Blaškić* partially overturned the trial judgment by making reference to the laws of war for interpreting crimes against humanity,¹⁰⁰⁸ mirroring the approach taken in its earlier *Kunarać* appeal decision.¹⁰⁰⁹ The Appeals Chamber highlighted that taking into account the specific situation of the victim at the precise time of the commission of crimes when assessing the civilian status of the victim “may be misleading”.¹⁰¹⁰ The determining factor is not what the individual is doing at the time, but their status under IHL. By reference to the ICRC commentary to AP(I), a civilian who has become a member of an armed force is a combatant until they are discharged, whether or not they are bearing arms or engaged in combat at the time of the alleged commission of the crime.¹⁰¹¹

Subsequent ICTY judgments closely reflect the *Blaškić* appeal judgment, although with crucial corrections.¹⁰¹² The ICTY emphasized that while persons who are *hors de combat* cannot be considered civilians, they still fall under the scope of crimes against humanity as victims.¹⁰¹³ In the *Martić* and *Mrkšić et al.* cases, the ICTY Appeals Chamber explicitly held that, while a combatant

who is *hors de combat* does not become a civilian, there is nothing to suggest that a “civilian population” means that only civilians can be victims of crimes against humanity. For example, in the *Mrkšić et al.* case, although 181 of 194 men removed from the Vukovar Hospital in Croatia were members of the Croatian Armed Forces, they were *hors de combat* because Serb forces had detained them and were therefore considered to be victims of crimes against humanity. Hence, both civilians *per se* and combatants who are *hors de combat* can be victims of crimes against humanity if the respective conditions are met.¹⁰¹⁴

The practice of the International Criminal Tribunal for Rwanda (ICTR) serves as guidance, especially since its statute does not link the commission of crimes with an armed conflict, unlike the ICTY Statute.¹⁰¹⁵ In *Akayesu*, issued only a year after *Tadić*, the ICTR stated that “members of the civilian population are people who are not taking any active part in the hostilities, including members of the armed forces who laid down their arms and those persons placed *hors de combat* by sickness, wounds, detention or any other cause”.¹⁰¹⁶ Subsequent ICTR judgments strongly resembled the *Akayesu* approach,¹⁰¹⁷ with some even mentioning the *Blaškić* Trial Chamber’s stance on the specific situation of the victim, rather than their status, to be determinative.¹⁰¹⁸

Hence, the civilian population should constitute the primary object of the attack and the presence of isolated non-civilians among such a population does not change its character.¹⁰¹⁹ With this, the former members of a *levée en masse* and those who are *hors de combat* can be victims of the crime against humanity. For example, a person who is *hors de combat*, who was rendered unconscious in a combat action, can be a victim of the crime against humanity if the criminal act against that person was part of a widespread or systematic attack against the civilian population.¹⁰²⁰

In the case of the Russian occupation of Enerhodar, despite the potential status of a few of the detainees as prisoners of war, the majority of the incidents of imprisonment or other severe deprivation of liberty and torture specifically involved the civilian population of Enerhodar, such as Ukrainian ZNPP employees and former members

of the *levée en masse* who were not participating in the hostilities any more at the time of their abduction. In addition, all of the prisoners of war who were imprisoned or subject to severe deprivation of liberty held *hors de combat* status, due to having been in the power of an adverse party, having abstained from any hostile act, and having not attempted to escape. Therefore, the Russian occupying authorities and forces attacked the civilian population of Enerhodar and its environs.

5.3.3. A “Widespread” or “Systematic” Attack against the Civilian Population

The requirement of a “widespread” or “systematic” attack is disjunctive.¹⁰²¹ That is, the attack could be widespread or it could be systematic, but it does not have to be both, even if that is often the case in practice.

A widespread element highlights the large-scale nature of the attack and the number of targeted victims.¹⁰²² While the number of victims and geographical and temporal indicators are vital in establishing the widespread element,¹⁰²³ they should not be assessed strictly in quantitative or geographical terms, but instead based on the specific circumstances of the case.¹⁰²⁴ Hence, the widespread element can be satisfied by an attack carried out over a large geographical area or one conducted within a limited area but targeting a large number of civilians.¹⁰²⁵ Several authoritative commentaries to the Rome Statute mentioned that a widespread attack is an attack that is conducted on a large scale or involves a multiplicity of victims.¹⁰²⁶ This disjunctive method of defining the widespread element stems from the jurisprudence of the *ad hoc* tribunals and the ICC, which often referred either to the large number of victims,¹⁰²⁷ the multiplicity of victims,¹⁰²⁸ the large-scale commission of the acts, or, in some cases, to both the large-scale nature of the attack and the number of victims involved.¹⁰²⁹

As stated in [Subsection 5.3.1](#), there is no exact numerical or geographical threshold for multiple acts to be considered an attack. This is especially relevant to the widespread element. In the *Sarić*

case, the Bosnian court found that the attack of Serbian forces on the entire Bosniak population in the Nahorevo and Nahorevska Brda areas in the municipality of Sarajevo, around 300 in total, formed a widespread attack.¹⁰³⁰ In Bemba, the ICC Pre-Trial Chamber deduced the widespread nature of the attack in light of the multiplicity of victims, locations where crimes were committed, and the overall duration of the attack.¹⁰³¹ Similarly, in Gbagbo, the ICC Pre-Trial Chamber inferred the widespread element based on: (i) the large number of acts committed; (ii) the significant number of individuals targeted and victimized; (iii) the duration of the attack, which extended over more than four months; and (iv) its impact on the entire city of Abidjan.¹⁰³²

The “systematic” element refers to the “organized nature of the acts of violence and the improbability of their random occurrence”, signifying a pattern of crimes characterized by the “nonaccidental repetition of similar criminal conduct on a regular basis”.¹⁰³³ A mere repetition of coincidental and non-connected crimes would not satisfy the systematic element.¹⁰³⁴ Additionally, as mentioned in [Subsection 5.3.1](#), international jurisprudence has often equated the systematic element with the state or organizational policy requirement.¹⁰³⁵

Only the attack itself and not the individual acts of the accused should be widespread or systematic, meaning that a single or limited number of acts of a specific accused would qualify as a crime against humanity if all other conditions are met, unless they are isolated or random.¹⁰³⁶

The attack on the civilian population of Enerhodar and its vicinity has been both widespread and systematic.

Satisfying the widespread element, the acts of imprisonment and other severe deprivation of liberty, accompanied by acts of torture, have been committed on a large scale and against several civilian residents of Enerhodar.

Although the widespread element cannot be equated with any specific numbers, it is still useful to estimate the approximate number of the civilian residents of Enerhodar targeted in order to assess the widespread nature of the attack on its civilian population:

- According to Enerhodar’s mayor, Dmytro Orlov, in August 2022, over 1,000 civilians in Enerhodar had been imprisoned and tortured.¹⁰³⁷
- In November 2023, the mayor reported a slightly higher number of over 1,500 civilians.¹⁰³⁸
- In April 2025, Truth Hounds’ partner, Ukrainian NGO the Association of Relatives of Political Prisoners of the Kremlin reported that over 2,000 Enerhodar civilians had survived Russian acts of imprisonment and torture.¹⁰³⁹
- Truth Hounds itself has documented at least 226 civilian residents of Enerhodar who have been subjected to imprisonment and other severe deprivation of liberty, mostly followed by inhuman treatment and torture. This figure includes the individuals interviewed directly and third persons mentioned by the interviewees. It also constitutes only a picture of the broader scope (number) of imprisonment and torture offenses that have been committed against Enerhodar’s civilian population (for precise calculations, please refer to [Subsection 2.2](#)).

Estimated total number of Enerhodar civilians:

- January 2022: Approximately 52,237¹⁰⁴⁰
- June 2023: Approximately 15,000¹⁰⁴¹
- January 2024: Between 10,447 and 13,059¹⁰⁴²
- March 2025: Between 8,000 and 9,000¹⁰⁴³

The numbers in the table above are approximate, given Russian armed forces’ ongoing occupation of Enerhodar and the resulting complexity of calculating a precise number of those targeted by Russian occupying authorities and forces.

For the same reason, it is impossible to determine the exact proportion of targeted civilians *vis-à-vis* the whole of Enerhodar’s civilian population. Nevertheless, even without precise calculations, the widespread nature of the attack on Enerhodar’s civilian population can still be identified from the following:

- At least 2,000 Enerhodar civilian residents have been targeted through acts of imprisonment and other severe deprivation of liberty, followed by torture.

- These offenses have been ongoing since the Russian occupation of Enerhodar on March 3, 2022, spanning over 40 months, or more than three and a half years.
- Several Enerhodar civilian residents were subjected to repeated imprisonment and torture, having been victims of detention and other severe deprivation of liberty, accompanied by torture, on more than one occasion.
- Given that many documented instances involved the targeting of ZNPP personnel,¹⁰⁴⁴ these offenses have significantly affected the city of Enerhodar, which has functioned as a satellite city of the ZNPP (see [Section 3.3.5.](#) and [Annex I](#)).

The systematic nature of the attack is satisfied by the organized nature of imprisonment and other severe deprivation of liberty, followed by acts of torture against the civilian population of Enerhodar. These acts did not occur by accident and happened on a regular basis. [Subsection 2.2](#) demonstrates that, in Russian-occupied Enerhodar, the occupying authorities and forces primarily targeted pro-Ukrainian civilians, former AFU members, their relatives, and ZNPP workers. Members of Russian occupying forces, involving the military, occupying police, and Russian security services personnel, abducted these targeted individuals from their homes or workplaces and took them to a network of detention facilities, comprising improvised or established structures. The methods of physical torture were consistent, including brutal beatings with various objects, electrocution (notably with a “Tapik” device), and instances of conflict-related sexual violence. Psychological pain and suffering were also prevalent, involving mock executions, threats against relatives or loved ones, and coerced participation in filming Russian propaganda.

Within these facilities, specific rooms were designated for interrogation and torture sessions, predominantly conducted by Russian security services. The primary aim was to extract information (e.g., about anti-occupation resistance, pro-Ukrainian civilians, owners of weaponry, or present or former members of the Armed Forces of Ukraine) and coerce confessions (e.g., admitting cooperation with Ukrainian military and security forces). These sessions were consistently

accompanied by punishment, intimidation, and coercion. In many documented instances, coercion took the form of forcing ZNPP personnel to sign contracts with Rosatom. Throughout their detention, prisoners endured inhuman conditions, marked by overcrowding, lack of sanitation, and severe denial of food, water, and proper hygiene. These practices inflicted enduring physical and psychological trauma, with some victims suffering chronic injuries, while others died as a result of their mistreatment.

Truth Hounds’ conclusions are consistent with the findings of several international agencies and institutions, including UN entities. Already in March 2023, the UN Independent International Commission of Inquiry on Ukraine found that the Russian authorities used torture and inhuman treatment in a widespread and systematic manner across the occupied territories, including in Zaporizhzhia Oblast. In particular, the Commission stated that “torture was particularly severe against current or former members of Ukrainian armed forces and associated persons and their relatives. Local officials, law enforcement personnel, employees of Zaporizhzhia Nuclear Power Plant, and civilians with pro-Ukrainian views have also been victims of torture”.¹⁰⁴⁵ In their later October 2023 report, the Commission confirmed its previous findings.¹⁰⁴⁶

In its 2024 report, the Commission emphasized the widespread and systematic torture committed in Russian-occupied territories, including in Zaporizhzhia Oblast,¹⁰⁴⁷ referring to its previous findings in 2024 and preceding years.¹⁰⁴⁸ Notably, the Commission emphasized that the torture practices had been enforced by regular personnel, as well as Russian special-purpose units. Notably, the Commission highlighted the use of Enerhodar Police Station by Russian occupying authorities and forces as part of a network of detention facilities, enabling them to carry out widespread and systematic offenses. In its 2025 report, the Commission reiterated that in all of the Russian-occupied regions that were under its assessment, including Zaporizhzhia Oblast, “the Russian authorities have committed crimes against humanity of torture and enforced disappearances, both perpetrated pursuant to a coordinated state policy, in a widespread and systematic manner [...] with the aim of furthering the Russian Federations’ military objectives”. The

Commission once again highlighted the use of Enerhodar Police Station as a site for carrying out widespread and systematic offenses.¹⁰⁴⁹

Therefore, the factual findings in this report, confirmed by UN reports, prove both the widespread and systematic nature of the attack on the civilian population of Enerhodar.

5.3.4. A Sufficient Link between the Acts of the Accused and the Attack

Under the Rome Statute, there must be a sufficient link between the acts of the accused and the attack.¹⁰⁵⁰ While there is no specific guidance on what would be “sufficient”, some factors that could establish it might be: common features between the individual’s acts and acts taking place within the attack’s scope; the character of the events and surrounding circumstances in which the individual’s conduct took place; the timing and location of the accused’s acts in relation to the attack; the scope of the accused’s awareness of the attack at the time of committing the acts;¹⁰⁵¹ and how the accused’s acts are connected to, or contribute to advancing, the policy underlying the attack.¹⁰⁵² In any event, the individual’s acts themselves need not be widespread or systematic provided they form part of a widespread or systematic attack.¹⁰⁵³

In the case of the Russian occupation of Enerhodar, first, Truth Hounds identified specific groups operating in Enerhodar, at specific time periods and with specific responsibilities, based on the recollections of interviewed survivors about the callsigns, physical appearances, and means used by the perpetrators of abduction, detention, and torture. These groups consisted of Russian military and security forces, as well as members of the occupying police force. As stated in [Subsection 2.4](#), some groups were responsible for matters related to the ZNPP, while others dealt with the civilians of Enerhodar more generally.

Second, in all of the documented instances, the civilians were abducted and placed in detention centers in the same manner: they were taken from their workplaces or homes, handcuffed and/

or blindfolded, and transported in stolen civilian vehicles, often enduring physical abuse during the journey to the detention facility. Irrespective of the status of the targeted civilian, whether a ZNPP worker or a former resistance participant, they were placed at the same detention facilities as other targeted Enerhodar civilians (see [Subsections 2.3 and 2.4.1](#)).

Third, in all of the documented instances, the same individuals, from the same groups, committed acts of torture against the imprisoned civilian residents of Enerhodar in an identical manner. The perpetrators subjected prisoners to different sorts of physical and psychological pain and suffering, such as beatings, threats of execution, and electrocution, for one of four purposes: (i) to obtain information about participants of the anti-occupation resistance, pro-Ukrainian civilians, and other civilians “disloyal” to the occupying regime, the owners of weaponry, former members of the Armed Forces of Ukraine, and other information linked to the Ukrainian military or security forces; (ii) to punish people for their pro-Ukrainian stance or former participation in the anti-occupation resistance; (iii) to intimidate people, for example, by threatening them or their relatives with execution or deportation; and (iv) to force people to cooperate with the occupying authorities and forces, such as ZNPP employees, who were often forced to sign a contract with Rosatom.

Russian security forces subjected many Ukrainian ZNPP workers to various forms of physical and psychological suffering on their evacuation route outside of Enerhodar, with alleged awareness of their status as workers. The subsequent targeting of these civilians upon their return by other security forces operating within Enerhodar further underscores that these offenses against ZNPP personnel are part of the broader pattern of crimes committed against the civilian population of Enerhodar.

As was emphasized in [Subsection 5.3.1](#), all of these offenses were carried out under Russian state policy allowing for the imprisonment and further torture of the Ukrainian civilian population of Enerhodar.

The facts described above signal that each of the documented instances of imprisonment and other

severe deprivation of liberty, followed by torture, constituted a part of a widespread and systematic attack on the civilian population of Enerhodar.

5.3.5. *Mens Rea* of the Alleged Perpetrators

The Rome Statute requires that the perpetrator “knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population,”¹⁰⁵⁴ which reflects the practice of the *ad hoc* tribunals.¹⁰⁵⁵ This constitutes an additional *mens rea* element to Article 30 of the Rome Statute¹⁰⁵⁶ and helps to exclude isolated acts from the scope of crimes against humanity.¹⁰⁵⁷ As mentioned earlier, there is no requirement for the perpetrator to have committed the acts with a discriminatory intent.¹⁰⁵⁸

As such, the perpetrator should be aware of the existence of a broader attack and that their individual acts form part of it. In determining the additional *mens rea* requirement, international and domestic jurisprudence on crimes against humanity seems to hold a “risk-based” approach.¹⁰⁵⁹ Concerning the perpetrator’s knowledge of the attack, the perpetrator need not possess detailed knowledge of the attack’s characteristics or the precise details of the plan or policy of the state or organization.¹⁰⁶⁰ The perpetrator’s general awareness of the existence of the attack is sufficient,¹⁰⁶¹ meaning that they only need to be aware of the facts related to the attack that increase the dangerousness of their conduct for the victims or that transform their conduct into a contribution to the crimes committed by others.¹⁰⁶²

Concerning the knowledge that individual acts form part of the attack, the perpetrator must, at a minimum, have known of the risk that their acts can form part of a broader attack.¹⁰⁶³ For example, if the perpetrator committed a certain act with the acceptance of the risk that the particular act could constitute an integral part of the attack on the civilian population, the act can constitute a crime against humanity, provided other elements are met.¹⁰⁶⁴ The perpetrator’s motive is irrelevant in proving their conduct constituted a crime against humanity; it is sufficient that the

perpetrator knowingly participated in the attack directed against a civilian population.¹⁰⁶⁵ In the case of an emerging attack, which is imminent or has just begun, the second contextual mental subelement is satisfied if the perpetrator intended to further such an attack.¹⁰⁶⁶

In the case of the Russian occupation of Enerhodar, the contextual *mens rea* of each alleged perpetrator will require individual assessment. Nevertheless, the documented incidents of imprisonment and other forms of severe deprivation of liberty, accompanied by acts of torture, demonstrate that the alleged perpetrators carried out acts of detention and torture concurrently with their own and their colleagues’ past and future criminal offenses against the civilian population of Enerhodar. This pattern indicates their awareness of both the broader attack on the civilian population and the fact that their specific conduct formed part of that attack.

5.4. Individual Criminal Responsibility

Since this report primarily focuses on the methods and means employed by Russian occupying authorities and forces in Enerhodar and its vicinity to enable the commission of arbitrary detentions, inhuman treatment, and torture, rather than identifying the individuals responsible for these offenses, it provides only a brief overview of the potential modes of liability for the perpetrators.

5.4.1. Direct Commission

“Commission” constitutes a well-recognized mode of liability in ICL which comprises different forms of principal participation,¹⁰⁶⁷ including direct commission, indirect commission, and co-perpetration.¹⁰⁶⁸ In particular, Article 25(3)(a) of the Rome Statute specifies that a person can be responsible for committing a crime “whether as an *individual*, *jointly with another* or *through another person*, regardless of whether that other person is criminally responsible”.¹⁰⁶⁹

Direct commission, often referred to as direct or individual perpetration, was one of the first modes of liability recognized in ICL.¹⁰⁷⁰ The *ad hoc* and hybrid tribunals held that commission primarily covers the physical perpetration of a crime by the perpetrator themselves.¹⁰⁷¹ Hence, direct commission refers to the physical perpetration of the crime. This means that only an individual who physically fulfills all the elements of the crime bears liability as a direct perpetrator.¹⁰⁷² International jurisprudence suggests that direct commission can take place not only through an act but also through a culpable omission, when a perpetrator violates their duty to act.¹⁰⁷³

The direct perpetrator should have committed the material elements of the crime with intent and knowledge.¹⁰⁷⁴ Article 30 of the Rome Statute specifies that, in relation to the conduct, the person has to mean to engage in the conduct,

while in relation to the consequence, the person has to intend the consequences or be aware that they will occur in the ordinary course of events.¹⁰⁷⁵

5.4.2. Co-Perpetration

Co-perpetration, as a form of committing a crime, is highly relevant in the case of the Russian occupation of Enerhodar. It refers to the commission of a crime by two or more persons acting in a concerted manner, through individual contributions that result in the realisation of the objective elements of a crime.¹⁰⁷⁶ The ICC has embraced co-perpetration based on a “joint control over crime” theory, which helps to distinguish between principals and accessories.¹⁰⁷⁷ The theory foresees that “none of the participants has overall control over the offense because they all depend on one another for its commission, they all share control because each of them could frustrate the commission of the crime by not carrying out his or her task”.¹⁰⁷⁸ This presupposes that the co-perpetrator exercises negative control over the crime, since co-perpetrators cannot secure the commission of the crime on their own, but are mutually dependent on their co-perpetrators performing their essential contributions.¹⁰⁷⁹ Co-perpetration based on joint control over the crime has been criticized in academia, alleging that such a legal framework of co-perpetration requires speculative and counterfactual analysis from judges on whether the principal’s contribution was essential or not.¹⁰⁸⁰

With respect to the objective elements of co-perpetration, the ICC held that there are two requirements:

- The existence of a common plan or an agreement with one or more persons; and
- The coordinated essential contribution, which results in the fulfillment of the material elements of the crime.

The terms “plan” and “agreement” are synonyms, having the same legal meaning.¹⁰⁸¹ The plan or agreement does not need to be explicit, but may be inferred from the concerted action of the co-perpetrators.¹⁰⁸² The common plan or agreement does not need to be prearranged and may arise extemporaneously (see the second constitutive *mens rea* element under co-perpetration below).¹⁰⁸³

International jurisprudence has consistently held that the perpetrator’s contribution to co-perpetration should be essential, meaning that each individual’s contribution is crucial for the realization of the common plan and that, without such participation, the crime would not occur.¹⁰⁸⁴ This is a higher threshold than the “substantial contribution to or effect on” required for accessory liability (aiding or abetting).¹⁰⁸⁵ The essential contribution can occur during the “planning or preparation stage, including when the common plan is conceived”,¹⁰⁸⁶ and when the crime is perpetrated. That said, there is no need for the co-perpetrator to be physically present at the crime scene, as long as they exercised joint control over the crime.¹⁰⁸⁷ Nevertheless, the essential contributions of all co-perpetrators need to result in the commission of material elements of a crime.¹⁰⁸⁸ This implies that at least one of the co-perpetrators should physically carry out the material elements of a crime.¹⁰⁸⁹

The general *mens rea* standard in Article 30 of the Rome Statute, requiring that the material elements of the offense were committed with intent and knowledge, also applies.¹⁰⁹⁰ Co-perpetration also requires that: (i) the co-perpetrators are all mutually aware and mutually accept that implementing their common plan will result in the realisation of the objective elements of the crime;¹⁰⁹¹ and (ii) they are aware of the factual circumstances enabling them to jointly control the crime.¹⁰⁹²

The “will result” formulation in the first constitutive subjective element of co-perpetration means that the co-perpetrator knows that their actions will necessarily cause the consequence in question, unless interrupted by an unforeseen or unexpected event.¹⁰⁹³ There is no requirement that a co-perpetrator foresees the crime with absolute certainty.¹⁰⁹⁴ This aligns with the fact that the plan or agreement does not have to be specifically

directed by all co-perpetrators at the time it is committed. It is sufficient that the plan or agreement entails “an element of criminality”, such that a crime is a foreseeable and highly likely consequence of the plan or agreement’s execution.¹⁰⁹⁵

The second subjective element of co-perpetration highlights that the co-perpetrator was aware of their essential role in the execution of the common plan or agreement, and their ability to frustrate its commission by not carrying out their tasks.¹⁰⁹⁶ This second subjective element of co-perpetration has been criticized as placing too much of a burden on the prosecution, since many co-perpetrators in the context of crimes within the ICC’s jurisdiction typically lack full control and therefore cannot be expected to have complete awareness of the factual circumstances underpinning that control.¹⁰⁹⁷

5.4.3. Aiding or Abetting

Another relevant mode of liability to the case of the Russian occupation of Enerhodar is aiding, abetting, or otherwise assisting in the commission of the crime, *i.e.*, an accomplice/accessory liability,¹⁰⁹⁸ provided for in Article 25(3)(c) of the Rome Statute. The ICC has clarified that “aiding”, “abetting”, and “otherwise assisting” constitute a single mode of liability. It has further noted that the terms “aid” and “otherwise assist” overlap, meaning that “otherwise assist” does not expand the scope of the mode of liability beyond what is already covered under aiding and abetting.¹⁰⁹⁹

“Aiding” connotes assistance in the commission of the crime and “abetting” refers to encouragement or moral support to the crime’s commission.¹¹⁰⁰ It is not necessary to prove both aiding and abetting—either one is sufficient to establish this mode of liability.¹¹⁰¹ Aiding or abetting may involve either an act or an omission. It can occur before, during, or after the principal crime and it can be geographically distanced from the crime.¹¹⁰² While assistance, encouragement, and moral support provided before or during the commission of a crime are relatively straightforward (see examples below), questions arise regarding how aiding or abetting can occur after the crime has been committed. International jurisprudence indicates that aiding or abetting after the crime might be established through a prior agreement

or promise to perform certain acts after the crime was committed.¹¹⁰³ International jurisprudence further suggests that aiding and abetting can take place by omission, where a person violates a duty to act.¹¹⁰⁴ For example, in *Furundzija*, the ICTY Trial Chamber found the accused responsible for aiding or abetting outrages upon personal dignity, including rape, due to his presence and continued interrogation of the witness, which encouraged and substantially contributed to criminal acts committed by the other accused.¹¹⁰⁵ The Rome Statute provides that the principal's crime does not need to happen for aiding or abetting liability to arise, since assistance in both the commission of the crime and the attempted commission of the crime is prohibited.¹¹⁰⁶

To constitute aiding or abetting, there should be a causal link between the perpetrator's act or omission and the principal's crime. The perpetrator's act or omission does not need to be necessary for the commission of the principal offense; it needs only to have furthered, advanced, or facilitated the commission of such offense.¹¹⁰⁷ For example, interrogating a victim while another person is raping the victim amounts to the aiding or abetting *actus reus*.¹¹⁰⁸

The *ad hoc* and hybrid tribunals have employed the "substantial"¹¹⁰⁹ contribution to or effect" and/or "specific direction" notions in interpreting such a causal link.¹¹¹⁰ While they commonly agree that the act or omission should have substantially contributed to or had a substantial effect on the commission of the principal's crime as part of the aiding or abetting *actus reus*, their recent practice seems to suggest that "specific direction" is not part of the *actus reus*.¹¹¹¹ The practice of the ICC concerning "substantial contribution to or effect" has not been consistent. While initially, the ICC held that accessories should have had a "substantial contribution to or effect on" the commission of the principal's crime,¹¹¹² recent judgments have rejected a minimum contribution threshold to the commission of the principal's offense¹¹¹³ or remained silent on this issue.¹¹¹⁴

Nevertheless, especially in light of the statute's limitation to the gravest crimes, it would be erroneous to conclude that any level of contribution suffices for the *actus reus* of aiding or abetting. That is why the *ad hoc* and hybrid tribunals opt-

ed for a threshold of "significant contribution or effect", which is also strongly supported in academia.¹¹¹⁵ Unfortunately, there is limited international jurisprudence that clearly defines what constitutes a "substantial contribution to or substantial effect on", leaving room for interpretation on a case-by-case basis.¹¹¹⁶ The most instructive decision is the Taylor case at the Special Court for Sierra Leone (SCSL). On appeal, the SCSL held that "substantial contribution to or effect on" may be inferred from conduct that: (i) supported and sustained the organized commission of crimes; (ii) made civilians more vulnerable and less able to defend themselves, provided a pretext for attacks, and sustained the functioning of the organized commission of crimes; (iii) supported and enhanced the capacity of the principals to commit crimes; (iv) supported and sustained the system of arrests and detention; (v) contributed to and made possible the victims' deportation; and (vi) permitted the continued existence and further development of the inhuman situation. At the same time, the SCSL clarified that some acts do not amount to the *actus reus* of aiding or abetting, namely where: (i) the accused was not in a position where their lack of objection in any way contributed to the success of any executive operation; (ii) their position and responsibilities did not render substantial assistance to the crimes; (iii) their acts were too insignificant or inadequate *vis-à-vis* the crimes to attract liability or they had little to no influence; and (iv) the distribution of orders connected to the crimes, the proposal of discriminatory laws, and the signing of decrees imposing citizenship did not sufficiently connect the accused to the crimes.¹¹¹⁷

While the perpetrator's presence at the scene of the crime is not determinative, in certain circumstances, where the perpetrator is in a position of authority, it can demonstrate that the perpetrator significantly legitimized or encouraged the effect on the principal.¹¹¹⁸ In the *Aleksovski* case, which concerned the individual responsibility of the commander of the Kaonik prison in Bosnia and Herzegovina where non-Bosnian prisoners were detained, the ICTY found that Aleksovski's presence during the systematic mistreatment of detainees implied he was aware that his tacit approval would be considered as a sign of his support and encouragement. In particular, the tribunal found that since the accused previously

ordered or instigated and abetted the mistreatment of detainees, even in an incident involving the mistreatment of two detainees in his absence, he was still an aider or abettor:

*"It is also similarly satisfied that the recurring brutality the two detainees were subsequently subjected to in the absence of the accused was aided and abetted by him. Abuse of this kind was frequent and was committed day and night near the accused's office so that the accused could hardly not have not been aware of it. Yet he did not oppose or repress it, as his position required. On the contrary, his silence could only be taken as a sign of his approval, given that he participated actively in the initial abuse of these two detainees; the accused could hardly have been unaware that his silence would amount to encouragement to the perpetrators."*¹¹¹⁹

The threshold of "substantial contribution to or effect on" for aiding or abetting does not require a single specific act or omission to qualify—it may be established through a series of cumulative acts or omissions.¹¹²⁰

The mere role of an accomplice within a system, who has no influence on the commission of offenses, does not constitute the *actus reus* of aiding and abetting. Cases heard under Control Council Law No. 10 (the so-called "Subsequent Nuremberg Trials and Post-War War Crimes Trials by the Allies")¹¹²¹ emphasize that to be considered an aider or abettor, the accomplice should make a significant difference to the commission of the principal's crimes, rather than simply holding a non-influential position in the whole system. For example, in the Zyklon B case, a British military court found that because a first gassing technician held no influence over the supply of gas, his actions did not amount to aiding and abetting, even if they "were an integral part of the supply and use of poison gas" and the technician was aware that his functions played such an important role in the transfer of gas. In that case, the British court convicted the owner and second-in-command of the gas firm. In another case ("Hechingen Deportation"), a German court held that the actions of an accused, as a local administrative authority, following decrees of higher-ranked

perpetrators concerning unlawful deportations, did amount to aiding and abetting, even if such assistance could have been easily obtained from another person.¹¹²²

In *Delalić*, the ICTY famously stated that it "would not accept that the circumstance alone of holding a position as a guard somewhere within a camp in which civilians are unlawfully detained suffices to render that guard responsible for the crime of unlawful confinement of civilians". Hence, the tribunal did not establish what degree of participation of an accused involved in the release of prisoners would affect the crime of unlawful confinement.¹¹²³ By contrast, in *Jokić*, the ICTY rejected the accused's reliance on the *Delalić* decision, finding that his role in three execution sites, whether as a duty officer or chief of engineering,¹¹²⁴ extended beyond the mere transmission of orders up and down the chain of command. In particular, although the accused did not directly issue orders in his capacity as chief of engineering of the Zvornik Brigades of the Drina Corps (Army of the Republika Srpska), he contributed to their execution by assisting in the implementation of the brigade commander's orders, which were based on his own advice and proposals. The ICTY held that while aiding or abetting generally involves a lesser degree of directness of participation in the commission of a crime, compared to primary liability for an offense, Jokić's acts of assistance including coordinating, sending, and monitoring the deployment of Zvornik Brigade resources and equipment to the mass execution sites between July 14 and 17, 1995, were sufficient to establish his responsibility.¹¹²⁵

Under the general *mens rea* standard in Article 30 of the Rome Statute, it must be established that the accessory's act or omission was committed with intent and knowledge. However, the accessory is not required to share the same mental state as the principal perpetrator. It is sufficient that the accessory intentionally engaged in conduct that they knew would assist in the commission of the crime. This stems from Article 30 of the Rome Statute requiring intent: (i) in relation to the aider or abettor's own conduct, an aider or abettor meaning such conduct; and (ii) intent in relation to that conduct's consequences (crime of the principal)—either meaning to cause that consequence or being aware that the consequence

“will occur in the ordinary course of events”.¹¹²⁶ The accessory, however, need not know all the details of the principal’s crime and the factual circumstances in which it is committed—knowledge of the essential elements of the principal’s crime is sufficient.¹¹²⁷

In addition to the general Article 30 *mens rea* requirement, the Rome Statute foresees that the accessory aids or abets the commission of the crime for the purpose of facilitating its commission.¹¹²⁸ This presents a stricter aiding or abetting *mens rea* threshold than that employed by the *ad hoc* and hybrid tribunals, which only required the knowledge that an act or omission would assist in the commission of the respective crime.¹¹²⁹ Such an additional subjective element refers to the aider or abettor’s conduct and not to the consequences of such conduct, which is the crime of the principal.¹¹³⁰

Hence, the *mens rea* for an aider and abettor would be satisfied if they:

- (i) Not only meant to engage in their conduct, but also to facilitate the commission of the principal’s conduct; or
- (ii) Meant to cause the consequence of their conduct (the conduct of the principal) or are aware that such consequences will occur in the ordinary course of events.

5.4.4. Modes of Liability Applied to Crimes Committed in Enerhodar

Given that the Russian occupation of Enerhodar involves widespread and systematic acts of torture, it is necessary to determine when an individual qualifies as a co-perpetrator or as an aider or abettor. The decisive factor is whether the individual shares the purpose behind the torture. If the person shares the purpose, they would likely be a co-perpetrator. If the person merely provides assistance or support with knowledge that torture is being carried out, they would be considered an aider or abettor. For example, driving the torture perpetrators to the place of torture with full knowledge of what they will do or supplying food and

drink to the perpetrators at the place of torture while knowingly supporting their actions would amount to aiding or abetting.¹¹³¹

In the case of the Russian occupation of Enerhodar, as indicated in [Subsection 2.4](#), there were three levels of perpetrators of the crimes. First, at the top of the chain of command were the FSB, its Special Counter-Intelligence Unit, and leaders of the occupying police. This group both oversaw operations and directly participated in abductions, unlawful detention, and the infliction of physical and psychological suffering. Second are the personnel of the Russian military and occupying police who, acting in coordination with senior-level perpetrators, took part in the execution of these crimes. Finally, the third group consists of the lower-ranking Russian occupying police and military representatives, excluding leadership, who primarily served in support roles, such as guarding the detention centers.

After carefully examining the collected interviews of survivors, supported by open-source findings, it appears that the highest and mid-level perpetrators could be liable as co-perpetrators. It may be unusual for mid-level perpetrators, such as middle-ranking members of the Russian military and occupying police, to fall under the same scope of co-perpetration as high-level perpetrators, namely the leaders of the Russian security forces and occupying police. However, the Enerhodar case is unique due to the overlapping participation in the commission of crimes by perpetrators at different levels. Co-perpetration does not require each of the co-perpetrators to be present at the crime scene. Typically, the highest level of command only plans and organizes the criminal events without personally conducting the material elements of the offenses.¹¹³² In the case of the Russian occupation of Enerhodar, the leaders of the Russian security forces and occupying police, as the highest level of perpetrators, along with mid-level perpetrators and sometimes even with low-level perpetrators, not only planned and organised the offenses of imprisonment, inhuman treatment, and torture against the Enerhodar civilian population but personally participated in their commission.

Truth Hounds is not aware of any written plan or agreement among the co-perpetrators on the

imprisonment of Enerhodar civilian residents. However, a plan or agreement can be deduced from the widespread and systematic pattern of offenses documented to date since the Russian occupation of Enerhodar, in particular, the systematic nature of inhuman treatment and torture. Such a plan or agreement certainly included an element of criminality due to the nature of offenses foreseen by its commission.

The excerpts below clearly demonstrate that the high- and mid-ranking perpetrators in the case of the Russian occupation of Enerhodar depended on one another for the commission of crimes, thereby having joint control over the crimes. In particular, each of the co-perpetrators' contributions was essential, as failing to carry out a task by any of them could have frustrated the commission of the crimes.

*"And this [redacted] was the head of the FSB at the nuclear power plant because there was also a head of the city [head of the FSB in Enerhodar], what was his call-sign, [redacted], I think, something like that. And at the nuclear power plant, this [redacted] was the head, I don't know if he was their head or if he was simply responsible for the nuclear power plant—I don't know these details. And in the city, maybe there was someone more important."*¹¹³³

*"Twenty people were running behind me in uniform, wearing bandages, these 'mujahideen'. They were in three cars... [There were] maybe 15 people, I did not have time to count exactly. Two of them had uncovered faces, one was an FSB officer and the other was a counterintelligence officer—they had uncovered faces and the rest were wearing masks... They were dressed in jeans, t-shirts, civilian clothes, faces uncovered. The rest of them [had their] faces covered, [wearing] military uniforms, unloading vests, no chevrons."*¹¹³⁴

"And there was also the deputy chief of police... And he came to us one night and he said: 'So, are you going to tell me something? Anything you remember? If you tell us everything now, we'll let you go.' Nobody said anything. And he was drunk, he had

*a lot of booze on him. He just left and he comes in and he starts firing his gun into the walls, up, just next us. I think it was a trauma gun because I didn't see any shell casings. He shot and just walked away."*¹¹³⁵

The general *mens rea* under Article 30 of the Rome Statute, coupled with additional elements under the co-perpetration mode, is met due to the following:

- In each documented incident, the co-perpetrator intended to commit the offense and either directly intended its consequences or accepted them by being aware that they would occur in the ordinary course of events. While unexpected hindrances might have taken place, such as the absence of a specific targeted civilian at their workspace or apartment, the groups operating in Enerhodar pursuant to a common plan or agreement would have foreseen that their direct participation in the abduction of Enerhodar civilians and their further transportation to a detention facility would inevitably lead to the commission of imprisonment, inhuman treatment, and torture.
- Simultaneously, the documented incidents signal that the co-perpetrators were mutually aware and accepted that implementing the common plan or agreement would result in the realization of the objective elements of the crimes. The incidents also signal that these co-perpetrators were aware of their essential role in executing the common plan or agreement and of their ability to frustrate its execution by failing to carry out their tasks.

Regarding the low-level perpetrators, such as guards at the detention facilities in Enerhodar and its vicinity, these individuals would likely fall under accomplice/accessory liability (aiding or abetting). Despite holding a lower place in the Russian occupation system, these individuals still played a role in substantially influencing the commission of the crimes against Enerhodar's civilian residents. Some guards may have believed they were merely guarding lawfully detained individuals, such as those suspected of participating in anti-occupation resistance. However, the continuous influx of new detainees and the visible physical injuries they sustained after interrogation sessions

should have signaled otherwise. Moreover, Truth Hounds documented cases in which guards beat detainees while escorting them to and from the interrogation room, often accompanied by acts of intimidation.¹¹³⁶ As stated earlier, the cumulative effect of a series of facilitative acts of an individual may amount to their substantial contribution to or effect on the commission of crimes.

In certain circumstances, low-ranked individuals can also be individual perpetrators or even co-perpetrators. In particular, in certain instances, the low-ranked perpetrators have often either themselves physically and psychologically humiliated the prisoners at the detention centers, summoned the prisoners to the interrogation sessions and detention cells, respectively, and overseen the prisoners in the cells:

*"They took me out of the cell again, to the [interrogation] office. The officer on duty took me out—he was probably from Luhansk, dressed in civilian clothes. This guy from Luhansk was fired in a couple of days, he was about 170 cm tall, full-figured, 'a disgusting animal', shaved, with a 5 cm haircut, dark blond hair... [In the interrogation room I was told:] 'Write down the access to your [bank account] and who you sent money to in the Ukrainian army.' The Luhansk guard was beating me with a rubber baton... When they took me out [for interrogation] the second time, they put handcuffs on me in front, took me out of the cell, and put them on in the corridor. There was a soldier with him [the officer on duty from Luhansk], but he didn't go into the office. As the 'Luhansk' soldier led me down the corridor, he started beating me with a baton there."*¹¹³⁷

This excerpt highlights that this person likely acted as a co-perpetrator, since he was not acting in his individual capacity, nor only assisting in the commission of the crime. To the contrary, that person likely shared joint control over the crime(s) through his essential contribution to a common plan or agreement that comprised the imprisonment, inhuman treatment, and torture of many other civilian detainees. The decisive factor is that the person appears to have shared

the intent behind the torture of the anonymized victim, to obtain information.

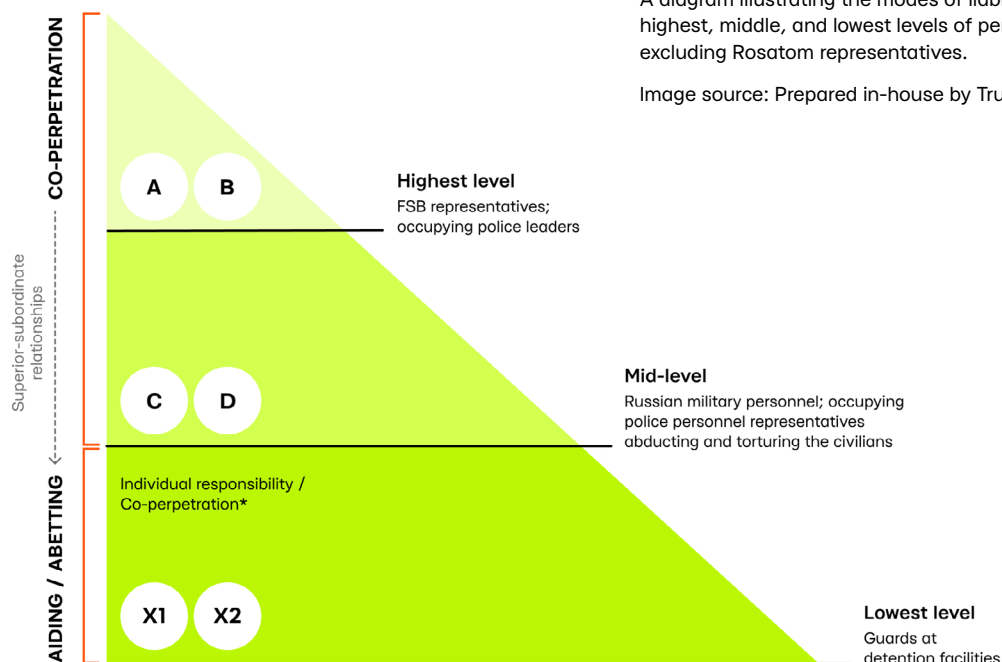
Depending on whether there has been a common plan or an agreement between such low-ranked perpetrators and the higher-ranked perpetrators and whether such lower-ranked perpetrators have essentially contributed to the plan or agreement, they might be considered co-perpetrators, even if this is unlikely due to the higher threshold under that mode of liability. These people can otherwise be considered individual perpetrators if they tortured prisoners in their personal capacity, not to facilitate the commission of the principals' crimes and not pursuant to a common plan or agreement. Given the pattern of systematic crimes in this situation, however, that is less likely.

It is challenging to determine the precise modes of liability for the key leadership of Rosatom, including the so-called "Zaporizhzhnia Nuclear Power Plant Operating Organization" which is owned by Rosenergoatom. As mentioned in [Subsection 2.5](#), in most documented cases, Rosatom representatives merely summoned Ukrainian ZNPP personnel to appear before Russian occupying forces, who would then abduct these employees, place them in detention facilities, and subject them to inhuman treatment and torture. However, in certain documented instances, Rosatom representatives were present alongside Russian security forces during the interrogation sessions of Ukrainian ZNPP employees at the plant and participated in the sessions by questioning the person being interrogated. In the first scenario, it is likely that the Rosatom representative significantly assisted the commission of the physical or psychological pain or suffering against a ZNPP worker by a security forces representative, which amounts to aiding, unless the specific intent of facilitation is not proven.

In the second scenario, the presence of a Rosatom representative along with the security forces representative likely constituted a tacit encouragement of the psychological pain or suffering inflicted on the worker, which amounts to aiding or abetting, unless specific intent is not proven. If a Rosatom representative also participated in the inflicting of physical or psychological pain or suffering, that would likely fall under the scope of co-perpetration. Whether the Rosatom repre-

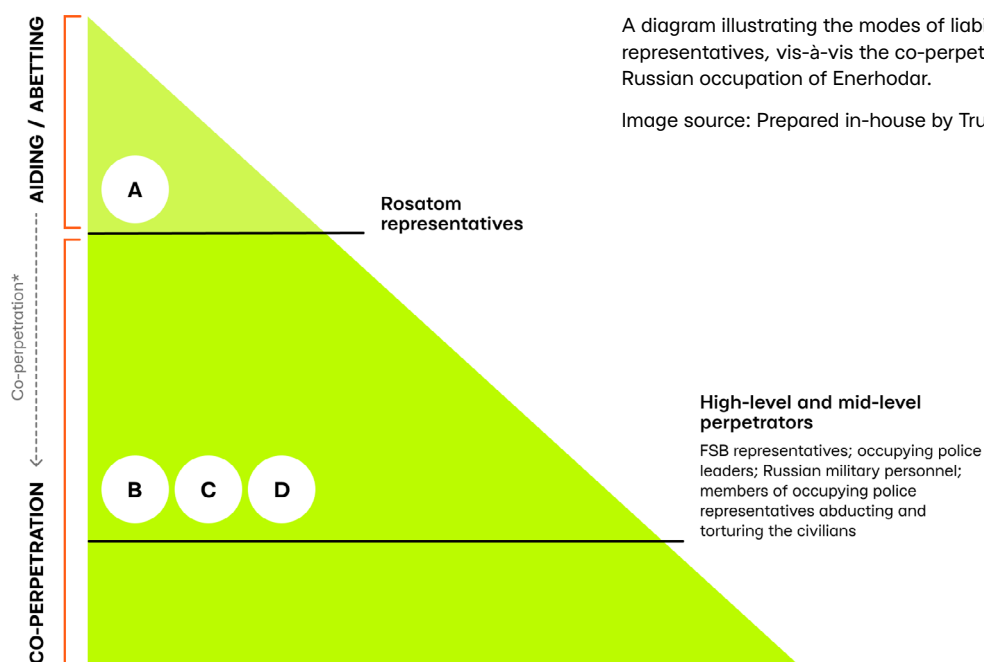
sentative solely intended to facilitate the commission of torture or they also had the specific intent of torture, namely obtaining information or a confession, of punishing, intimidating, humiliating or coercing the victim or a third person, or of discriminating, on any ground, against the worker, will be decisive in distinguishing aiding or abetting from co-perpetration.¹¹³⁸

¹¹³⁸ As stated earlier, the perpetrator's co-perpetration is established if there is a common plan or agreement and the perpetrator's essential contribution to that plan or agreement is proven.



A diagram illustrating the modes of liability relating to the highest, middle, and lowest levels of perpetrators in the case, excluding Rosatom representatives.

Image source: Prepared in-house by Truth Hounds experts.



A diagram illustrating the modes of liability relating to Rosatom representatives, vis-à-vis the co-perpetrators in the case of the Russian occupation of Enerhodar.

Image source: Prepared in-house by Truth Hounds experts.

5.5. Rosatom's Liability for Human Rights Abuses in the Occupied Territories

The international legal framework for human rights has evolved to place a heightened emphasis on corporate responsibility. While states have traditionally borne sole responsibility for human rights, the rise of multinational enterprises has led to a growing consensus that businesses must also ensure their operations do not contribute to human rights abuses.

- **Key UN initiatives:** Guidelines like the UN Guiding Principles on Business and Human Rights and the UN Global Compact provide a framework for companies to conduct due diligence and behave responsibly. Additionally, the UN Working Group on Business and Human Rights actively promotes these standards by communicating with states and corporations about alleged violations. The Group's reports to the UN Human Rights Council can be used by advocates to strengthen their campaigns; and
- **Regional and local reinforcement:** This trend is supported by regional courts (*e.g.*, the Inter-American and African Courts) and regulations (*e.g.*, the EU's Corporate Sustainability Reporting Directive), which hold businesses accountable for their human rights impact.

While the ICC currently lacks jurisdiction over corporations as legal entities, it may prosecute individual corporate officers for their involvement in international crimes. This is an important distinction and is complemented by several other avenues to hold companies and their management accountable, including:

- **State-level mechanisms:** Foreign governments can impose financial sanctions on Rosatom and its leadership, launch criminal

investigations under universal jurisdiction, and bar Rosatom-linked companies from public procurement;

- **Corporate mechanisms:** Other global businesses that continue to cooperate with Rosatom face significant legal, economic, and reputational risks, given the company's involvement in war crimes and its role in funding the Russian state; and
- **Civil society:** Organizations and journalists play a vital role in documenting and publicizing Rosatom's conduct at the ZNPP, raising awareness, and applying pressure on international businesses and governments.

This multi-scale legal and non-legal landscape is highly relevant to the actions of Rosatom with respect to the case of the Russian occupation of Enerhodar. Documented evidence indicates that Rosatom's senior management is complicit in the abduction, detention, and torture of Ukrainian employees at the ZNPP. These abuses served a direct corporate purpose: coercing staff to sign new contracts to facilitate Rosatom's business operations in an occupied territory.

For a more detailed overview of these frameworks, legal precedents, and specific findings, see [Annex IV](#).

5.6. Conclusion

The cases analyzed in this section cover at least 226 cases of the unlawful detention of civilian residents of Enerhodar, including ZNPP employees. Most cases involved inhuman treatment and torture. Documented torture methods included beatings, electrocution, sexual violence, and psychological pressure through threats, including against family members. The analysis in this section reveals that these actions collectively form a pattern of unlawful incidents committed against significant numbers of the civilian population in Enerhodar and the surrounding area, clearly organized in a manner that precludes their accidental commission. Moreover, these violations form part of a systematic state policy of the Russian Federation in the occupied territories.

The scale and deliberate nature of documented violations constitute two categories of ICL violations. First, they constitute crimes against humanity, given the widespread and systematic nature of the torture and unlawful detention of the civilian population in violation of fundamental international law norms. Second, they constitute war crimes, in particular, including torture.

While more investigation of individual perpetrators is needed, the available information is sufficient to indicate that individuals involved in these violations are responsible as direct perpetrators, co-perpetrators, and aiders and abettors of the crimes. Finally, Rosatom's role in the occupying regime raises fundamental questions of corporate responsibility during armed conflicts, particularly given the corporation's continued presence in the global nuclear sector.

Conclusions

Russian forces' forcible seizure of the ZNPP on March 4, 2022, marked the first military occupation of an operational nuclear power plant in history. The ZNPP's seizure in itself constituted a gross violation of IHL and ICL provisions protecting civilian objects during armed conflict, particularly concerning those containing dangerous forces. However, as our research has demonstrated, the plant's seizure was only the beginning of a series of systematic, willful breaches of both human rights and nuclear safety and security under Russian occupation.

Russia's establishment of control over Enerhodar, the ZNPP's satellite city, unfolded in a number of distinct phases.

The initial stage, spanning March to April 2022, displayed significant disorder in Russian military control. This was manifested in the chaotic mining of the ZNPP without creating mine maps, repeated "captures" of facilities already controlled by different Russian units, and the absence of a clear administrative hierarchy. Local Ukrainian authorities continued to function during this period, organizing civilian evacuations, maintaining municipal services, and ensuring food supply channels to the city. Active civil resistance to occupation continued simultaneously, expressed through mass demonstrations and local institutions' refusal to cooperate with the occupying forces.

The militarization of the nuclear facility constituted another significant development. The Russian Federation deployed a significant military contingent and heavy equipment there, gradually transforming the plant into military infrastructure. Such actions violate IHL provisions for special protection of nuclear facilities during armed conflict.

The occupying regime underwent a structural transformation in late March through early April

2022. Occupying administrative bodies formed and began displacing Ukrainian municipal authorities and pro-Russian and Russian-controlled media and law enforcement agencies also emerged. The occupying Russian forces' violent suppression of peaceful protests on April 2, 2022, marked a turning point. Repressive measures became organized afterward, clearly targeting territorial defense participants, veterans of Ukraine's military operations in eastern Ukraine, and pro-Ukrainian activists, particularly among ZNPP employees.

Occupying Russian forces created a network of at least five detention facilities in Enerhodar and the surrounding area, alongside two smaller sites in and around the city. The sites in question include both permanent facilities and temporary detention points. This network illustrates the establishment of an organized repressive apparatus that became integral to the governance of the occupation. Authorities placed detainees in overcrowded cells with limited access to food and water, with unhygienic conditions that caused longer-term health and psychological damage. Medical assistance was either denied entirely or provided only when life was directly threatened. This indicates methodical practices of unlawful detention, inhuman treatment, and torture.

Russia's announcement of the annexation of Zaporizhzhia Oblast on September 30, 2022, marked the institutionalization of occupation control. This allowed the occupying administration to invoke the Russian legal framework to justify the city's complete integration, including the captured ZNPP, into Russia's administrative system. This cemented territorial control mechanisms that had effectively functioned since Spring 2022. In particular, the annexation led to personnel changes in plant management and systematized the pre-existing campaign designed to force Ukrainian ZNPP personnel to sign contracts with Rosatom.

Rosatom's role simultaneously transformed from technical management of the captured plant to key participation in the occupational control system of the entire city. This transformation occurred through two main mechanisms. First, through financial control, which was primarily manifested in Enerhodar's budget formation through corporate subsidies and allocations. Second, through its personnel strategy, involving targeted appointments to key administrative positions of individuals with prior Rosatom experience, thereby ensuring an institutional connection between corporate interests and local governance.

Beyond the continuous militarization of the nuclear plant from the first days of the full-scale invasion, this stage witnessed coordinated repressive pressure by Russian forces on the ZNPP's technical personnel. Documented cases include nuclear reactor management specialists being forced to work after experiencing physical and psychological violence. These systematic abuses create significant nuclear safety threats, given that operators' psycho-physical condition constitutes a critical factor for safe nuclear plant operation. ZNPP employees became a priority target group for the occupying regime's repressive policy during this stage, differing from the period before the official integration of the city into Russia's administrative system, when they faced repression at the same level as other categories of the civilian population.

Truth Hounds documented at least 226 cases of the unlawful detention of civilian residents of Enerhodar, including ZNPP employees. Most cases involved inhuman treatment and torture. Documented torture methods included beatings, electrocution, sexual violence, and psychological pressure through threats, including against family members. An ICL analysis shows these actions collectively form a pattern of unlawful incidents committed against a significant part of the civilian population in Enerhodar and the surrounding area (indicating "widespread" crimes) that were clearly organized, making accidental commission impossible (indicating "systematic" crimes). The analysis in this report demonstrates that human rights violations in Enerhodar and the surrounding area—particularly abductions, torture, and inhuman treatment of civilians—form part of a

systematic state policy of the Russian Federation in the occupied territories of Ukraine.

The scale and deliberate nature of documented violations constitute two categories of ICL violations. First, they constitute crimes against humanity, given the widespread and systematic nature of the torture and unlawful detention of the civilian population in violation of fundamental international law norms. Second, they constitute war crimes, demonstrated by the targeted commission of these violations, particularly torture, against civilians during an armed conflict.

Truth Hounds documented the participation of individuals identifying themselves as Rosatom employees in the detention of ZNPP personnel, with subsequent coercion to sign contracts with the corporation. This demonstrates how corporate interests became integrated into repressive mechanisms of occupational control.

Rosatom's role in the occupying regime raises fundamental questions of corporate responsibility during armed conflicts, particularly given the corporation's continued presence in the global nuclear sector. The corporation controls 44% of global uranium enrichment capacity and has nearly doubled its growth in nuclear fuel exports to Europe between 2021 and 2023. Rosatom's management of nuclear projects in 33 countries provides the corporation with a critical technological partner status for many states.

Parallel to intensified international activities, even under sanctions imposed against the Russian Federation, the corporation continues using profits from these contracts to support Enerhodar's occupying regime—a regime with a distinctly repressive character in deep conflict with basic human rights principles. This support encompasses not only financial resources but also managerial expertise and human capital developed through general corporate activities, particularly through active participation in international projects, which generates corresponding organizational competencies.

Rosatom's participation in the UN Global Compact, the world's largest corporate sustainability initiative founded under the auspices of the UN,

appears paradoxical against this background. The UN Global Compact requires businesses to commit to adhering to the ten principles in the areas of human rights, labor, the environment, and anti-corruption. Since October 2020, Rosatom has participated in this initiative, committing to respect internationally recognized human rights and prevent complicity in their violation.

However, as this report demonstrates, the violations that have taken place at the ZNPP and in Enerhodar with the tacit consent of or active facilitation by the corporation question the sincerity of that commitment. Participation in this initiative is fundamentally incompatible with how the corporation manages its operations. Moreover, Rosatom itself bears responsibility for violating the IAEA's seven pillars of nuclear safety and security, particularly regarding ensuring personnel's ability to fulfill duties and make decisions without undue external pressure. Several other principles, such as ensuring a reliable external power supply from the general grid, faced significant challenges due to the occupying forces' actions.

This unprecedented convergence of nuclear risks and deliberate human rights violations demands an immediate international response. The combination of risks and challenges requires urgent consideration and concrete decisions by international stakeholders. Based on Truth Hounds' analysis and expertise, we have developed recommendations to guide further action.

Recommendations

To foreign governments and criminal justice authorities:

- Investigate crimes under universal jurisdiction, including:
 - Investigations into torture and other serious violations of IHL in Enerhodar, including Rosatom's potential complicity; and
 - Investigate these abuses as crimes against humanity, given their widespread and systematic nature and hold both individual perpetrators and corporate enablers, including Rosatom, accountable.
- End cooperation with Rosatom, including by:
 - Suspending or terminating existing contracts with Rosatom and its subsidiaries due to their involvement in serious IHL violations;
 - Not entering into new partnerships with Rosatom, given its legal, ethical, and reputational risks; and
 - Banning Rosatom-linked entities from public procurement and energy sector partnerships.
- Impose expanded targeted sanctions by:
 - Broadening and imposing punitive sanctions against Rosatom, especially in the EU and other states yet to act, including:
 - Bans on new contracts and existing nuclear cooperation;
 - Restrictions on equipment, services, and technology exports;
 - Financial sanctions—asset freezes and transaction bans;
 - Export/import controls on nuclear materials, especially enriched uranium; and
 - Sanctions on Rosatom subsidiaries tied to military procurement and nuclear weapons development; and
- Call on Russia to release all unlawfully detained Ukrainian civilians, including Enerhodar residents and ZNPP employees.

To the bodies of the UN: The UN Secretary General:

- Appoint a Special Envoy for the Protection of Civilian Infrastructure and Nuclear Safety in Armed Conflict who is mandated to:
 - Coordinate international efforts to ensure the demilitarization of the ZNPP and the protection of nuclear facilities in Ukraine;
 - Engage directly with all relevant parties, including the Russian Federation, to secure the immediate withdrawal of military personnel and equipment from the plant;
 - Serve as a dedicated focal point for monitoring threats to nuclear facilities in conflict zones or areas at risk of political instability, including nuclear power plants in regions with rising tensions and report regularly to the UN Security Council and General

- Assembly on the status of the ZNPP and other critical civilian infrastructure;
- Facilitate cooperation with the IAEA and the Office of the High Commissioner for Human Rights (OHCHR) to ensure independent monitoring, risk assessment, and accountability for IHL violations; and
- Reinforce international norms under IHL and human rights law regarding the protection of nuclear infrastructure, advocate adherence to the IAEA's Seven Indispensable Pillars of Nuclear Safety and Security and to the Five Concrete Principles in all conflict-affected areas, and push for the inclusion of nuclear safety protections in UN Security Council resolutions, peacekeeping mandates, and ceasefire agreements.

Concrete Principles, naming the responsible party when evidence is clear;

- Publishing frequent and detailed public reports, with annexes containing factual incident logs, timelines, and photographic or sensor evidence; and
 - Briefing the UN Security Council and General Assembly with clear language on violations, highlighting both immediate risks and structural threats caused by military control and staff coercion; and
- Demand Rosatom's full compliance with both the Seven Pillars of Nuclear Safety and Security and the Five Concrete Principles at the ZNPP and work to prevent any restarting of the plant under military occupation without independent oversight.

OHCHR:

- Increasing monitoring and public condemnation by:
- Incorporating findings on systematic detention and torture in Enerhodar into OHCHR reports and deploying investigative teams; and
 - Publicly calling for the immediate release of unlawfully detained civilians, including Enerhodar residents and ZNPP staff; and

UN Global Compact:

- Assess Rosatom's compliance with UN Global Compact principles. If violations are confirmed, immediately suspend its membership to uphold the Compact's integrity.

To the IAEA:

- Publicly document and attribute safety violations by:
- Moving beyond generic safety updates to specifically document instances where occupational practices violate both the IAEA's Seven Indispensable Pillars and the Five

To the Council of Europe Commissioner for Human Rights:

- Conduct a thematic investigation and public reporting, including by:
- Launching a special thematic report on human rights violations against ZNPP personnel and Enerhodar residents, documenting arbitrary detention, torture, coercion, and restrictions on freedom of movement, highlighting the direct connection between these abuses and compromised nuclear safety culture;
 - Including ZNPP-related findings in annual or *ad hoc* reports to the Committee of Ministers and Parliamentary Assembly of the Council of Europe;
 - Issuing formal public statements naming Russia's treatment of ZNPP staff and Enerhodar civilians as violations of the European Convention on Human Rights and IHL; and
 - Organizing public hearings or expert panels focused on "Human Rights in Occupied Nuclear Facilities", using the ZNPP as the primary case study to highlight the connections between the nuclear safety threat

- and the grave human rights emergency in and around the ZNPP.
- Mobilize members to demand governments cut ties with Rosatom and support persecuted Ukrainian energy workers.

To Ukrainian State institutions:

- **The Ministry of Foreign Affairs:**
 - Integrate report findings into diplomatic efforts, international statements, and submissions to global bodies.
- **Energatom (Ukraine's state-owned nuclear power generation company):**
 - Use these report findings in public communications and international engagement with nuclear institutions.
- **The Office of the Prosecutor General:**
 - Include evidence from this report in ongoing investigations of IHL violations in Enerhodar, addressing both individual and institutional accountability, including Rosatom; and
- **Law enforcement:**
 - Ensure legal assessments of ZNPP personnel and civilians under occupation reflect the coercive environment, including torture and threats, limiting voluntary agency.

To civil society organizations, environmental activists, and the academic and scientific communities:

- Publicly recognize the ZNPP as a high-risk environmental and public health issue;
- Raise awareness of the situation at the ZNPP and demand justice by engaging governments, supporting justice and accountability for torture survivors and detainees, and conducting further research to further elucidate the issues detailed in this report;
- Advocate for full compliance with international safety standards, oppose any plant restart under occupation and push for the site's demilitarization;
- Further engage with ways in which survivors of repression and their families can be assisted in terms of psychological, legal, and humanitarian support; and
- Call on Russia to release all unlawfully detained Ukrainian civilians, including Enerhodar residents and ZNPP employees.

To nuclear sector businesses:

- Cease all direct and indirect ties with Rosatom due to its role in grave human rights violations and nuclear safety breaches.

To international trade unions:

- Publicly condemn Rosatom's involvement in human rights abuses, war crimes and crimes against humanity; and

This list of recommendations and addressees is not exhaustive. Institutions, organizations, and individuals with the capacity and mandate to advance the objectives outlined above are also encouraged to take appropriate action to prevent further safety, security, and human rights breaches and to ensure accountability for the violations examined in this report.

Annex I. Recent and Distant History of Enerhodar as a Satellite City

Local Context and Demographic Background

Modern Enerhodar's territory lies within the Lower Dnipro region, an area that for centuries has developed as a space of civilizational interaction and intense demographic shifts. This was the site of the Great Meadow,¹¹³⁹ an important military and economic complex of the Cossack era that left a lasting imprint on the region's cultural landscape. Since the 1950s, part of these historic lands has been submerged beneath the waters of the Kakhovka Reservoir, which engulfed the inner delta of the River Dnipro, along with its floodplains, forests, swamps, and floodplain islands, forever changing the approaches to nature management within the region and beyond.¹¹⁴⁰

The current ethnic map of this part of Ukraine's south formed as a result of its gradual development, from spontaneous Ukrainian colonization and the Cossacks movement to the expansion of the Grand Duchy of Lithuania, the Polish-Lithuanian Commonwealth, and later the Russian Empire.¹¹⁴¹ Settlement processes intensified in the 18th and 19th centuries, resulting in a demographic pattern wherein different ethnic communities often lived side by side. This occurred, among other factors, due to the empire's stimulation of capital investment, encouragement of migration, and the prevalence of the "military settlement" model¹¹⁴² during that period.

In the late 19th century, the region where the city of Enerhodar would eventually emerge was marked by ethnolinguistic and cultural diversity. Data from the first general census of the Russian Empire in 1897 indicates that, on the territory of the Melitopol povit¹¹⁴³ of Tavria Province, 54.9% of

the population identified Ukrainian as their native language, 32.8% as Russian, 5.2% as German, and 4.2% as Yiddish.¹¹⁴⁴ A slightly different linguistic profile was observed further north, in areas such as the Oleksandriia povit of Katerynoslav Province, where 82.5% reported Ukrainian as their native language, 5.7% as Russian, 5.1% as German, and 5.2% as Yiddish.¹¹⁴⁵

This historical feature remained evident at the turn of the 21st century. According to the 2001 Ukrainian census, Ukrainians made up 57.14% of Enerhodar's population, Russians 39.83%, and other nationalities 3.03%.¹¹⁴⁶

At the same time, nearly 62% of the city's residents considered Russian to be their native language, while 37.8% identified Ukrainian as their native language.¹¹⁴⁷ Moreover, a so-called "ethnic divide" was recorded in neighbouring villages: in Vodiane, Ukrainians accounted for 92.6% of the population, whereas, in the nearby village of Dniprovka, Russians constituted the majority (78.6%).¹¹⁴⁸

Such ethno-demographic dynamics spanning more than a century reveal two interconnected aspects. On the one hand, the region has historically developed from a complex ethnocultural mosaic characterised by multilingualism, which precludes its categorisation as "monocultural". On the other hand, demographic data consistently demonstrates the numerical predominance of the Ukrainian population. Together, these demographic features underscore the intricacy of the region's ethnocultural structure and call into question official Russian claims that the Lower Dnipro region belongs to "historically Russian lands"—a narrative used in contemporary Russian political discourse to justify territorial claims.¹¹⁴⁹

The Founding of Enerhodar

Enerhodar is one of Ukraine's youngest cities—part of the Soviet Union's "flagship construction projects"¹¹⁵⁰ in the Ukrainian Soviet Socialist Republic.¹¹⁵¹ The city was established on June 12, 1970, when a granite stone was set among the dunes on the bank of the Kakhovka Reservoir on the River Dnipro to mark the start of the construction of the Zaporizhzhia Thermal Power Plant (ZTPP). The plant was named after the regional center, the city of Zaporizhzhia, and the commemorative stone included a reference to a new, as yet unnamed, settlement.¹¹⁵² The construction manager, engineer Rem Henoch, later recalled in his memoirs: "It was hard to imagine that there was such a wild corner of semidesert and sand in the center of Ukraine."¹¹⁵³ It was Henoch himself who insisted that the ZTPP be constructed on the Ivanivski Hills on the banks of the Dnipro.¹¹⁵⁴

During the 1970s, the settlement, which still held small town status, gradually expanded. Its first residents were engineers, construction workers, and power industry specialists who arrived from different parts of Ukraine and other Soviet republics to build the ZTPP. The first residential high-rise building was commissioned in December 1970.¹¹⁵⁵ In November 1972, the settlement was officially named Enerhodar. It was granted city status 15 years after its establishment, in 1985, when its population had surpassed 40,000 people and the town had developed modern infrastructure.¹¹⁵⁶

The typical practice at the time of constructing temporary housing for construction workers was abandoned in favour of building permanent residences and settling part of the workforce in surrounding villages.¹¹⁵⁷ The first and second microdistrict residential buildings were built using modular construction technology. Block rooms, manufactured at a factory in Dnipropetrovsk Oblast, were floated down the River Dnipro on barges and transported by rail to the city of Dniprorudne. From there, they were delivered by truck to Enerhodar, where they were assembled using cranes and then clad with exterior panels.¹¹⁵⁸

Interestingly, the sources of that time reflect a high level of industrial construction, significantly superior in quality to the construction of

residential buildings.¹¹⁵⁹ Most criticism targeted the standardized nature of the project, the monotony of architectural forms, the low quality of materials, and builders' negligence.¹¹⁶⁰ "Neither the architecture of the buildings, nor the level of apartment amenities, nor the urban planning itself come anywhere near similar foreign localities, even those in developing countries. This is not only about Enerhodar, this is an issue with all newbuilds", Henoch wrote.¹¹⁶¹

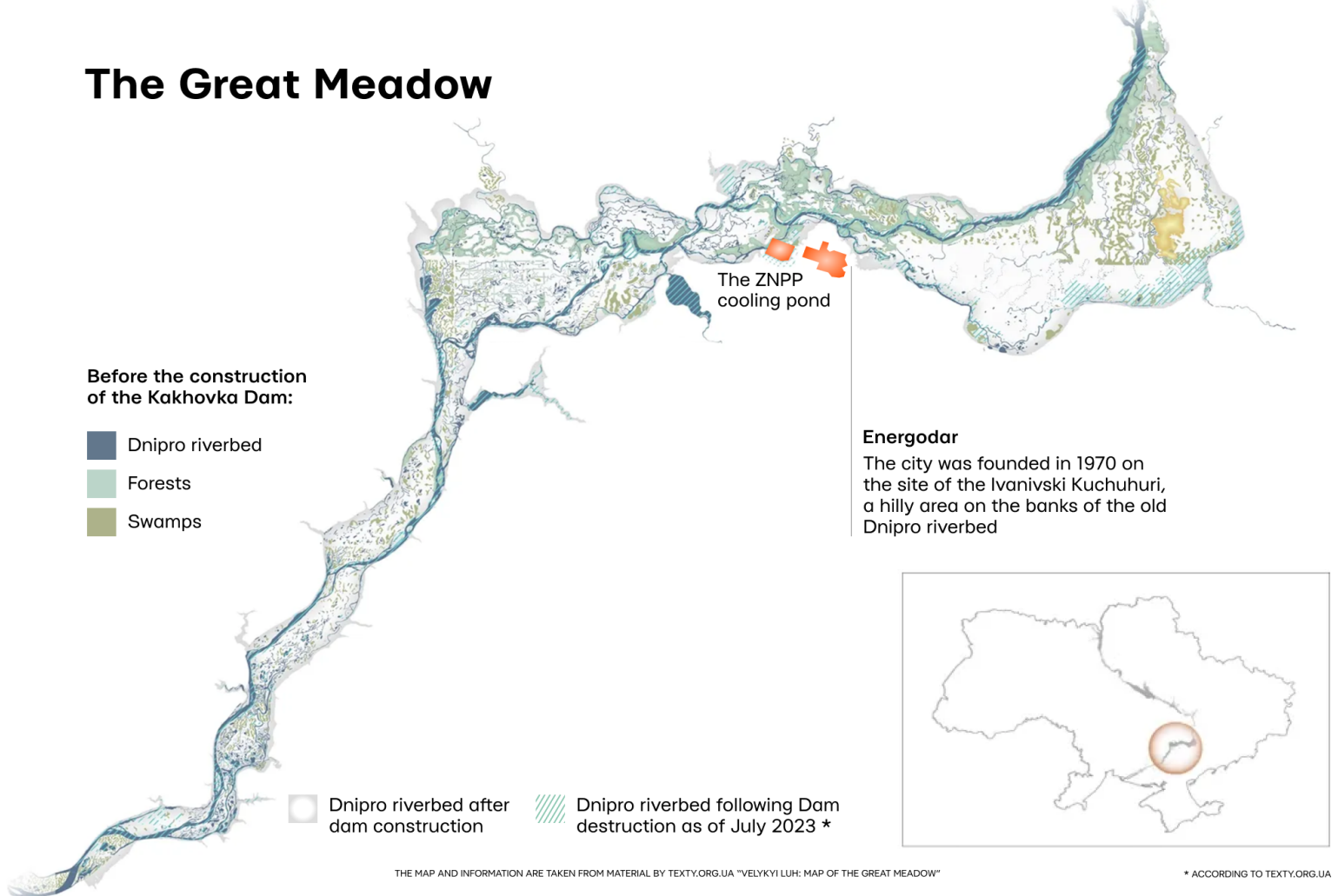
The Zaporizhzhia Nuclear Power Plant and the Establishment of the Satellite City

A turning point in Enerhodar's history came in 1978, when the decision was made to construct a nuclear power plant, a project that unfolded over the following decade. Given that nuclear energy was one of the Soviet Union's key priorities during the 1970s and since Enerhodar already hosted a large population of skilled construction workers, Communist Party leadership had little hesitation in selecting the site for the future ZNPP.¹¹⁶² The plant was designed as a series of monoblocks, with sufficient spacing between them to allow for the deployment of assembly cranes, to ensure a separate engine room for each reactor unit.¹¹⁶³



Power line supports were built on the shore, after which they were towed to the installation sites in the Kakhovka Reservoir. Image source: Provided from a private archive.

The Great Meadow



The first power unit was commissioned in 1984, followed by four more over the next five years. Following the Chernobyl disaster in April 1986, the government of the Ukrainian Soviet Socialist Republic imposed a moratorium on the construction of nuclear power plants. As a result, the completion of the sixth and final power unit at the ZNPP was delayed until 1995, after an independent Ukraine lifted the moratorium.¹¹⁶⁴

As might be expected, given the scale of the ZNPP and the ZTPP, Enerhodar soon became known as Ukraine's energy capital. As of 2019, the number of employees at the nuclear power plant alone reached around 11,000 people, covering almost a quarter of the city's population.¹¹⁶⁵ In January 2021, the ZNPP reached its full design capacity of 6,000 MW for the first time.¹¹⁶⁶

While the small, unnamed settlement was going through development phases, from acquiring city status to transforming into a satellite city (or "nuclear city"),¹¹⁶⁷ other enterprises were emerging. Most of them were founded in the 1970s and 1980s, including a factory for non-standard equipment and pipelines, a special structures facto-

ry, a concrete production facility, and others.¹¹⁶⁸ Schools, kindergartens, utility companies, and prominent tourist and cultural establishments, such as the Enerhodar Hotel or the Suchasnyk Palace of Culture also provided jobs in Enerhodar.¹¹⁶⁹ Nevertheless, the nuclear energy giant remained the city's primary employer.

Similar satellite cities began to appear across various parts of the Soviet Union in the mid-20th century. In Ukraine, there are six similar urban projects: Prypiat, Varash (Kuznetsovsk before 2016), Netishyn, Enerhodar, Pivdennoukrainsk (Yuzhnoukrainsk before 2024), and Slavutych.¹¹⁷⁰ For analytical convenience, these "nuclear cities" can be categorized into "military" and "civilian". The former were "closed administrative-territorial entities" with limited access and strict regulations in line with defense industry standards. The latter, including Enerhodar, embodied the widely propagated Soviet slogan of the "peaceful atom".¹¹⁷¹

Thus, five of the six satellite cities were built with a standardized design, placing the nuclear power plant at some distance from the city, yet connecting the two with a wide avenue. Classic "nuclear

cities” also incorporated relatively autonomous and accessible infrastructural solutions, which can be explained through the concept of a “microdistrict” (i.e., a residential area with high-rise buildings designed to meet the basic needs of workers and their families within walking distance, with proximity to educational and medical facilities).¹¹⁷²

While similar, Enerhodar differs from the other satellite cities whose construction was completed before the Chernobyl disaster. One distinctive feature was the presence of five-story buildings in its first and second microdistricts, which emerged due to unplanned changes in executive decisions at the urban design and approval stages of the city’s master plan. Since the Soviet authorities did not originally plan for the construction of the ZNPP in Enerhodar, the first urban planning project, among other things, did not include nine-story residential buildings and thus differed from the typical look of other Ukrainian “nuclear cities” of that period.¹¹⁷³



The Enerhodar Hotel and Skif restaurant. Image source: «Fragile Heritage» («Крихка спадщина»), Instagram: @fragile_heritage.

Symbolic Space and the Public Life of the City

The toponymic landscape of Enerhodar changed with the implementation of Ukraine’s nationwide decommunization policy in 2015–2016. For example, *Komsomolska* Street (named after a political youth organization in the Soviet Union) was renamed *Molodizhna* (“Youth”) Street, while *Radianska* (“Soviet”) Street became *Ukrains-*

ka (“Ukrainian”) Street. Despite preserving the original Soviet urban planning with characteristic features of a “nuclear city”, public spaces in Enerhodar experienced a notable transformation of aesthetic ideas and approaches.

This became particularly noticeable over time, when the city gradually filled with advertising spaces and commercial facilities—their emergence clearly showed how the urban space of Enerhodar collects different, often competing narratives and conjunctions. In turn, this created a visual dissonance in Soviet-era architecture, typical of many post-Soviet cities, marked by layering the original aesthetic vision with the visual codes of a later era.

A similar process took place with memorial sites, which over time came to embody multiple—and not always consistent—meanings, thereby complicating contemporary efforts to interpret the past. In 2001, a memorial sign was erected next to the *Harmoniia* Gymnasium (high school) in honour of Serhii Lohinov, a sailor from Enerhodar who served in the Northern Fleet of the Russian Navy and died in August 2000 alongside 119 other sailors on the *Kursk* submarine in the Barents Sea.¹¹⁷⁴ Meanwhile, in 2015, the first monument in Zaporizhzhia Oblast to commemorate the participants of the Anti-Terrorist Operation in the Luhansk and Donetsk Oblasts of Ukraine was erected nearby.¹¹⁷⁵

The events of 2013–14, including the Revolution of Dignity and the beginning of Russia’s aggression against Ukraine, became a turning point in the civic life of Enerhodar. In October 2014, the city buried volunteer soldier Serhii Poluliakha, the first Enerhodar resident to be killed in the Russo-Ukrainian War.¹¹⁷⁶

Following 2014, an increasing number of grassroots initiatives emerged in the city, including the *FreeDom* youth hub; the *Nadiia* charitable foundation, dedicated to animals; and the NGO *Peredova* (“Frontline”), which supported active participants and veterans of the Russo-Ukrainian War. The public (participatory) budget became an important tool for the development of local government: the annual funding of projects by the municipality of 10,000,000 UAH (approximately 239,160 USD) each became one of the highest allocations per capita in Ukraine.¹¹⁷⁷ A symbol-

ic rupture in this civic dynamic occurred after the Russian troops occupied Enerhodar, when the FreeDom youth hub was repurposed into the “Boiling Point: Resident” space.¹¹⁷⁸

The history of Enerhodar is the history of a city founded on the ideas of peaceful life and work and it eventually became an integral part of Ukraine’s independent energy system. For decades, thousands of energy specialists, engineers, and workers have supplied light and heat to millions of Ukrainian homes, hospitals, schools, and businesses every day. The Russian occupation of 2022 did not simply disrupt the usual way of life of the urban community, it altered the very purpose of the city, turning its “peaceful atom” into an instrument of coercion and threat.

Annex II. The ZNPP and Nuclear Infrastructure in Ukraine

Ukraine has four operational nuclear power plants: Khmelnytskyi, Khmelnytskyi Oblast; Rivne, Rivne Oblast; South Ukraine, Mykolaiv Oblast; and Zaporizhzhia, Zaporizhzhia Oblast. There are 15 operable reactor units distributed across these sites: two at Khmelnytskyi; four at Rivne; three at South Ukraine; and six at the ZNPP. All of the operable reactors are pressurised water reactors and were connected to the grid between 1980 and 2004.¹¹⁷⁹ Enerhoatom, a national state enterprise, owns and operates all of the nuclear power plants in Ukraine, which are overseen by the SNRIU. As explored in the main body of this Report, the ZNPP has, however, not been under the control of Enerhoatom since Russia's occupation in March 2022 and is currently disconnected from the Ukrainian grid. Alongside these operational nuclear power plants, Ukraine has the Chornobyl Nuclear Power Plant, the site of the 1986 major nuclear disaster. The plant comprised four RBMK-1000 reactors,¹¹⁸⁰ none of which have been operational since 2000.

The share of energy derived from nuclear sources has risen significantly since Ukraine's first nuclear power plant, Chornobyl, was connected to the grid in 1977. In Ukraine, as in other countries, nuclear power is primarily used as a baseload energy source to meet the minimum stable level of electricity demand, rather than spikes in demand. Following the beginning of Russia's war in 2014, nuclear power became the dominant energy source in Ukraine. Indeed, the percentage of electricity derived from nuclear sources rose from 43.6% in 2013 to 56.5% at its peak in 2015.¹¹⁸¹ This increase can be partly attributed to the war's disruption of Ukraine's coal industry—all of Ukraine's anthracite (hard coal) mines are located in the coal-rich eastern Donetsk and Luhansk Oblasts,¹¹⁸² both of which have been partially occupied since

2014. Since the initial post-2014 increase in the share of electricity derived from nuclear sources in Ukraine, its share has remained stable, representing an average of 53.6% of all energy between 2015 and 2023.¹¹⁸³

Several measures have been taken to reduce any dependence on Russian energy infrastructure in Ukraine. In March 2022, for example, Ukraine and Moldova disconnected their grids from the Russian-operated IPS/UPS transmission grid and synchronized them to that of the European Union, a year ahead of schedule.¹¹⁸⁴ In addition, Enerhoatom signed an agreement with Westinghouse Nuclear in June 2022 for the American corporation to provide all of the fuel for Ukraine's nuclear reactors.¹¹⁸⁵

Notably, the percentage of electricity derived from nuclear power has not significantly changed since Russia's full-scale invasion of Ukraine, despite the disconnection of the ZNPP from the Ukrainian grid. In 2022 and 2023, more than half of Ukraine's electricity continued to come from nuclear power, representing approximately 55% and 50.7% of the overall energy consumed, respectively.¹¹⁸⁶ This can largely be attributed to Ukraine's reduced electricity consumption during the full-scale invasion, stemming from the departure of refugees and initiatives to reduce electricity consumption.¹¹⁸⁷ According to the International Energy Agency, industrial power consumption in Ukraine halved between 2022 and the end of 2024, while household consumption reduced by 20%.¹¹⁸⁸ Ukraine thus remains heavily dependent on nuclear power for electricity, with its reliance on nuclear power surpassed only by France and Slovakia, which, in 2023, derived 65% and 62% of their electricity from nuclear power, respectively.¹¹⁸⁹

The largest of Ukraine's—and Europe's—nuclear power plants, the ZNPP, has six reactor units—all VVER V-320 models that were connected to the grid between 1984 and 1995.¹¹⁹⁰ The power plant's 6 GW energy production capacity was crucial to meeting Ukraine's energy demands before the full-scale invasion. Indeed, in 2021, the ZNPP generated approximately one quarter of Ukraine's electricity supply, constituting almost half of Ukraine's nuclear power generation.¹¹⁹¹

Russia's occupation of the ZNPP and the resulting loss of 6 GW of energy production capacity, enough to power all of Portugal,¹¹⁹² has had significant consequences for Ukraine's energy security. The remaining Ukrainian-controlled nuclear reactors have, by comparison, a total generation capacity of just under 8 GW.¹¹⁹³ In addition, extensive Russian attacks have disrupted the functioning of transformer substations that deliver energy to Ukraine's nuclear plants and distribute their power to the country. For example, the IAEA reported in November 2024 that the ability of substations to provide reliable off-site power to Ukrainian nuclear power plants was "significantly reduced" due to damage to equipment at all seven critical substations and loss of the grid's internal capacity.¹¹⁹⁴ Moreover, four substations and power lines were damaged in mid-November 2024, prompting all of Ukraine's nuclear power plants to reduce output as a precaution.¹¹⁹⁵ As a result of this targeting of energy infrastructure, the transmission capacity of Ukraine's energy system has now been reduced from 56 GW before the full-scale invasion to an estimated 9 GW by the end of 2024.¹¹⁹⁶

This reduction in transmission capacity has direct nuclear safety implications. Damage to parts of the grid limits options for rerouting energy, compromising the safe functioning of nuclear plants. If a plant cannot offload its energy, it will typically go into automatic emergency shutdown. During the full-scale war, all of Ukraine's nuclear power plants have, on several occasions, undergone emergency shutdowns owing to Russian damage to the grid. The first simultaneous emergency shutdown (or "scram") of all four plants occurred in November 2022, when missile attacks on high-voltage cables, transformers, and substations led to a complete loss of off-site power.¹¹⁹⁷ While all nuclear plants are designed to shut down immediately in emergencies and diesel-powered generators begin

to power water through the spent fuel cooling ponds, this process poses risks if used too frequently. Repeated emergency shutdowns place significant strain on all components of nuclear power plants, through the resulting rapid contraction and subsequent expansion of parts when a plant is restarted, which can cause issues such as warping.¹¹⁹⁸

The loss of the ZNPP's generation capacity since the full-scale invasion and the issues faced by Ukraine's other nuclear plants are rendered even graver by Russia's ongoing attacks on other energy infrastructure in the country. By September 2024, it was estimated that Ukraine had lost 80% of its thermal power generation capacity due to Russian attacks.¹¹⁹⁹ More broadly, Russian forces had occupied, destroyed, or damaged two thirds of Ukraine's power generation capacity by Spring 2024.¹²⁰⁰ Renewable sources of energy have also been impacted, as more than 40% of Ukraine's solar and wind energy systems are in currently occupied territory.¹²⁰¹ This is especially true of wind power generation capabilities, which are concentrated in the partly-occupied Kherson and Zaporizhzhia Oblasts. Russia's destruction of the Kakhovka Dam in 2023, which had a capacity of approximately 335 MW, also significantly reduced Ukraine's hydroelectricity generation capacity.¹²⁰²

In light of this, recent reports of Russia's construction of power lines and a pumping station aiming to restart the ZNPP and divert its energy to the Russian grid take on further gravity. In particular, the notion of restarting one or more of the ZNPP's reactors raises serious questions for international nuclear security, particularly given the site's lack of cooling water (see [Subsection 3.3.3](#)). However, as this analysis has demonstrated, the possible connection of the ZNPP to the Russian grid also has far-reaching implications for Ukraine's energy security going forward.

Annex III. Russian Nuclear Blackmail against Ukrainian Nuclear Power Plants

The Russian Federation has repeatedly threatened to deploy nuclear weapons in its war on Ukraine.¹²⁰³ However, Russia's nuclear blackmail is much greater in scope, with Ukraine's nuclear power plants and their auxiliary infrastructure repeatedly coming under attack. This is an unprecedented situation. While non-operational nuclear facilities under construction have been targeted in previous conflicts, this has been primarily driven by counter-proliferation concerns in light of fears around the weaponization of nuclear programs.¹²⁰⁴ Ukraine's nuclear power plants are operational, meaning Russia's occupation of and armed attacks against these fully operational civilian nuclear power plants represent a risk of radiological release never before encountered.

In Russia's full-scale invasion of Ukraine, however, Russian threats of attacks on nuclear facilities in Ukraine have, as Darya Dolzikova of RUSI contends, come to be viewed as a "half-step" between the use of conventional weapons and an attack with nuclear weapons.¹²⁰⁵ As of late 2024, more than 70 drones and 30 Russian cruise missiles had been recorded flying in the vicinity of Ukrainian nuclear power plants.¹²⁰⁶ The deployment of these weapons takes place in the context of leaked Russian war planning documents revealing that Russia has long considered strikes on and threats against operational civilian nuclear power plants to be a tactic, despite its unprecedented nature. In particular, Russian planning documents for a potential conflict with Japan and South Korea, thought to date from 2013 or 2014, include plans to target civilian nuclear power plants, as well as other energy and critical national infrastructure.¹²⁰⁷

Beyond the occupation of the ZNPP and threats to nuclear safety detailed in the body of this report, Ukraine's four other nuclear power plants have also come under serious threat during Russia's full-scale war. The Chornobyl Nuclear Power Plant, fully decommissioned in 2000 following the 1986 disaster, came under attack on the first day of the full-scale invasion, when Russian forces occupied the plant. While Russia did not directly attack the plant's units during the 35-day occupation, actions taken by Russian forces during that time compromised the safe functioning of the plant. For example, Russian forces looted or damaged over 1,000 of the plant's computers,¹²⁰⁸ destroyed the plant's analytical laboratories for radiation monitoring, and stole, broke, and disabled analytical instruments.¹²⁰⁹ Radiation and other sensors were found to be inoperable when the occupation ended, due to a lack of required maintenance and specialized personnel. This hindered comprehensive monitoring of the site, in turn jeopardizing other safety systems and components.¹²¹⁰ Russian soldiers dug trenches in the notoriously highly radioactive Red Forest and dug up sand from the exclusion zone to use in sandbag fortifications.¹²¹¹ Ukraine reported spikes in radiation levels at the beginning and end of Russia's occupation of Chornobyl, which may be linked to Russian heavy military vehicles disturbing contaminated ground in the exclusion zone.¹²¹²

However, threats to the Chornobyl Nuclear Power Plant did subside with the withdrawal of Russian forces. The site continues to experience air raids¹²¹³ and on February 14, 2025, for example, Russia attacked the plant with a long-range Shahed 136 drone (also known by its Russian designation

“Geran-2”).¹²¹⁴ The attack, which coincided with the gathering of Western leaders at the Munich Security Conference, caused tens of millions of dollars worth of damage to the plant’s 1.5 billion EUR (approximately 1.7 billion USD) “New Safe Confinement” structure, which was completed in 2019 and which confines the radioactive remains of the destroyed Reactor No. 4.¹²¹⁵ While the strike did not provoke an immediate radiological release risk, the 15 m² hole in the structure’s outer roof caused a fire to break out in the inner cladding, which took three weeks to extinguish.¹²¹⁶ The attack also opened the structure to the elements, creating the potential for it to rust and for radioactive dust to escape.¹²¹⁷ Former UK military specialists at McKenzie Intelligence Services investigated the attack and concluded that the drone was almost certainly pre-programmed to strike the New Safe Confinement.¹²¹⁸ Ukraine’s Security Service has, in the meantime, opened criminal proceedings with respect to the attack.¹²¹⁹

Ukraine’s three other nuclear power plants, all of which continue to operate, have also come under Russian attack. In September 2022, for example, Ukraine’s second-largest nuclear power plant, the South Ukraine plant, was struck by a Russian missile. While the reactors themselves did not sustain damage, the missile detonated approximately 300 meters from the reactors and damaged the power plant buildings. The attack also damaged transmission lines and a nearby hydroelectric power plant.¹²²⁰ Shahed drones have subsequently repeatedly been detected flying near the plant.¹²²¹ According to Enerhoatom, there was a notable increase in drone sightings in proximity to Ukraine’s nuclear power plants in late 2024, likely related to Russian attempts to damage Ukraine’s energy infrastructure for the winter ahead.¹²²²

The Khmelnytskyi Nuclear Power Plant has also been targeted on numerous occasions. In one example, in October 2023, Shahed drones detonated in the vicinity of the plant, injuring 20 individuals and causing damage to an administrative and laboratory building and a power line.¹²²³ Similarly, on September 12, 2024, a Shahed drone was detected flying near the plant, but was subsequently downed by Ukraine’s air defenses. In response, Serhii Tiurin, head of the Khmelnytskyi Oblast Military Administration, stated that Russian drones repeatedly flying in close proximity to Ukrainian

nuclear power plants were “part of the Russian tactic of terror”.¹²²⁴ Again, on September 20 and 22, 2024, Shahed drones were detected flying close to the Khmelnytskyi Nuclear Power Plant,¹²²⁵ while, on October 28, 2024, a Shahed drone flew critically close to one of the plant’s units.¹²²⁶ Although the Rivne Nuclear Power Plant experienced fewer attacks, examples include an incident on the night of September 24, 2024, when a Russian unmanned aerial vehicle flew at a dangerously low height and almost struck the plant.¹²²⁷

Russia’s sustained targeting of Ukraine’s nuclear power plants demonstrates a clear disregard for international law, which, as is explored in the main body of this report, expressly prohibits attacks on nuclear facilities and nuclear safety more broadly. Indeed, the combination of attacks on critical nuclear infrastructure and on the plants themselves, mainly through drone strikes, reveals a willingness to gamble with an international nuclear catastrophe to increase pressure on Ukraine’s energy supply and the psychological resolve of its population. The recklessness with which Russian forces continue to act with regard to nuclear power plants in Ukraine should be recognized for what it is: an attempt to leverage concerns regarding a nuclear disaster to push for concessions

Annex IV. Rosatom's Liability for Human Rights Abuses in the Occupied Territories of Ukraine

Rosatom's liability for its role in the occupation of the ZNPP and Enerhodar is complicated by its status as a not purely private company, but rather as a state-owned enterprise. This is emphasized by Rosatom's role as an instrument of Russian foreign policy (see [Subsection 4.2](#)). The Russian state and individuals within the Russian government may therefore be subject to additional liability for the actions of Rosatom. However, the company and its employees are still responsible for their complicity in war crimes and crimes against humanity committed in Zaporizhzhia. There are several ways that the international community can hold them accountable.

Rosatom and its management can hardly maintain a credible claim of being unaware of the events at the ZNPP and in Enerhodar. Russian occupying forces maintain a constant presence at the ZNPP and use its premises to abduct and detain employees (see [Subsections 1.2.5, 2.3 and 2.5](#)). Rosatom representatives have summoned ZNPP employees to meetings where there were military or security personnel present and these meetings directly preceded detention and/or beatings. Many of these cases occurred during regular working hours and on a scale that would likely have affected the plant units' operation to such a degree that Rosatom's management would have been alerted to these events. Moreover, the purpose of the interrogations, detentions, and beatings was directly related to Rosatom's business. Many employees were interrogated and beaten to coerce them to sign new contracts with Rosatom and/or become Russian citizens. Alternatively, these abuses were used to punish them for not signing those contracts and not cooperating with the occupying administration (see [Subsection 2.5](#)).

While corporate liability rules vary across jurisdictions, a company's senior management may generally be liable for what lower-level employees or other company agents have done. This is particularly true when the crime committed is related to or in furtherance of the company's business.

A.4.1. Business and Human Rights

Human rights law traditionally defined states' obligations toward individuals, but the rise of powerful multinational enterprises has expanded international law's focus to include responsibilities upon businesses. Growing attention to businesses' environmental, social, and governance (ESG) policies has led to numerous voluntary initiatives, with corporations joining to signal commitment to human rights and responsible conduct. At the same time, interest in holding companies criminally accountable for war crimes, torture, and other abuses has increased, driven in part by civil society and activist efforts to expose corporate involvement in international crimes.

The UN has developed several initiatives on business and human rights, including the creation of the UN Guiding Principles on Business and Human Rights.¹²²⁸ The UN Global Compact initiative lays out 10 principles, which are derived from the Universal Declaration of Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the UN Convention against Corruption.¹²²⁹ UN recommendations include an

emphasis on all companies to carry out human rights due diligence, including to “understand the context in which you operate, understand the interaction between your business activities and the context, understand your impact on human rights, and use this understanding to avoid or mitigate negative impacts.”¹²³⁰ These guidelines all place responsibilities on corporate actors to behave proactively in a responsible way in their business operations.

The UN actively promotes corporate initiatives and standards for businesses, including through the establishment of a special Working Group on Business and Human Rights.¹²³¹ The working group’s mandate is “to promote the effective and comprehensive dissemination and implementation of the Guiding Principles on Business and Human Rights”.¹²³² The working group is empowered to communicate with states and corporations about alleged human rights violations or deviations from the UN’s human rights principles. The communications procedure works by “sending a letter to the concerned States and business enterprises to draw their attention to the facts of the allegations made and the applicable international human rights norms and standards, in particular the core concepts, obligations, responsibilities and expectations set out in the Guiding Principles”.¹²³³ These communications and any replies received are included in the working group’s reports to the UN Human Rights Council. They may also become part of advocacy efforts by human rights defenders and other stakeholders.

These ideas have also been reinforced at the regional and local levels. For example, the Inter-American Court of Human Rights (IACtHR) has emphasized that businesses “must ensure their activities do not cause or contribute to human rights violations”.¹²³⁴ This includes adopting preventive measures to protect workers and the environment.¹²³⁵ The African Court on Human and Peoples’ Rights (ACHPR) has held that businesses, particularly multinational corporations, are also responsible for respecting international law obligations, including “a responsibility [...] to commit themselves to public policies in prevention and reparation, due diligence in continuous identification of the consequences of their activities and lastly, setting up procedures aimed at solving problems caused by their action”.¹²³⁶ The

EU has introduced the Corporate Sustainability Reporting Directive (CSRD) to mandate medium and large businesses to report on sustainability-related matters, including social and human rights, as part of their annual reporting.¹²³⁷ As a complement to the CSRD, the European Union has introduced the European Sustainability Reporting Standards, which also cover the full range of ESG issues, including climate change, biodiversity, and human rights.¹²³⁸

A.4.2. International Avenues for Corporate Accountability

A.4.2.1. ICC Prosecution

The prosecution of companies for their involvement in international war crimes has precedent dating back at least to the Nuremberg trials and the Holocaust.¹²³⁹ However, the ICC currently does not have jurisdiction over corporate entities *per se*, although it may prosecute individual officers of companies.¹²⁴⁰

For instance, following the Second World War, a case was brought against Hermann Roechling and four other leading officials of his family firm, Roechling Enterprises. The French military court at Rastatt¹²⁴¹ held Hermann Roechling responsible as a superior¹²⁴² for war crimes, including forced labor, due to his industrial role in the Nazi war economy, his tolerance of forced labor abuses, including the establishment of a punishment camp near the company premises in coordination with the Gestapo, and his failure to prevent inhuman treatment of foreign workers. The first-instance judgment was upheld on appeal concerning Roechling’s responsibility for war crimes.¹²⁴³

Public statements suggest that Rosatom’s senior management, rather than being ignorant of these developments, is well aware of the occupation of the ZNPP and actively participates in its misappropriation. Director General Likhachev, who has repeatedly represented Rosatom in negotiations about the ZNPP, has called the ZNPP a Russian nuclear power plant¹²⁴⁴ and Rosatom has embraced the idea that Enerhodar is its newest “nuclear city”.¹²⁴⁵ Moreover, Likhachev has said that, on his order, the ZNPP should begin the

process of preparing to restart generation.¹²⁴⁶ Rosatom also continues to move Russian personnel from nuclear power plants on the territory of the Russian Federation itself to the ZNPP.

A.4.2.2. State-Level Mechanisms

A.4.2.2.1. Universal Jurisdiction

In recent years, many countries have increasingly accepted the doctrine of “universal jurisdiction” for certain categories of grave international crimes, such as crimes against humanity and torture. More than 160 states have implemented the principle of universal jurisdiction into their domestic legislation.¹²⁴⁷ A case using this theory has already been brought in Argentina concerning torture committed against a Ukrainian national while living under Russian occupation.¹²⁴⁸

States may exercise universal jurisdiction over the crime of torture if the perpetrator is on the territory of any member state of the Convention against Torture.¹²⁴⁹ As of the date of this report, 173 states have ratified this convention. Member states are under an obligation to detain perpetrators to ensure that their presence is sufficient to permit criminal or extradition proceedings to be instituted and to conduct a preliminary inquiry into allegations.¹²⁵⁰ This obligation to prosecute or extradite alleged perpetrators of torture is one of the convention’s central mandates.¹²⁵¹

Accordingly, companies and their management may be liable for their role in serious international crimes or violations of ICL, particularly for the crime of torture. For example, in 2018, in the case of *Manzano, Rubén y otros, v. Ford Argentina*, the manager of production and the chief of security of Ford Argentina were sentenced to ten and 12 years in prison, respectively, for aiding the crime of torture committed by the Argentine dictatorship in 1976–1983.¹²⁵² In that case, the management of Ford Argentina, much like the Rosatom management at the ZNPP, permitted the military to establish a presence at their factory and kidnap employees—they also provided information and access that facilitated the abductions.¹²⁵³ As another example, the African Commission on Human and Peoples’ Rights found that Anvil Mining indirectly contributed to the Kilwa massacre by providing

logistical support to the Congolese military. While the Commission held the state responsible, it also called for the accountability of the company and its personnel, even suggesting extradition of Anvil Mining personnel as a potential means of ensuring justice.¹²⁵⁴ New cases in Europe are being brought. In Sweden, charges were brought against the then chair and the former CEO of Lundin Energy for their alleged “complicity in war crimes carried out by the Sudanese army and allied militia in southern Sudan in the period of 1999–2003”.¹²⁵⁵ The Court of Appeal in France has found that a French cement company, LaFarge SA, could be charged with complicity in crimes against humanity in a case alleging the company made payments to ISIS in order to continue its business operations.¹²⁵⁶ There is not yet a final judgment in this case.

These cases highlight the growing recognition that multinational corporations must be held accountable for their complicity in human rights abuses, not only through state action but also through direct legal obligations. There is growing recognition that multinational corporations can be responsible for human rights violations in their supply and production chains, even when they may have outsourced some of this work to other companies.

In numerous countries, universal jurisdiction has already allowed domestic investigations into international crimes committed by the Russian Federation’s occupying forces in Ukraine. For example, Estonia, Germany, Latvia, Lithuania, Norway, Poland, Slovakia, Spain, Sweden, and Switzerland have either opened or are considering opening criminal cases to prosecute international crimes committed in the course of Russia’s aggression against Ukraine.¹²⁵⁷ None of these investigations have looked into the serious crimes being reported at the ZNPP nor Rosatom’s role in facilitating these crimes. States, particularly those in which Rosatom continues to do business, should not shy away from opening investigations into Rosatom’s involvement in war crimes and torture. Such investigations may begin in anticipation of travel to the country by Rosatom personnel, particularly its leadership.

A.4.2.2.2. Financial Sanctions

Separately, some countries have begun exploring the use of financial sanctions in response to human rights violations. So-called “Magnitsky sanctions” in the UK and US, among other countries, “target those responsible for human rights violations or corruption”.¹²⁵⁸ Many countries have also introduced wide-reaching sanctions programs against Russia following its full-scale invasion of Ukraine in 2022.¹²⁵⁹

Foreign countries, particularly those where Rosatom-linked enterprises conduct business, should investigate the potential links between those subsidiaries and related companies to the abuses in Enerhodar. At a minimum, these foreign branches of Rosatom continue to pay dividends to Rosatom and taxes to the Russian state budget. These revenues are valuable funding sources for the Russian government and military. Some of these international subsidiaries may have a closer relationship with Rosatom’s civilian nuclear energy division and, therefore, with entities and individuals participating in the ZNPP’s seizure and occupation. In these circumstances, states should investigate the role of these companies and consider criminal cases, fines, and/or asset freezes against the entities and individuals involved.

Finally, if sanctions have not been imposed, governments should designate Rosatom, Rosenergoatom Concern JSC, and, if they have not already done so, the Zaporizhzhia Nuclear Power Plant Operating Organization. Additional sanctions can and should be added against more of Rosatom’s subsidiaries, particularly those responsible for Russian military procurement and for Rosatom’s work in nuclear weapons research, development, and production for the Russian state.

Some states, such as the UK and US, have already implemented sanctions against Rosatom’s senior management. The US and UK have already sanctioned eight of Rosatom’s nine supervisory board members.¹²⁶⁰ Many of these sanctions were introduced because these individuals also have senior roles in other Russian government agencies. Their placement on the supervisory board of Rosatom illustrates the prized role Rosatom plays as a tool of the Russian government and

as a critical element of the Russian defense and energy sectors.

Other senior management figures who have been made subject to individual sanctions include Nikolay Spasskiy, Aleksandr Lokshin, Kirill Komarov, and Andrey Petrov.¹²⁶¹ In addition, sanctions were announced against the Zaporizhzhia Nuclear Power Plant Operating Organization and Oleg Romanenko soon after the purported annexation of Zaporizhzhia Oblast and the misappropriation of the plant.¹²⁶² So far, the EU has implemented limited sanctions against Rosatom-linked entities or individuals aside from President Vladimir Putin and Rosatom chairman Sergey Kiriyenko.¹²⁶³

So far, however, these sanctions have been insufficient to induce any changes in behavior. Individual sanctions should also be imposed against the entire senior management and leadership (including the director general and board of directors) of the most involved Rosatom companies, namely Rosatom, Atomenergoprom, Rosenergoatom, and the Zaporizhzhia Nuclear Power Plant Operating Organization. Sanctions should remain in place against group personnel even if they leave their role in actively participating in misappropriating the plant, such as in the case of Oleg Romanenko, who has been replaced by Ramil Galiev.

To effectively isolate the Russian nuclear energy sector, sanctions imposed on Rosatom should go further than freezing the conclusion of contracts concerning its principal activities. Rosatom must also be prohibited from participating in scientific cooperation, information exchange, and attending or hosting conferences. In addition, Rosatom should not receive any turbines or other goods for its operations.

A.4.2.2.3. Barring from Participation in Public Procurement Processes

Finally, Rosatom-linked companies should be barred from participating in public procurement processes in other jurisdictions. This is not only due to Rosatom’s role in the occupation of the ZNPP and Enerhodar, but also broader security-related concerns with respect to Rosatom and its subsidiaries. As noted by witnesses and corroborated by open-source research, many

Rosatom employees are believed to have relationships with Russian intelligence and security services. Moreover, as discussed in [Section 4](#), Rosatom is expected to play an expanded role in Russian foreign policy operations. Accordingly, an effective means of limiting Rosatom's ability to promote Russia's expansionist foreign policy objectives would be to restrict it from participating in procurement, particularly for large and important public infrastructure projects such as new power plants. It would be significant for states to note that concern about Rosatom's activities in occupied Zaporizhzhia is one of the reasons for excluding Rosatom from procurement bids.

A.4.2.3. Corporate Mechanisms

Businesses that "operate in or have value chains linked to the Russian Federation or the areas it occupies in Ukraine [...] face significant operational, legal, economic, and reputational risks", including the risk of sanctions or corruption-related liability, becoming implicated in the Russian government's international law violations, and operational and reputational risks.¹²⁶⁴ This is particularly true when the counterparty is a Russian state-owned enterprise and/or operates in a strategic sector such as energy or defense. All of these criteria apply to Rosatom. Therefore, any business relationship with them carries significant risks.

By agreeing to operate the ZNPP and accepting its nationalization under Russian law, Rosatom has directly engaged in business activities in the Russian-occupied territories of Ukraine and deliberately accepted the heightened legal, compliance, economic, and reputational risks associated with doing so. Likhachev himself has confirmed that the group is active in all of what he referred to as Russia's "new regions".¹²⁶⁵ By doing business in the occupied areas of Zaporizhzhia Oblast and other illegitimately annexed territories, it is likely that Rosatom regularly partners with sanctioned entities and individuals and regularly engages in sanctionable and other criminal activities. This has been illustrated by the placement of Rosatom-linked personnel in the occupying governments of Enerhodar and Zaporizhzhia Oblast.

Throughout its public reporting since 2022, Rosatom has sought to minimize coverage of its true

relationship with the ZNPP. This shows it is unlikely that Rosatom is being or will be transparent about any of its business operations with sanctioned counterparties or, potentially, its business operations more generally in other high-risk jurisdictions (such as Iran). Global businesses should therefore not rely on Rosatom's representations to assess the risks of potential cooperation or continued business with the company.

Separately, Rosatom has continued to pay significant taxes to the Russian state budget and dividends to its shareholders, such as the Russian Ministry of Finance. In this way, not only Rosatom, but also its customers and partners around the world, indirectly contribute to the financing of the Russian invasion of Ukraine and the occupation of Ukrainian territories such as Enerhodar.

A.4.3. Civil Society's Role in Holding Rosatom Accountable

Civil society organizations and journalists can play a critical role in exposing Rosatom's involvement at the ZNPP, including its role in detaining and abusing Ukrainian personnel and supporting Russia's detention network in Enerhodar. This report shows Rosatom has quietly embedded itself in occupying administrative bodies with little international pushback. Civil society can amplify reports of its negligent and dangerous conduct to highlight the risks created by Rosatom and the Russian military, as well as the broader pattern of detention and torture in Russian-occupied territories of Ukraine.

They can also investigate local Rosatom subsidiaries to uncover other human rights abuses, environmental hazards, or financial crimes, demonstrating that misconduct extends beyond Enerhodar. Such findings would increase pressure on states and businesses to end cooperation with Rosatom.

Finally, stakeholders could demand greater transparency from Rosatom and the Zaporizhzhia Nuclear Power Plant Operating Organization, ensuring they fully cooperate with the IAEA's team of international monitors.

Sources and Notes

1. Truth Hounds began investigating the situation in Enerhodar and at the ZNPP in 2023. These efforts resulted in the publication of the report "In A Nuclear Prison: How Rosatom Turned Europe's Largest Nuclear Power Plant into a Torture Chamber and How Can The World Stop It", released in September 2023, available at: <https://truth-hounds.org/en/cases/in-a-nuclear-prison-how-rosatom-turned-europes-largest-nuclear-power-plant-into-a-torture-chamber-and-how-can-the-world-stop-it/>, last accessed Jul. 24, 2025.
2. Reuters, "Trump and Putin to discuss power plants, land in talks to end Ukraine war," Mar. 17, 2025. <https://www.reuters.com/world/trump-says-will-speak-with-putin-tuesday-about-ending-war-ukraine-2025-03-17/>, last accessed Jul. 24, 2025.
3. Melkozerova, V., "Trump Eyes Europe's Biggest Nuclear Power Plant. Problem: It's Occupied by Russia," Politico, Mar. 20, 2025, <https://www.politico.eu/article/trump-eyes-europes-biggest-nuclear-power-plant-problem-its-occupied-by-russia/>, last accessed Jul. 24, 2025; Ministry of Foreign Affairs of the Russian Federation, "Foreign Ministry Statement in connection with media reports on the future of Zaporozhye NPP," Ministry of Foreign Affairs of the Russian Federation, https://mid.ru/en/foreign_policy/news/2005359/, last accessed Jul. 24, 2025; Ministry of Foreign Affairs of Ukraine, "Statement by the Ministry of Foreign Affairs on the situation around the Zaporizhzhia Nuclear Power Plant," Ministry of Foreign Affairs of Ukraine, <https://mfa.gov.ua/en/news/zayava-mzs-shchodo-situiaciy-navkolo-zaporizkoyi-atomnoyi-elektrostantsiyi>, last accessed Jul. 24, 2025.
4. Enerhodar City Council, "Updated!!!," Facebook, Feb. 28, 2022, <https://www.facebook.com/en.gov.ua/posts/pfbid0VrkeBAZ3gru5JjSnH2CbFUcysQsbhTAuLLZ68FpRemD5pP6iJWpdo4rNcckpQL3Pl>, last accessed Jul. 28, 2025.
5. Dmytro Orlov - Mayor of Enerhodar, "Address of Mayor Dmytro Orlov to the residents of the city regarding the situation in the city of Enerhodar (UPDATED)!," Facebook, Feb. 24, 2022, <https://www.facebook.com/DmitroOrlovOfficial/posts/pfbid0gsy8xZDEC614st3H5n2Ky7yioMzyoLC22DGXwtSHKsv5EBZDm3eQvBvLYD94L1MK1>, last accessed Jul. 28, 2025.
6. Vasilyna Gaviak, "Russian troops approached Energodar," Suspilne Media, <https://suspilne.media/zaporizhzhia/211516-rosijski-vijska-nablizilis-vpritul-do-energodara/>, last accessed Jul. 28, 2025.
7. Zaporizhzhia Investigation Centre and texty.org.ua, "Nuclear Terror: How Russia took nuclear power plants and energy donors hostage," incentre, <https://incentre.zp.ua/energodar-znpp-dataproject/>, last accessed Jul. 28, 2025.
8. Ground Forces of the Armed Forces of Ukraine, "WE CANNOT BE DEFEATED Enerhodar residents are blocking routes to stop the advance of enemy equipment. Without any weapons, naked," Facebook, Feb. 28, 2022, https://www.facebook.com/watch/?extid=NS-UNK-UNK-UNK-IOS_GK0T-GK1C&v=1138317810084519, last accessed Jul. 28, 2025.
9. Survivor ID: En-004.
10. News Ukraine, "Checkpoint in Energodar March 3, 2022," YouTube, Mar. 3, 2025, <https://www.youtube.com/watch?v=arqeZAFrDtc>, last accessed Jul. 28, 2025.
11. The formation of territorial defense forces took place directly during active hostilities, when local civilian volunteers self-organized to protect their localities. On January 1, 2022, these units were integrated into the Territorial Defense Forces of the Armed Forces of Ukraine (i.e., the reserve military component of the Armed Forces of Ukraine formed to protect territorial integrity at the local level).
12. Vasyliivskiy Raion is one of the five administrative units of Zaporizhzhia Oblast centered on the city of Vasylivka. Enerhodar is part of this raion.
13. Administrator, "They immediately went to the ZNPP in a whole column": how energy providers tried to stop the enemy in March 2022," Nikopol News, Sep. 18, 2024, <https://nikopol.nikopolnews.net/ukraina/odyn-iz-najmasovanishykh/>, last accessed Jul. 28, 2024; "Shooting, knocked out tanks and retreat across the lake: a special forces soldier told how the battles for the Zaporizhzhia NPP took place," First Zaporizhzhia, Oct. 20, 2023, <https://1news.zp.ua/strilyanina-pidbiti-tanki-ta-vidhid-po-ozeru-specpriznachenecz-rozkazav-yak-prohodili-bo%D1%97-za-zaporizku-aes/>, last accessed Jul. 28, 2025.
14. Energodar Today, "Andriy Shevchyk: On the liberation of Enerhodar," May 16, 2024, Telegram, <https://archive.ph/hon4J>, last accessed Sep. 3, 2025.
15. Energodar, "I'm afraid the Zaporizhzhia Nuclear Power Plant has already been liquidated. There are no victims," RBC Ukraine, <https://www.rbc.ua/ukr/news/pozhar-zaporozhskoy-aes-likvidirovali-zhertv-1646368854.html>, last accessed Jul. 28, 2025; Margarita Ogneva, "Zaporizhzhia NPP: Three years under occupation. How Russian priests and soldiers 'start' the reactor," Glavcom, <https://glavcom.ua/publications/zaporizka-aes-tri-roki-v-okupatsiji-jak-rosijski-popi-i-soldati-zapuskajut-ukrajinski-reaktori-1048048.html>, last accessed Jul. 28, 2025.
16. Zaporizhzhia Investigation Centre and texty.org.ua, "Nuclear Terror: How Russia took nuclear power plants and energy donors hostage," incentre, <https://incentre.zp.ua/energodar-znpp-dataproject/>, last accessed Jul. 28, 2025.
17. Survivor ID: En-014.
18. Survivor ID: En-025.
19. Survivor ID: En-033.
20. Alexey Arunyan, "So that he wouldn't get in the way, they physically removed him from the path." How Russians in Zaporizhzhia Oblast Kidnap Ukrainian Officials and Create Occupation Administrations," Graty, May 2, 2022, <https://graty.me/chtoby-ne-meshal-ego-fizicheski-ubrali-s-puti-kak-rossiyane-v-zaporozhskoj-oblasti-pohishhayut-ukrainskih-chinovnikov-i-sozdayut-okkupaczionnye-administraczi/>, last accessed Jul. 28, 2025.
21. Zaporizhzhia News, "An evacuation convoy of 12 buses and 100 cars from Enerhodar, Dniprorudne and Vasylivka arrived in Zaporizhzhia - State Border Guard Service of Ukraine," Telegram, <https://archive.ph/UIINqJ>, last accessed Sep. 3, 2025; Dmytro Orlov - Mayor of Enerhodar, "UPDATE!!! As for evacuation!," Telegram, Mar. 10, 2022, <https://archive.ph/gLasV>, last accessed Sep. 3, 2025; Dmytro Orlov - Mayor of Enerhodar, "An evacuation column of more than 70 cars left Enerhodar in the direction of Zaporizhzhia," Telegram, Mar. 16, 2022, <https://archive.ph/XdyQ0>, last accessed Sep. 3, 2025.
22. Taras Hryhorovych Shevchenko was a Ukrainian poet, writer, artist, public and political figure, and folklorist, whose writings are regarded as the foundation of modern Ukrainian literature and, to an extent, the modern Ukrainian language itself.
23. "Enerhodar residents celebrated Kobzar's birthday," Energodar City, Mar. 9, 2022, <https://web.archive.org/web/20220421131653/https://energodar.city/articles/197795/energodarci-vidznachili-den-narodzhennya-kobzarya>, last accessed Jul. 28, 2025.
24. Zaporizhzhia Investigation Centre and texty.org.ua, "Nuclear Terror: How Russia took nuclear power plants and energy donors hostage," incentre, <https://incentre.zp.ua/energodar-znpp-dataproject/>, last accessed Jul. 28, 2025.
25. Friends of Major Selivanov, "On Monday, March 26, the inter-district police department in the city of Energodar began its work. The police are located at 17 Stroiteley Avenue, the stronghold is located at 4 Voinov-Internationalistov Street," Telegram, Mar. 31, 2022, <https://archive.ph/5HkKb>, last accessed Sep. 3, 2025.
26. The Russian Cossack movement is a modern paramilitary structure ideologically supporting the Kremlin, which is used to establish control over the occupied territories.
27. Friends of Major Selivanov, "The law enforcement squad, formed from the Cossacks of Energodar, went on patrol," Telegram, Mar. 31, 2022, <https://archive.ph/ejAqZ>, last accessed Sep. 3, 2025.
28. Anastasia Lotarieva, Andriy Zakharov, and Vitaliy Chervonenko, "Who is Russia putting in charge of the occupied territories of Ukraine?" BBC, <https://www.bbc.com/ukrainian/features-60952640>, last accessed Jul. 28, 2025.
29. "Dmytro Orlov, Mayor of Energodar: In the occupation, you feel like you've been thrown back 30 years," Ukrinform, May 24, 2022, <https://www.ukrinform.ua/rubric-regions/3490854-dmitro-orlov-miskij-golova-energodara.html>, last accessed Jul. 28, 2025.
30. Survivor ID: En-028; Survivor ID: En-020; Business FM Editorial Team, "Ukrainian media reported on firefighters' action in Energodar, which is under Russian control," bfm.ru, <https://www.bfm.ru/news/500421?ysclid=m2t6wo5ts4242088719>, last accessed Jul. 28, 2025; Andriy Pochtiev, "They put about a dozen bullets in close range, but he did not give up. The terrifying and heroic story of a Zaporizhzhia NPP employee," ViknaTV, <https://vikna.tv/istorii/rozpovidi/uprytul-vsadyly-blyzko-desyatka-kul-ale-vin-ne-zdavsya-strashna-j-geroyichna-istoriya-pracivnyka-zaporizkoyi-aes/>, last accessed Jul. 28, 2025; Friends of Major Selivanov, "A Ukrainian saboteur who worked at the Zaporozhye nuclear power plant was injured while trying to resist law enforcement officers," Telegram, May 24, 2022, <https://archive.ph/JrmJR>, last accessed Sep. 05, 2025.
31. Business FM Editorial Team, "Ukrainian media reported on firefighters' action in Energodar, which is under Russian control," bfm.ru, <https://www.bfm.ru/news/500421?ysclid=m2t6wo5ts4242088719>, last accessed Jul. 28, 2025.
32. Andriy Pochtiev, "They put about a dozen bullets in close range, but he did not give up. The terrifying and heroic story of a Zaporizhzhia NPP employee," ViknaTV, <https://vikna.tv/istorii/rozpovidi/uprytul-vsadyly-blyzko-desyatka-kul-ale-vin-ne-zdavsya-strashna-j-geroyichna-istoriya-pracivnyka-zaporizkoyi-aes/>, last accessed Jul. 28, 2025.
33. Survivor ID: En-028; Survivor ID: En-014.
34. Survivor ID: En-014.
35. ENTsTV, "The team of the EnTS TV channel announced that it is ceasing broadcasting in Energodar," Detector.Media, Mar. 13, 2022, <https://detector.media/infospace/article/197459/2022-03-13-komanda-telekanalu-ents-povidomyla-shcho-prypnyayae-movlennya-v-energodari/>, last accessed Jul. 28, 2025; Energodar Today, "Friends! In the liberated Energodar, the veil of censorship and Ukrainian propaganda has fallen!" Telegram, Apr. 22, 2022, <https://archive.ph/6xY03>, last accessed Sep. 3, 2025; Friends of Major Selivanov, "On the territory of the Zaporozhye region liberated from Zelensky and his degenerates, a new newspaper began to be published - the interdistrict bulletin «Militol Vedomosti». Today, the newspaper was brought to Energodar," Telegram, Apr. 13, 2022, <https://archive.ph/JzFiH>, last accessed Sep. 3, 2025.
36. The "Great Patriotic War" is a term introduced through Soviet historiography to refer to the period of the Second World War between the Soviet Union and Nazi Germany (1941-1945). In today's Russia, the cult of the "Great Victory" is one of the cornerstones of state ideology. Different post-Soviet countries have their own interpretations of this historical period according to their individual national historical narratives and contemporary political contexts.
37. Energodar Today, "Servicemen of the Russian Guard conducted a search in the library of Energodar," Telegram, May 5, 2022, <https://archive.ph/PFn58>, last accessed Sep. 3, 2025; Energodar Today, "Thematic exhibitions dedicated to the 77th anniversary of the Victory in the Great Patriotic War have been launched in the libraries of the city of Energodar," Telegram, May 6, 2022, <https://archive.ph/8QT8r>, last accessed Sep. 3, 2025.
38. Alexey Kurichenko, "The Immortal Regiment action took place in liberated Energodar," TVZvezda, May 5, 2022, <https://web.archive.org/web/20250728165026/https://tvzvezda.ru/news/2022591145-LoVXz.html?ysclid=m2c6hne2yn66869259>, last accessed Jul. 28, 2025.
39. "To the basement" (in Ukrainian: "на підвал") is a colloquial expression commonly used to denote (mostly unlawful) detention by security services or military personnel. The term originates from the frequent use of basement facilities as informal detention centers;

- Survivor ID: En-025.
40. Survivor ID: En-002.
 41. Elisabeth Jean Wood, and Francisco Gutiérrez Sanín, "Ideology in Civil War: Instrumental Adoption and Beyond, *Journal of Peace Research* 51, no. 2 (March 2014), at 213-226; Laleh Khalili, "Theorizing Violence, *International Journal of Middle East Studies* 45, No. 4 (2013), at 791-812.
 42. Survivor ID: En-014.
 43. Daryna Antonyuk, "The largest nuclear power plant in Ukraine has been occupied by the Russians, and missiles are flying over others. How nuclear power plants work during war," *Forbes*, May 2, 2022, <https://forbes.ua/inside/naybilshu-atomnu-stantsiyu-ukraini-okupuvali-orki-a-nad-inshimi-litayut-raketi-yak-aes-prodovzhuyut-viroblyati-elektriku-pid-chas-viyni-intervyu-z-kerivnikom-energoatom-02052022-5736>, last accessed Jul. 28, 2025.
 44. The cold shutdown of nuclear power plan power units is a technical mode when the reactor stops completely and the coolant temperature goes below 70°C. In this mode, the power unit does not generate electricity but remains under security system control to evacuate residual heat from nuclear fuel with minimum energy consumption of the plant itself.
 45. Energodar Today, "Thematic exhibitions dedicated to the 77th anniversary of the Victory in the Great Patriotic War have been launched in the libraries of the city of Energodar," *Telegram*, May 6, 2022, <https://archive.ph/Rqdz4>, last accessed Sep. 3, 2025.
 46. Survivor ID: En-017.
 47. Survivor ID: En-017.
 48. Survivor ID: En-021.
 49. International Atomic Energy Agency, Nuclear Safety, Security and Safeguards in Ukraine: 2nd Summary Report by the Director General, GOV/2022/52, Sep. 2022, <https://www.iaea.org/sites/default/files/documents/gov2022-52.pdf>, last accessed Jul. 28, 2025.
 50. Mari Saito, Polina Nikolskaya, Anton Zverev and Marian Prysiazniuk, «Russia turns Ukrainian nuclear city into stronghold of fear,» *Reuters*, Aug. 29, 2025, <https://www.reuters.com/investigations/russia-turns-ukrainian-nuclear-city-into-stronghold-fear-2025-08-29/>, last accessed Sep. 3, 2025.
 51. Ukraine war: Russia using nuclear plant as army base - Ukraine, *BBC*, Jul. 19, 2022, <https://www.bbc.com/news/world-europe-62469740>, last accessed Jul. 28, 2025.
 52. Joe Parkinson, and Drew Hinshaw, "Russia's Goal in Attack on Nuclear Plant: Take the Electricity, Ukraine Says," *Aug. 14, 2022, Wall Street Journal*, <https://www.wsj.com/world/europe/russia-goal-ukraine-nuclear-plant-take-electricity-11660505601>, last accessed Jul. 28, 2025.
 53. International Atomic Energy Agency, "Nuclear Safety, Security and Safeguards in Ukraine: 2nd Summary Report by the Director General, GOV/2022/52, Sep. 2022. <https://www.iaea.org/sites/default/files/documents/gov2022-52.pdf>, last accessed Jul. 28, 2025.
 54. Energoatom, "▲ As of 09:00 on August 25, 2022, Zaporizhzhia NPP is operating with the risk of violation of radiation and fire safety standards," *Telegram*, Aug. 25, 2025, <https://archive.ph/t9aNm>, last accessed Sep. 3, 2025.
 55. António Guterres, "Secretary-General's statement on Zaporizhzhia Power Plant," UN, Aug. 11, 2022, <https://www.un.org/sg/en/content/sg/statement/2022-08-11/secretary-generals-statement-zaporizhzhia-power-plant>, last accessed Jul. 28, 2025.
 56. Rafael Mariano Grossi, "The day has come, @IAEAorg's Support and Assistance Mission to #Zaporizhzhia (ISAMZ) is now on its way," X/Twitter, Aug. 29, 2022, <https://x.com/rafaelmgrossi/status/1564096717397659649>, last accessed Jul. 28, 2025.
 57. Energoatom, "Zaporizhzhia NPP completely shut down," *Telegram*, Sep. 11, 2022, <https://archive.ph/luql8>, last accessed Sep. 3, 2025.
 58. Joan Forner and Francesc Boya, "The Zaporizhzhia nuclear power plant taken as military target: legal and technical global challenges," CIDOB (Barcelona Centre for International Affairs), <https://www.cidob.org/en/publications/zaporizhzhia-nuclear-power-plant-taken-military-target-legal-and-technical-global>, last accessed Jun. 6, 2025.
 59. Survivor ID: En-017; Survivor ID: En-018; Survivor ID: En-035.
 60. Survivor ID: En-017.
 61. Dmytro Hulyichuk, "Special forces tried to liberate Energodar and ZNPP three times – GUR," *TSN*, Oct. 9, 2023, <https://tsn.ua/ato/specpriznachenci-trichi-namagalisy-a-zvinit-energodar-i-zaes-gur-2425966.html>, last accessed Jul. 29, 2025; Zaporizhzhia Info, "Archival footage from the landing operation," *Telegram*, Sep. 3, 2024, <https://archive.ph/dWE4y>, last accessed Sep. 3, 2025.
 62. "About 10,000 employees of the Zaporizhzhia NPP remain in the temporarily occupied Energodar," *Suspilne*, Jul. 26, 2022, <https://suspilne.media/zaporizhzhia/264499-v-timcasovo-okupovanomu-energodari-zalisautsa-blizko-10-tisac-pracivnikiv-zaporizkoi-aes/>, last accessed Jul. 29, 2025.
 63. "In the Russian zone of the Zaporozhye region, preparations for the referendum have begun, *BBC News Russian*, Jul. 25, 2022, <https://www.bbc.com/russian/news-62468017>, last accessed Jun. 6, 2025.
 64. "More than 93% of voters supported the entry of the Zaporizhia region into Russia," *TASS*, Sep. 27, 2022, <https://tass.ru/mezhdunarodnaya-panorama/15887881>, last accessed Jul. 29, 2025.
 65. "So-Called Elections in Occupied Areas of Ukraine "Have No Legal Grounds," *Undermine Peace Prospects, United Nations Official Tells Security Council*, UN Press, Sep. 8, 2023, <https://press.un.org/en/2023/sc15405.doc.htm>, last accessed Jul. 29, 2025.
 66. "So-Called Elections in Occupied Areas of Ukraine "Have No Legal Grounds," *Undermine Peace Prospects, United Nations Official Tells Security Council*, UN Press, Sep. 8, 2023, <https://press.un.org/en/2023/sc15405.doc.htm>, last accessed Jul. 29, 2025.
 67. "Russian troops "threw" the general director of ZNPP into the free territory of Ukraine," *Radio Svoboda*, Oct. 3, 2022, <https://www.radiosvoboda.org/a/news-enerhoatom-zvinnennia-hendyrektora-zaes/32063472.html>, last accessed Jul. 29, 2025.
 68. Oleksandr Yankovsky, "Russia appropriates occupied Zheleznodorozhny NPP. What will save the Ukrainian plant?," *Radio Svoboda*, Oct. 7, 2022, <https://www.radiosvoboda.org/a/novyny-pryzovya-putin-pryvasnyuye-zaporiz%CA%B9ku-stantsiyu-rosatom/32069430.html>, last accessed Jul. 29, 2025; "New Director Appointed to Zaporizhzhia NPP," *Interfax*, Nov. 30, 2022, <https://www.interfax.ru/russia/874774>, last accessed Jul. 29, 2025.
 69. "Half of the staff left Zaporizhzhia NPP," *Kommersant*, Dec. 12, 2022, <https://www.kommersant.ru/doc/5719691>, last accessed Jul. 29, 2025.
 70. Survivor ID: En-002.
 71. Orlov Dmitry Olegovich, "Energodar urban territorial community: Zaporizhia region, Vasylyivskyi district," *Gromada*, <https://gromada.en.gov.ua/persons/10429>, last accessed Jul. 29, 2025.
 72. "Energodar MP Shevchyk announced the creation of the so-called "city council"," *Suspilne*, Mar. 27, 2022, <https://suspilne.media/zaporizhzhia/222174-energodarskij-deputat-sevcik-zaaviv-pro-stvorennia-tak-zvanoi-radi-mista/>, last accessed Jul. 29, 2025.
 73. Survivor ID: En-017; Survivor ID: En-022; Survivor ID: En-004; Survivor ID: En-035; Survivor ID: En-002.
 74. Survivor ID: En-022.
 75. Survivor ID: En-017.
 76. Survivor ID: En-004.
 77. Survivor ID: En-007.
 78. Survivor ID: En-022.
 79. Survivor ID: En-017.
 80. Survivor ID: En-017.
 81. "Rosatom needs to solve four issues to launch Zaporozhye NPP," *Tass*, May 21, 2022, <https://tass.com/economy/1961385>, last accessed Jul. 29, 2025.
 82. Survivor ID: En-017.
 83. Survivor ID: En-017.
 84. Survivor ID: En-020.
 85. Survivor ID: En-021.
 86. Survivor ID: En-017.
 87. "Russia's Permanent Representative in Vienna stated that there is nothing to demilitarize on the territory of the Zaporizhzhia NPP," *Interfax*, Sep. 16, 2022, <https://www.interfax.ru/world/862585>, last accessed Jul. 29, 2025.
 88. Survivor ID: En-017.
 89. Oleg Polishchuk, "Who is in the service of the occupiers. Gauleiter of the Azov Sea and Kherson region (dossier)," *Glavcom*, May 31, 2022, <https://glavcom.ua/country/incidents/na-sluzhbi-v-okupantiv-kremlivski-gaulayteri-priazovya-ta-hersonshchini-dosje-849358.html>, last accessed Jul. 29, 2025.
 90. Veronika Khorolska, "Former Russian official convicted of bribery becomes "mayor" of Energodar," *Incentre*, Nov. 22, 2022, <https://incentre.zp.ua/rosijskyj-ekschynovnyk-zasudzhenyi-za-habar-stav-merom-energodaru/>, last accessed Jul. 29, 2025.
 91. "Molokov (Volga) Alexander Gennadievich," *war-proekt*, <https://war-proekt.media/chinovniki-iz-rossii-v-ukraine/person/molokov-aleksandr-gennadievich/>, last accessed Jul. 29, 2025.
 92. Tetyana Kushneryk, "Member of the Servant of the People party became a Gauleiter of Energodar," *Glavcom*, Nov. 23, 2022, <https://glavcom.ua/country/incidents/chlenkinja-sluihi-narodustala-haulajaterkoju-enerhodaru-890981.html>, last accessed Jul. 29, 2025.
 93. Kateryna Ivanova, "The occupier-appointed mayor of Energodar resigns at the request of Rosatom," *Glavcom*, Jan. 15, 2025, <https://glavcom.ua/country/incidents/priznacheni-ukupantami-mer-enerhodaru-senovoz-jde-z-posadi-na-prokhannja-rosatomu-1040602.html>, last accessed Jul. 29, 2025.
 94. "The head of Energodar Eduard Senovoz leaves his post," *Kommersant*, Jan. 15, 2025, <https://www.kommersant.ru/doc/7432296>, last accessed Jul. 29, 2025.
 95. "In Zaporizhia Oblast, occupiers appointed a Rosatom employee as Gauleiter of Energodar," Centre for Journalistic Investigations, Dec. 14, 2022, <https://investigator.org.ua/news-2/249658/>, last accessed Jul. 29, 2025.
 96. Energodar TC, "How will Energodar develop and what measures does Rosenergoatom take to support it?," *Telegram*, Sep. 17, 2024, <https://archive.ph/Xejqm>, last accessed Sep. 3, 2025.
 97. Military commandant offices were typically established by occupying forces in captured populated areas, sometimes with the involvement of local collaborators from law enforcement, and generally served a regulatory function in maintaining order and control over the civilian population.
 98. "Mayor of Energodar Eduard Senovoz: "We live and develop, no matter what"," *Strana-Rosatom*, Jan. 22, 2024, <https://strana-rosatom.ru/2024/01/22/zhivem-i-ravivaem-sya>

- nesmotrya-ni-na-cht/, last accessed Jul. 29, 2025 ("The first thing I did was organize a Commandant's Office. Why? Because there are numerous representatives of various enforcement and security structures in the city.... Organizing the Office was not easy, and we received a lot of help from Sergey Kiriyenko... Eventually, everything worked out, and I am very proud of it.").
99. Julia Gileva, "Mayor of Energodar Eduard Senovoz: "We live and develop, despite everything"," Strana-Rosatom, Jan. 22, 2024, <https://strana-rosatom.ru/2024/01/22/zhivem-i-razvivaemsya-nesmotrya-ni-na-cht/>, last accessed Jul. 29, 2025.
 100. Julia Gileva, "Mayor of Energodar Eduard Senovoz: "We live and develop, despite everything"," Strana-Rosatom, Jan. 22, 2024, <https://strana-rosatom.ru/2024/01/22/zhivem-i-razvivaemsya-nesmotrya-ni-na-cht/>, last accessed Jul. 29, 2025.
 101. Julia Gileva, "Mayor of Energodar Eduard Senovoz: "We live and develop, despite everything"," Strana-Rosatom, Jan. 22, 2024, <https://strana-rosatom.ru/2024/01/22/zhivem-i-razvivaemsya-nesmotrya-ni-na-cht/>, last accessed Jul. 29, 2025.
 102. ZNPP. Officially, "Modernization and repair of social and cultural facilities of Energodar is under constant control," Telegram, Feb. 9, 2024, <https://archive.ph/lq2wP>, last accessed Sep. 3, 2025.
 103. "Eduard Senovoz leaves post of head of Energodar," Tass, Jan. 15, 2025, <https://tass.ru/politika/22884003>, last accessed Jul. 29, 2025.
 104. "Maxim Pukhov appointed head of Energodar," Nangs, Jan. 17, 2025, <https://nangs.org/news/authorities/maksima-pukhova-naznachili-glavoje-energodara>, last accessed Jul. 29, 2025.
 105. "Pukhov Maxim Olegovich," Atomic Energy, <https://www.atomic-energy.ru/experts/puhov-maksim-olegovich>, last accessed Jul. 29, 2025.
 106. "Maxim Pukhov leaves the post of head of Polyarnye Zori," Bi-Port, Oct. 16, 2024, <https://b-port.com/news/296814>, last accessed Jul. 29, 2025.
 107. "Rosatom together with Energodar," Russian Federal Nuclear Center, Dec. 13, 2022, <https://vniitf.ru/article/rosatom-vmeste-s-energodarom>, last accessed Jul. 29, 2025.
 108. Viktor Zvantsev, "Rosatom has prepared a three-year plan for the development of Energodar," RIA, Mar. 16, 2023, <https://ria.ru/20230316/energodar-1858413564.html>, last accessed Jul. 29, 2025.
 109. "Series of events for schoolchildren," Rosatom, <https://rosatomtalents.team/energodar>, last accessed Jul. 29, 2025.
 110. ZNPP. Officially, "A roadmap for the creation of the Polytechnic College of Sevastopol State University in Energodar was signed," Telegram, Sep. 3, 2024, <https://archive.ph/Lxf5O>, last accessed Sep. 3, 2025.
 111. ZNPP. Officially, "The path of a nuclear scientist," Telegram, Feb. 17, 2024, <https://archive.ph/Qyyps>, last accessed Sep. 3, 2025.
 112. ZNPP. Officially, "Dear staff of Zaporizhzhia NPP!," Telegram, Dec. 10, 2024, <https://archive.ph/Ti2T5>, last accessed Sep. 3, 2025.
 113. «In Enerhodar, a unified school uniform was created,» Komsomolskaya Pravda, Aug. 30, 2023, <https://www.zap.kp.ru/online/news/5430317/>, last accessed Jul. 31, 2025.
 114. EnTeVeShki Energodar, "On the Day of Defenders of the Fatherland, we present to your attention a film by Alexander Demin about one of the defenders of Energodar," Telegram, Feb. 23, 2023, <https://archive.ph/GvCej>, last accessed Sep. 3, 2025.
 115. Geneva Convention IV, Art. 50; Convention on the Rights of the Child, Arts. 17, 29.
 116. Enerhodar Svyaznoy, "Today, in the youth center «Boiling Point. Resident» hosted ENTV master classes for novice journalists and cameramen," Telegram, <https://archive.ph/v8bvl>, last accessed Sep. 3, 2025.
 117. In the city of EN, "Schoolchildren of Energodar were the first to be presented with the ABC of Zaporizhzhia," Telegram, Oct. 19, 2023, <https://archive.ph/zbWvT>, last accessed Sep. 3, 2025.
 118. "ABCs of Regions," znd.info, May 2, 2024, <https://znd.info/azbuka-regionov/>, last accessed Jul. 29, 2025.
 119. Grace Mappes, Riley Bailey, Karolina Hird, Angelica Evans, and Frederick W. Kagan, "Russian Offensive Campaign Assessment, February 17, 2024," Institute for the Study of War, Feb. 17, 2024, <https://www.understandingwar.org/backgroundunder/russian-offensive-campaign-assessment-february-17-2024>, last accessed Jul. 29, 2025.
 120. EnTeVeShki Energodar, "On the Day of Defenders of the Fatherland, we present to your attention a film by Alexander Demin about one of the defenders of Energodar," Telegram, Feb. 23, 2023, <https://archive.ph/GvCej>, last accessed Sep. 3, 2025.
 121. Enerhodar Svyaznoy, "Today, in the youth center «Boiling Point. Resident» hosted ENTV master classes for novice journalists and cameramen," Telegram, <https://archive.ph/v8bvl>, last accessed Sep. 3, 2025.
 122. Some targeted civilians belonged to multiple categories simultaneously, such as a ZNPP staff member who participated in the anti-occupation resistance from late February to early April 2022.
 123. Survivor ID: En-013; Survivor ID: En-012; Survivor ID: En-028; Survivor ID: En-014; Survivor ID: En-015; Survivor ID: En-018; Survivor ID: En-021; Survivor ID: En-020; Survivor ID: En-018; Survivor ID: En-021; Survivor ID: En-004; Survivor ID: En-033.
 124. Survivor ID: En-006; Survivor ID: En-010; Survivor ID: En-018; Survivor ID: En-021; Survivor ID: En-033.
 125. Survivor ID: En-020; Survivor ID: En-017; Survivor ID: En-021; Survivor ID: En-018; Survivor ID: En-019; Survivor ID: En-014; Survivor ID: En-027; Survivor ID: En-025; Survivor ID: En-011; Survivor ID: En-016; Survivor ID: En-031; Survivor ID: En-018; Survivor ID: En-033; Survivor ID: En-005; Survivor ID: En-029.
 126. Survivor ID: En-027; Survivor ID: En-021; Survivor ID: En-011; Survivor ID: En-031; Survivor ID: En-026; Survivor ID: En-005.
 127. Survivor ID: En-027; Survivor ID: En-028; Survivor ID: En-006; Survivor ID: En-019; Survivor ID: En-021; Survivor ID: En-017; Survivor ID: En-026; Survivor ID: En-017; Survivor ID: En-018; Survivor ID: En-033.
 128. Survivor ID: En-012; Survivor ID: En-009; Survivor ID: En-020; Survivor ID: En-028; Survivor ID: En-018; Survivor ID: En-026; Survivor ID: En-033; Survivor ID: En-015.
 129. Survivor ID: En-014; Survivor ID: En-025.
 130. Survivor ID: En-011; Survivor ID: En-013; Survivor ID: En-020; Survivor ID: En-028; Survivor ID: En-025.
 131. Survivor ID: En-025; Survivor ID: En-028.
 132. Survivor ID: En-020.
 133. Survivor ID: En-032; Survivor ID: En-020; Survivor ID: En-014; Survivor ID: En-018; Survivor ID: En-021.
 134. Survivor ID: En-016.
 135. Survivor ID: En-020.
 136. Survivor ID: En-016; Survivor ID: En-025.
 137. Survivor ID: En-016; Survivor ID: En-020; Survivor ID: En-025; Survivor ID: En-014; Survivor ID: En-031; Survivor ID: En-018; Survivor ID: En-026; Survivor ID: En-005; Survivor ID: En-020; Survivor ID: En-021; Survivor ID: En-029.
 138. Survivor ID: En-025; Survivor ID: En-014.
 139. The attempted assassination of Shevchuk with an explosive device took place on May 22, 2022. See: Yuri Korohodtskiy, "Mayor Shevchuk's collaborator was blown up in Enerhodar," Livi Bereh, May 22, 2024, https://web.archive.org/web/20220530222741/https://lb.ua/society/2022/05/22/517611_energodar_i_pidirvaii.html, last accessed Aug. 3, 2025.
 140. The so-called "referendum" on the illegal annexation of Zaporizhzhia Oblast to the Russian Federation took place on September 23–27, 2022. See: Suspilne.news, "Pseudo-referendum on joining the Russian Federation in Zaporizhzhia. What is known," Sep. 27, 2022, <https://suspilne.media/zaporizhzhia/284701-pseudoreferendum-sodo-priednanna-do-rf-na-zaporizzi-so-vidomo-den-1/>, last accessed Aug. 3, 2025.
 141. Survivor ID: En-026; Survivor ID: En-017; Survivor ID: En-022.
 142. The most recent documented case of abduction and detention of a Ukrainian staff member is from July 2024. Survivor ID: En-031.
 143. Energoatom, "13 employees of the Zaporizhzhia NPP were illegally deprived of their liberty in the temporarily occupied territories," Telegram, May 13, 2025, <https://archive.ph/GwSW>, last accessed Sep. 3, 2025; Energoatom, "13 employees of Zaporizhzhia NPP illegally deprived of their liberty in temporarily occupied territories," May 13, 2025, <https://energoatom.com.ua/news/13-pracivnikiv-zaporizkoyi-aes-nezakonno-pozbavleni-voli-na-timcasovo-okupovanix-teritoriiakh>, last accessed Aug. 3, 2025.
 144. Dmytro Orlov, "The fourth year of the full-scale invasion, the fourth year of the occupation of Enerhodar, continues," Telegram, Jun. 19, 2025, <https://archive.ph/wopL>, last accessed Sep. 3, 2025.
 145. In order to reflect the complexity of each person's experiences and to avoid too narrowly categorizing their status, each status was counted individually, meaning a single person may be represented in more than one category. As a result, the number of status entries may exceed the number of unique individuals.
 146. Survivor ID: En-004.
 147. Survivor ID: En-004.
 148. Survivor ID: En-031.
 149. Survivor ID: En-025; Survivor ID: En-020, Survivor ID: En-033 ; Survivor ID: En-029.
 150. Survivor ID: En-021; Survivor ID: En-020.
 151. Survivor ID: En-018; Survivor ID: En-029; Survivor ID: En-017; Survivor ID: En-004.
 152. Survivor ID: En-020.
 153. Survivor ID: En-021.
 154. Survivor ID: En-025; Survivor ID: En-022.
 155. Survivor ID: En-025.
 156. Survivor ID: En-020; Survivor ID: En-033.
 157. Survivor ID: En-020; Survivor ID: En-033.
 158. Survivor ID: En-018; Survivor ID: En-026; Survivor ID: En-029.
 159. Survivor ID: En-017.
 160. Survivor ID: En-018.
 161. Survivor ID: En-025.
 162. Survivor ID: En-025.
 163. "Being taken to the forest" in this context is a euphemism used by Russian forces for taking a detainee to be executed.
 164. Survivor ID: En-025.
 165. Survivor ID: En-028; Survivor ID: En-020; Survivor ID: En-011; Survivor ID: En-012; Survivor ID: En-026; Survivor ID: En-014. See also Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
 166. Survivor ID: En-020; Survivor ID: En-011.
 167. Survivor ID: En-026; Survivor ID: En-015.
 168. Survivor ID: En-026.
 169. Survivor ID: En-028; Survivor ID: En-018; Survivor ID: En-012, Survivor ID: En-011; Survivor ID: En-014.
 170. Survivor ID: En-018; Survivor ID: En-012; Survivor ID: En-014; Survivor ID: En-011.
 171. Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
 172. Survivor ID: En-012; Survivor ID: En-014.
 173. Survivor ID: En-014; Survivor ID: En-028; Survivor ID: En-012.

174. Survivor ID: En-015.
175. Survivor ID: En-014; Survivor ID: En-012; Survivor ID: En-026.
176. Survivor ID: En-012; Survivor ID: En-014; Survivor ID: En-018; Survivor ID: En-012. See also Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
177. Survivor ID: En-014.
178. Survivor ID: En-012.
179. Survivor ID: En-012; Survivor ID: En-014.
180. Survivor ID: En-028; Survivor ID: En-014.
181. Survivor ID: En-012; Survivor ID: En-018; Survivor ID: En-028.
182. Survivor ID: En-028; Survivor ID: En-018.
183. Survivor ID: En-012.
184. Survivor ID: En-012; Survivor ID: En-014.
185. Survivor ID: En-028; Survivor ID: En-014; Survivor ID: En-018.
186. Survivor ID: En-014.
187. Survivor ID: En-012; Survivor ID: En-028.
188. Survivor ID: En-012.
189. The term "Kadyrovtsi" refers to members of forces that directly answer to Ramzan Kadyrov, head of the Chechen Republic in the Russian Federation. While they technically fall within the chain of command of the Russian National Guard, they are not subject to the same conditions as their federal counterparts. See: RUSI, "The Chechens: Putin's Loyal Foot Soldiers," Nov. 4, 2022, <https://www.rusi.org/explore-our-research/publications/commentary/chechens-putins-loyal-foot-soldiers>, last accessed Aug. 3, 2025.
190. Survivor ID: En-012.
191. Survivor ID: En-014; Survivor ID: En-012.
192. Survivor ID: En-012.
193. Survivor ID: En-028.
194. Survivor ID: En-014.
195. Survivor ID: En-028.
196. Survivor ID: En-028. See also Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
197. Survivor ID: En-028; Survivor ID: En-014.
198. A republic within the Russian Federation, situated in southwestern Russia.
199. Survivor ID: En-018; Survivor ID: En-014.
200. Survivor ID: En-012.
201. Survivor ID: En-012.
202. Survivor ID: En-012.
203. Survivor ID: En-012.
204. Survivor ID: En-012; Survivor ID: En-016; Survivor ID: En-013; Survivor ID: En-029; Survivor ID: En-010; Survivor ID: En-006; Survivor ID: En-025; Survivor ID: En-032; Survivor ID: En-024; Survivor ID: En-028; Survivor ID: En-018.
205. Survivor ID: En-011; Survivor ID: En-010; Survivor ID: En-023;
206. Survivor ID: En-011.
207. Survivor ID: En-026.
208. Survivor ID: En-020.
209. Survivor ID: En-011; Survivor ID: En-020.
210. The literal translation in English is "monkeys' cage".
211. Survivor ID: En-009; Survivor ID: En-032.
212. Survivor ID: En-020.
213. Survivor ID: En-014; Survivor ID: En-026.
214. Survivor ID: En-020; Survivor ID: En-013; Survivor ID: En-010.
215. Survivor ID: En-013; Survivor ID: En-011.
216. Survivor ID: En-020; Survivor ID: En-028; Survivor ID: En-011; Survivor ID: En-026; Survivor ID: En-014; Survivor ID: En-013.
217. Survivor ID: En-012.
218. Survivor ID: En-014.
219. UPD Survivor ID: En-014; Survivor ID: En-011; Survivor ID: En-012; Survivor ID: En-018.
220. Survivor ID: En-014.
221. Survivor ID: En-032.
222. Novosti Enerhodara, "Renovation of the city court has begun in Enerhodar," *Telegram*, Feb. 6, 2025, <https://archive.ph/wQ6yJ>, last accessed Sep. 3, 2025.
223. Survivor ID: En-014.
224. "Filtration" has been defined by the Kharkiv Human Rights Protection Group as "a violent, unregulated screening of the personal data of detained people, their social contacts, views, and attitudes towards the occupying state, their safety for the authorities or services of the occupying state, as well as their willingness and consent to cooperate with the authorities or services of the occupying state". See: <https://khp.org/en/1608813448>.
225. Survivor ID: En-011; Survivor ID: En-020; Survivor ID: En-013.
226. Survivor ID: En-013; Survivor ID: En-011; Survivor ID: En-023; Survivor ID: En-020; Survivor ID: En-032.
227. Survivor ID: En-032.
228. Survivor ID: En-010; Survivor ID: En-014.
229. Survivor ID: En-011; Survivor ID: En-014; Survivor ID: En-020; Survivor ID: En-010.
230. Survivor ID: En-010; Survivor ID: En-011; Survivor ID: En-013; Survivor ID: En-014; Survivor ID: En-014 UPD.
231. Survivor ID: En-013; Survivor ID: En-021.
232. Survivor ID: En-011.
233. Survivor ID: En-026.
234. Survivor ID: En-032.
235. Survivor ID: En-013; Survivor ID: En-020; Survivor ID: En-021.
236. Survivor ID: En-013; Survivor ID: En-021.
237. Survivor ID: En-013.
238. Survivor ID: En-013; Survivor ID: En-010; Survivor ID: En-020; Survivor ID: En-026.
239. Survivor ID: En-009; Survivor ID: En-028.
240. "Rebar", short for "reinforcement bar", refers to steel rods or mesh that are used to reinforce concrete structures.
241. Survivor ID: En-028.
242. Survivor ID: En-032.
243. Survivor ID: En-009.
244. Survivor ID: En-032; Survivor ID: En-012; Survivor ID: En-019.
245. Survivor ID: En-012.
246. Survivor ID: En-014.
247. Survivor ID: En-012; Survivor ID: En-032.
248. Survivor ID: En-012.
249. Survivor ID: En-009.
250. Survivor ID: En-009.
251. Survivor ID: En-012.
252. Survivor ID: En-009.
253. Survivor ID: En-009; Survivor ID: En-019.
254. Survivor ID: En-032.
255. Novosti Enerhodara, "Renovation of the city court has begun in Energodar," *Telegram*, Feb. 6, 2025, <https://archive.ph/wQ6yJ>, last accessed Sep. 3, 2025.
256. Survivor ID: En-020; Survivor ID: En-014; Survivor ID: En-011; Survivor ID: En-021; Survivor ID: En-013; Survivor ID: En-033; Survivor ID: En-023; Survivor ID: En-026; Survivor ID: En-032.
257. Survivor ID: En-021; Survivor ID: En-020; Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
258. Survivor ID: En-011; Survivor ID: En-021; Survivor ID: En-026; Survivor ID: En-013; Survivor ID: En-015; Survivor ID: En-020; Survivor ID: En-028; Survivor ID: En-010; Survivor ID: En-014; Survivor ID: En-023; Survivor ID: En-019; Survivor ID: En-032; Survivor ID: En-018.
259. Survivor ID: En-023; Survivor ID: En-013; Survivor ID: En-031.
260. Survivor ID: En-028.
261. Survivor ID: En-030.
262. Survivor ID: En-019.
263. Two of the three documented instances of detainees being threatened with rape with a baton, accompanied by forced nudity, took place at Enerhodar Police Station: Survivor ID: En-030; Survivor ID: En-033.
264. Survivor ID: En-032; Survivor ID: En-019 about Survivor ID: En-014; Survivor ID: En-019; Survivor ID: En-030; Survivor ID: En-026.
265. Survivor ID: En-011; Survivor ID: En-028; Survivor ID: En-014.
266. Survivor ID: En-014; Survivor ID: En-019.
267. Survivor ID: En-015; Survivor ID: En-028.
268. Survivor ID: En-020; Survivor ID: En-012; Survivor ID: En-010.
269. Survivor ID: En-030.
270. Survivor ID: En-020.
271. Survivor ID: En-032; Survivor ID: En-028.
272. Survivor ID: En-011; Survivor ID: En-010; Survivor ID: En-015; Survivor ID: En-016.
273. Survivor ID: En-013; Survivor ID: En-020; Survivor ID: En-014.
274. Enerhodar Police Station, "Photo of people sitting in a room," *Facebook*, Sep. 18, 2021, <https://www.facebook.com/1822646041139982/photos/pb.100064801392501-2207520000/5013359095401978/?type=3>, last accessed Aug. 3, 2025.
275. Enerhodar Police Station, "Photo of people sitting in a long hallway room," *Facebook*, Sep. 16, 2020, <https://www.facebook.com/1822646041139982/photos/pb.100064801392501-2207520000/4320861411318420/?type=3>, last accessed Aug. 3, 2025.
276. Novosti Enerhodara, "Renovation of the city court has begun in Energodar," *Telegram*, Feb. 6, 2025, <https://archive.ph/wQ6yJ>, last accessed Sep. 3, 2025.
277. The available evidence provides limited information about this detention facility. The information presented in this report reflects only what has been confirmed through

- documented evidence.
278. Survivor ID: En-021.
 279. Survivor ID: En-021; Survivor ID: En-032; Survivor ID: En-012. *See also* Marc Santora, "Torture and Turmoil at Ukrainian Nuclear Plant: An Insider's Account," *New York Times*, June 16, 2025, <https://www.nytimes.com/2023/03/28/world/europe/ukraine-zaporizhzhia-nuclear-plant-grossi.html>, last accessed Aug. 2, 2025; in an interview with the *New York Times*, Ihor Murashov, the former director general of the ZNPP, stated that he was detained at the local department of the SBU in Enerhodar after he had been abducted on September 30, 2022. During his three-day detention at the SBU building in Enerhodar, he said he was made to sit in a chair with a sack over his head in handcuffs for 24 hours. After his three-day detention, Murashov was forced to record a video accusing the Armed Forces of Ukraine of shelling the ZNPP, along with being forced to sign a paper on the impossibility to redact his statement. Murashov was later released from captivity on October 4, 2022.
 280. Survivor ID: En-021; Survivor ID: En-032.
 281. Survivor ID: En-032.
 282. Survivor ID: En-032.
 283. Survivor ID: En-032.
 284. Survivor ID: En-032.
 285. Survivor ID: En-032.
 286. "Temporary Custody Isolator" is the translation of "Ізолятор тимчасового тримання", shortened in Ukrainian to "ІТТ".
 287. Survivor ID: En-013; Survivor ID: En-010; Survivor ID: En-019; Survivor ID: En-012; Survivor ID: En-005.
 288. Survivor ID: En-013; Survivor ID: En-010; Survivor ID: En-026; Survivor ID: En-010.
 289. Survivor ID: En-026.
 290. Survivor ID: En-013; Survivor ID: En-010; Survivor ID: En-019; Survivor ID: En-005; Survivor ID: En-026.
 291. Survivor ID: En-026.
 292. Survivor ID: En-015; Survivor ID: En-012; Survivor ID: En-026; Survivor ID: En-013; Survivor ID: En-019.
 293. Survivor ID: En-013; Survivor ID: En-019.
 294. Survivor ID: En-005.
 295. Survivor ID: En-026; Survivor ID: En-010.
 296. Survivor ID: En-019.
 297. Survivor ID: En-013.
 298. Survivor ID: En-026; Survivor ID: En-013; Survivor ID: En-009.
 299. Survivor ID: En-026.
 300. Survivor ID: En-019.
 301. Survivor ID: En-013; Survivor ID: En-019.
 302. Survivor ID: En-019.
 303. Survivor ID: En-026.
 304. Misto.UA, "Kamianka-Dniprovska District Department of the National Police (Ministry of Internal Affairs) of Ukraine in Zaporizhia Oblast," Jan. 25, 2024, <https://tinyurl.com/2s3mbed6>, last accessed Aug. 3, 2025.
 305. Survivor ID: En-026.
 306. Survivor ID: En-014.
 307. Survivor ID: En-009.
 308. Survivor ID: En-019.
 309. Survivor ID: En-009.
 310. Survivor ID: En-013.
 311. Survivor ID: En-019.
 312. Survivor ID: En-013; Survivor ID: En-010.
 313. Survivor ID: En-005.
 314. Survivor ID: En-013; Survivor ID: En-019.
 315. Survivor ID: En-013.
 316. Survivor ID: En-019.
 317. Survivor ID: En-026; Survivor ID: En-019; Survivor ID: En-009.
 318. Survivor ID: En-019.
 319. Survivor ID: En-026; Survivor ID: En-019.
 320. Survivor ID: En-019; Survivor ID: En-013; Survivor ID: En-015.
 321. Survivor ID: En-015.
 322. Survivor ID: En-015.
 323. Survivor ID: En-009.
 324. Survivor ID: En-011.
 325. Survivor ID: En-019.
 326. Survivor ID: En-019.
 327. Survivor ID: En-019.
 328. Survivor ID: En-019.
 329. Survivor ID: En-015; Survivor ID: En-026.
 330. Survivor ID: En-034.
 331. Survivor ID: En-031.
 332. Survivor ID: En-031.
 333. Survivor ID: En-031.
 334. Survivor ID: En-031; Survivor ID: En-014.
 335. Survivor ID: En-004.
 336. Zmina, "A ZNPP security guard, whom the Russians illegally sentenced to 11 years in prison, was constantly tortured in captivity," Apr. 30, 2025, <https://zmina.info/news/ohoronczya-zaes-olega-morochkovskogo-yakogo-rosiyany-nezakonno-zasudyly-do-11-rokiv-postitjno-katuvaly-v-uvyaznenni/>, last accessed Aug. 4, 2025.
 337. Media Initiative for Human Rights, "Russians sentence Zaporizhzhia nuclear power plant engineer Sergei Potin to 19 years in prison," Mar. 26, 2025, <https://mipl.org.ua/rosiyany-zasudyly-do-19-rokiv-uvyaznennya-inzhenera-zaporizkoyi-aes-sergiya-potynga/>, last accessed Aug. 4, 2025.
 338. Survivor ID: En-027.
 339. Survivor ID: En-027.
 340. Mariia Klymyk, "'You leave the cell and don't know how badly you'll be beaten.' Testimony of prisoners of war about their detention in Taganrog," *Media Initiative for Human Rights*, Jan. 6, 2023, <https://mipl.org.ua/vyhodysh-iz-kamery-ne-znayesh-chy-sylno-bytymut-svidchennya-vijskovopolonenyh-pro-utrymannya-u-taganrozi/>, last accessed Aug. 4, 2025; Sofia Krasnikova, "Journalist Viktoriya Roshchina, who died in Russian captivity, was held in one of Russia's most brutal detention centers," *Media Initiative for Human Rights*, Oct. 11, 2024, <https://mipl.org.ua/zhurnalistku-viktoriyu-roshchynu-yaka-pomerla-v-rosijskomu-poloni-trymaly-v-odnomu-z-najzhorstokishy-izolyatoriv-rosiyi/>, last accessed Aug. 4, 2025; Sevgil Musaieva, Stas Kozliuk, and Anastasiia Horpinchenko, "The Viktoriia Project: the story of the captivity and torture endured by journalist Viktoriia Roshchyna and thousands of Ukrainians imprisoned by Russia," *Ukrainska Pravda*, Apr. 29, 2025, <https://www.pravda.com.ua/eng/articles/2025/04/29/7509612/>, last accessed Aug. 4, 2025.
 341. Survivor ID: En-025.
 342. Survivor ID: En-025.
 343. Survivor ID: En-031.
 344. Survivor ID: En-011; Survivor ID: En-032.
 345. Yulia Hyleva, "Enerhodar Mayor Eduard Senovoz: 'We live and develop, no matter what'," *StranaRosatom*, Jan. 22, 2024, <https://web.archive.org/web/20250809044935/https://strana-rosatom.ru/2024/01/22/zhivem-i-razvivaemsa-nesmotrya-ni-na-cht/>, last accessed Aug. 9, 2025; Tass.Ru, "Zaporizhzhia reports on ensuring the safety of IAEA specialists' rotation," Feb 18, 2025, <https://tass.ru/armiya-i-opk/23168171>, last accessed Sep. 2, 2025.
 346. Representatives of the so-called "Zaporizhzhnia Nuclear Power Plant Operating Organization" owned by Rosenergoatom.
 347. Survivor ID: En-033.
 348. Survivor ID: En-027; Survivor ID: En-026; Survivor ID: En-020; Survivor ID: En-023; Survivor ID: En-010. Some abductions involved larger groups of Russian forces. Survivor ID: En-004; Survivor ID: En-014; Survivor ID: En-015; Survivor ID: En-005.
 349. Survivor ID: En-026; Survivor ID: En-028; Survivor ID: En-021; Survivor ID: En-014; Survivor ID: En-027; Survivor ID: En-011; Survivor ID: En-020; Survivor ID: En-004; Survivor ID: En-025; Survivor ID: En-015.
 350. Survivor ID: En-026; Survivor ID: En-014.
 351. Survivor ID: En-012; Survivor ID: En-010; Survivor ID: En-026; Survivor ID: En-023.
 352. Survivor ID: En-015.
 353. Survivor ID: En-015; Survivor ID: En-010; Survivor ID: En-014.
 354. Survivor ID: En-021.
 355. Survivor ID: En-025; Survivor ID: En-028; Survivor ID: En-012; Survivor ID: En-013; Survivor ID: En-011.
 356. Survivor ID: En-011; Survivor ID: En-015; Survivor ID: En-012; Survivor ID: En-028; Survivor ID: En-021; Survivor ID: En-025; Survivor ID: En-016; Survivor ID: En-031; Survivor ID: En-026; Survivor ID: En-024. *See also* Sevgil Musaieva, Stas Kozliuk, Anastasiia Horpinchenko, "The Viktoriia Project: the story of the captivity and torture endured by journalist Viktoriia Roshchyna and thousands of Ukrainians imprisoned by Russia," *Ukrainska Pravda*, Apr. 29 2025, <https://www.pravda.com.ua/eng/articles/2025/04/29/7509612/>, last accessed Aug. 3, 2025.
 357. Survivor ID: En-016.
 358. Survivor ID: En-015.
 359. Survivor ID: En-026; Survivor ID: En-017; Survivor ID: En-033. Truth Hounds documented some instances in which occupying police and security forces visited people at their homes and then beat them without ever abducting or detaining them. Survivor ID: En-028.
 360. Survivor ID: En-014; Survivor ID: En-010.
 361. Survivor ID: En-010.
 362. Survivor ID: En-014.
 363. Under the Rome Statute (RS), Article 8(2)(b)(xvi), pillage constitutes a war crime. However, the pillage of property does not concern the appropriation of property necessitated by military necessity, as reflected in fn. 47 to the Elements of Crime (EoC) RS, which is a core legal text for the International Criminal Court. International Criminal Court, Katanga and Ngudjolo, ICC-01/04-01/07-717, Confirmation Decision, Pre-Trial Chamber, Sep. 30, 2008, para. 329: The Pre-Trial Chamber held that "the pillaged property, whether moveable or immoveable, private or public – must belong to individuals or entities who are aligned with or whose allegiance is to a party to the conflict who is adverse or hostile to the perpetrator". *See also*: Sandoz Y., Swinarski C., Zimmermann B. (eds.), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 1376, para. 4542 (1987): The prohibition of pillage extends to all types of property, whether they belong to private persons or to communities or the state.
 364. Survivor ID: En-028; Survivor ID: En-019.
 365. Survivor ID: En-015; Survivor ID: En-026; Survivor ID: En-019; Survivor ID: En-013.

366. Survivor ID: En-028; Survivor ID: En-012; Survivor ID: En-009.
367. Survivor ID: En-010; Survivor ID: En-011; Survivor ID: En-009; Survivor ID: En-013; Survivor ID: En-005; Survivor ID: En-015; Survivor ID: En-014.
368. Survivor ID: En-020; Survivor ID: En-013; Survivor ID: En-010.
369. Survivor ID: En-014; Survivor ID: En-029.
370. Survivor ID: En-033.
371. Survivor ID: En-028. Survivor ID: En-014 also mentioned an UAZ car but not the color.
372. Survivor ID: En-025.
373. Survivor ID: En-016; Survivor ID: En-013; Survivor ID: En-028.
374. Survivor ID: En-025; Survivor ID: En-027.
375. Survivor ID: En-028; Survivor ID: En-011; Survivor ID: En-020.
376. Survivor ID: En-011; Survivor ID: En-019.
377. Survivor ID: En-028; Survivor ID: En-011; Survivor ID: En-012; Survivor ID: En-013; Indirect evidence: Survivor ID: En-025; Survivor ID: En-014; See also Joe Parkinson and Drew Hinshaw, "The Hole": Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
378. Survivor ID: En-028.
379. Survivor ID: En-011.
380. Survivor ID: En-012.
381. Survivor ID: En-031.
382. Survivor ID: En-028; Survivor ID: En-011; Survivor ID: En-013; Survivor ID: En-020; Survivor ID: En-012; Indirect evidence: Survivor ID: En-025; Survivor ID: En-014; Survivor ID: En-033; Survivor ID: En-005; Survivor ID: En-032. See also Joe Parkinson and Drew Hinshaw, "The Hole": Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
383. Survivor ID: En-013; Survivor ID: En-011.
384. Survivor ID: En-011.
385. Survivor ID: En-013; Survivor ID: En-032; Survivor ID: En-011; Survivor ID: En-027; Survivor ID: En-028; Survivor ID: En-014; Survivor ID: En-025; Survivor ID: En-016; Survivor ID: En-012; Survivor ID: En-019.
386. Survivor ID: En-014; Survivor ID: En-027; Survivor ID: En-018; Survivor ID: En-022.
387. Survivor ID: En-013.
388. Survivor ID: En-012; Survivor ID: En-025.
389. Survivor ID: En-012.
390. Survivor ID: En-012.
391. A TA-57 is a Soviet universal field telephone with an inductor calling system, produced since 1957. It has often been used against Ukrainian prisoners (both civilian and military) by Russian security forces, especially on the occupied territories under prolonged effective Russian control.
392. Usually, the detainees reported having Tapik electric clips connected both to their ears and fingers: Survivor ID: En-020; Survivor ID: En-014; Survivor ID: En-019; Survivor ID: En-032; Or to their hands and fingers: Survivor ID: En-021; Or to both their ears and toes: Survivor ID: En-011; Or only to their ears: Survivor ID: En-028; Survivor ID: En-013 (almost had a Tapik electrical wire connected to his ear); Survivor ID: En-026; Survivor ID: En-023; Or only to their fingers: Survivor ID: En-010; Survivor ID: En-018; Survivor ID: En-029.
393. "Ilyich" was Vladimir Lenin's patronymic..
394. Sevgil Musaieva, Stas Kozliuk, Anastasiia Horpinchenko, "The Viktoriia Project: the story of the captivity and torture endured by journalist Viktoriia Roshchyna and thousands of Ukrainians imprisoned by Russia," *Ukrainska Pravda*, Apr. 29, 2025, <https://www.pravda.com.ua/eng/articles/2025/04/29/7509612/>, last accessed Aug. 3, 2025.
395. Survivor ID: En-020.
396. Survivor ID: En-023; Survivor ID: En-013; Survivor ID: En-031.
397. Survivor ID: En-021; Survivor ID: En-028; Survivor ID: En-020; Survivor ID: En-010; Survivor ID: En-031; Survivor ID: En-018. See also: Sevgil Musaieva, Stas Kozliuk, Anastasiia Horpinchenko, "The Viktoriia Project: the story of the captivity and torture endured by journalist Viktoriia Roshchyna and thousands of Ukrainians imprisoned by Russia," *Ukrainska Pravda*, Apr. 29, 2025, <https://www.pravda.com.ua/eng/articles/2025/04/29/7509612/>, last accessed Aug. 3, 2025.
398. Survivor ID: En-028.
399. Survivor ID: En-019; Survivor ID: En-010; Survivor ID: En-023; Survivor ID: En-018; Survivor ID: En-020; Survivor ID: En-028, Survivor ID: En-032; Survivor ID: En-018; Survivor ID: En-031.
400. Survivor ID: En-016.
401. For instance, learn the Russian anthem by heart.
402. Survivor ID: En-028; Survivor ID: En-031.
403. Survivor ID: En-026; Survivor ID: En-025; Survivor ID: En-013; Survivor ID: En-028; Survivor ID: En-012.
404. Survivor ID: En-028; Survivor ID: En-015.
405. Truth Hounds documented at least two instances where detainees were raped with a police baton: Survivor ID: En-032; Survivor ID: En-030.
406. Truth Hounds documented at least five incidents when male detainees were threatened with being raped by other detainees: Survivor ID: En-032; Survivor ID: En-014; Survivor ID: En-019; Survivor ID: En-030; Survivor ID: En-026.
407. Truth Hounds documented at least one incident when a detainee was threatened to be placed on a plastic bottle: Survivor ID: En-019.
408. Truth Hounds documented at least five instances where detainees were threatened to be raped with a police baton or a stick: Survivor ID: En-028; Survivor ID: En-020. In at least three incidents, detainees were naked and threatened with rape: Survivor ID: En-032; Survivor ID: En-030; Survivor ID: En-033. For example, one of the detainees was forced to be naked, had an automatic gun pointed at her body, and was told that she would be raped by the Russian military. In two other instances, detainees, who were forced into nudity, were threatened with being raped by a baton covered with a condom or with a rubber baton, while they were being beaten.
409. Truth Hounds documented at least three instances where the Russian occupying forces tried to intimidate male prisoners by threatening to rape their wives: Survivor ID: En-014; Survivor ID: En-009; Survivor ID: En-026. See also: Joe Parkinson and Drew Hinshaw, "The Hole": Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
410. Survivor ID: En-012; Survivor ID: En-027; Survivor ID: En-031.
411. Survivor ID: En-031.
412. Survivor ID: En-031.
413. Survivor ID: En-014; Survivor ID: En-011; Survivor ID: En-028; Survivor ID: En-021; Survivor ID: En-026; Survivor ID: En-010; Survivor ID: En-020; Survivor ID: En-023; Survivor ID: En-013; Survivor ID: En-033; Survivor ID: En-023; Survivor ID: En-032.
414. Survivor ID: En-028; Survivor ID: En-013; Survivor ID: En-012; Survivor ID: En-027. See also Joe Parkinson and Drew Hinshaw, "The Hole": Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
415. Survivor ID: En-016.
416. Survivor ID: En-021; Survivor ID: En-020. See also: Joe Parkinson and Drew Hinshaw, "The Hole": Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
417. Survivor ID: En-009.
418. Survivor ID: En-021.
419. Survivor ID: En-027.
420. Survivor ID: En-025.
421. Survivor ID: En-014.
422. Survivor ID: En-021; See also: Viktoriia Roshchyna, "We are here like slaves of the 21st century." What is happening at the Zaporizhzhia NPP in occupied Enerhodar," *Ukrainska Pravda*, Mar. 10, 2023, <https://www.pravda.com.ua/eng/articles/2023/03/10/7392758/>, last accessed Aug. 3, 2025; Similarly, *Ukrainska Pravda* documented an incident involving torture with a hot iron.
423. A traumatic gun, also known as a non-lethal pistol or less-lethal pistol, is a firearm designed to be used with ammunition that is intended to cause injury or pain but not to kill, though it can be misused and cause fatal injuries: Survivor ID: En-011; Survivor ID: En-013; Survivor ID: En-012; Survivor ID: En-028; Survivor ID: En-014.
424. Survivor ID: En-032; Survivor ID: En-028.
425. Survivor ID: En-011.
426. Survivor ID: En-014.
427. Survivor ID: En-020; Survivor ID: En-012; Survivor ID: En-010.
428. Survivor ID: En-030.
429. Survivor ID: En-020.
430. Truth Hounds documented at least two incidents where detainees either had a cross shaved onto their head or were beaten on their back so that a cross would form from the wounds: Survivor ID: En-026; Survivor ID: En-009; Survivor ID: En-016.
431. Survivor ID: En-025; Survivor ID: En-031.
432. Survivor ID: En-031; Survivor ID: En-033.
433. Survivor ID: En-028; Survivor ID: En-027; Survivor ID: En-021.
434. Survivor ID: En-013; Survivor ID: En-010; Survivor ID: En-026; Survivor ID: En-019.
435. Survivor ID: En-019; Survivor ID: En-023.
436. Survivor ID: En-025; Survivor ID: En-010; Survivor ID: En-023; On some occasions, more individuals were present, while sometimes there were only representatives of the occupying Russian police; Survivor ID: En-026. Survivor ID: En-011.
437. Survivor ID: En-020; Survivor ID: En-028; Survivor ID: En-016; Survivor ID: En-019; Survivor ID: En-030; Survivor ID: En-026; Survivor ID: En-009.
438. Survivor ID: En-028; Survivor ID: En-020; Survivor ID: En-030; Survivor ID: En-026; Survivor ID: En-016; Survivor ID: En-009.
439. Survivor ID: En-013; Survivor ID: En-021; Survivor ID: En-027; Survivor ID: En-023.
440. Survivor ID: En-013; Survivor ID: En-021; Survivor ID: En-011; Survivor ID: En-031.
441. Survivor ID: En-028; Survivor ID: En-023; Survivor ID: En-018; Survivor ID: En-021.
442. Survivor ID: En-021.
443. Survivor ID: En-028; Survivor ID: En-027; Survivor ID: En-017; Survivor ID: En-026.
444. Survivor ID: En-028; Survivor ID: En-031; Survivor ID: En-018; Survivor ID: En-020; Survivor ID: En-027.
445. Survivor ID: En-027.
446. Survivor ID: En-018.
447. Survivor ID: En-028.
448. Survivor ID: En-031.

449. Survivor ID: En-014; Survivor ID: En-018; Survivor ID: En-016; Survivor ID: En-014; Survivor ID: En-020; Survivor ID: En-011.
450. Survivor ID: En-028; Survivor ID: En-014.
451. "Novichok" refers to a group of organophosphate chemicals that act as nerve agents; Survivor ID: En-025.
452. Survivor ID: En-012; Survivor ID: En-018; Survivor ID: En-026.
453. Survivor ID: En-032; Survivor ID: En-013; Survivor ID: En-025; Survivor ID: En-028; Survivor ID: En-012; Survivor ID: En-021.
454. Survivor ID: En-016; Survivor ID: En-013.
455. Survivor ID: En-025.
456. Survivor ID: En-025; Survivor ID: En-013; Survivor ID: En-012; Survivor ID: En-016; Survivor ID: En-032.
457. Survivor ID: En-012.
458. Survivor ID: En-011.
459. Survivor ID: En-012; Survivor ID: En-016.
460. Survivor ID: En-019; Survivor ID: En-013; Survivor ID: En-009.
461. Survivor ID: En-021.
462. Survivor ID: En-022. See also: A 15-year-old boy in Enerhodar, whose parents lost custody due to substance abuse issues, was visited three times by occupying Russian security forces along with his grandmother. The officers questioned his non-enrollment at the local school and, on the last visit, threatened to send him to an orphanage; Mari Saito, Polina Nikolskaya, Anton Zverev and Marian Prysiashniuk, "Russia turns a Ukrainian nuclear city into a stronghold of fear," *Reuters*, Aug. 29, 2025, <https://www.reuters.com/investigations/russia-turns-ukrainian-nuclear-city-into-stronghold-fear-2025-08-29/>, last accessed on Sep. 2, 2025.
463. Survivor ID: En-025.
464. Survivor ID: En-025.
465. Survivor ID: En-011; Survivor ID: En-031; Survivor ID: En-014; Survivor ID: En-005; Survivor ID: En-025.
466. Survivor ID: En-013; Survivor ID: En-025; Survivor ID: En-016; Survivor ID: En-032.
467. Survivor ID: En-025; Survivor ID: En-016.
468. Survivor ID: En-016; Survivor ID: En-031; Survivor ID: En-017; Survivor ID: En-018; Survivor ID: En-022; Survivor ID: En-004; Survivor ID: En-026; UPD Survivor ID: En-014; Survivor ID: En-035; Survivor ID: En-032.
469. Survivor ID: En-025; Kremlin Prachka, "The press secretary of the Zaporizhzhya NPP Andrey Tuz gave an extensive interview to Russian journalists," Jun. 23, 2022, <https://web.archive.org/web/2022En-015154026/https://telegra.ph/1-Avtobiografiya-06-23>, last accessed Aug. 3, 2025; Romanov Light, "Video of ZNPP's spokesman in Sochi," *Telegram*, Jun. 24, 2022, <https://archive.ph/wSnpv>, last accessed Sep. 3, 2025.
470. Survivor ID: En-012; MASH, "Profession — gunner of the Armed Forces. How a Ukrainian family put their city under fire," Nov. 7, 2022, <https://web.archive.org/web/20240907073748/https://mash.ru/longread/160792/>, last accessed Aug. 3, 2025; Zmina, "A ZNPP security guard, whom the Russians illegally sentenced to 11 years in prison, was constantly tortured in captivity," Apr. 30, 2025, <https://zmina.info/news/ohoroncya-zaes-olega-morochkovskogo-yakogo-rosiyany-nezakonno-zasudyly-do-11-rokiv-postitno-katuvaly-v-uvyaznennii/>, last accessed Aug. 3, 2025; Survivor ID: En-020.
471. Survivor ID: En-033.
472. Viktoriya Roshchyna, "We are here like slaves of the 21st century." What is happening at the Zaporizhzhia NPP in occupied Enerhodar," *Ukrainska Pravda*, Mar. 10, 2023, <https://www.pravda.com.ua/eng/articles/2023/03/10/7392758/>, last accessed Aug. 3, 2025.
473. Survivor ID: En-011.
474. MASH, "Profession — gunner of the Armed Forces. How a Ukrainian family put their city under fire," Nov. 7, 2022, <https://web.archive.org/web/20240907073748/https://mash.ru/longread/160792/>, last accessed Aug. 3, 2025; Survivor ID: En-020; Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025; Murashov forced to be recorded for a propaganda video.
475. Kremlinprachka, "The press secretary of the Zaporizhzhya NPP Andrey Tuz gave an extensive interview to Russian journalists," Jun. 23, 2022, <https://web.archive.org/web/2022En-015154026/https://telegra.ph/1-Avtobiografiya-06-23>, last accessed Aug. 3, 2025; Romanov Light, "23.06.2022 Sochi Russia Press-secretary of the Zaporizhzhia NPP Andrey Tuz," *Telegram*, Jun. 24, 2022, <https://archive.ph/wSnpv>, last accessed Sep. 3, 2025. See also Cecile Mantovani, Maria Tsvetkova, and Christian Lowe, "Insight: The man embroiled in Russia and Ukraine's propaganda war over a nuclear plant," *Reuters*, Sep. 15, 2022, <https://www.reuters.com/world/europe/man-embroiled-russia-ukraines-propaganda-war-over-nuclear-plant-2022-09-15/>, last accessed Aug. 3, 2025.
476. Survivor ID: En-025.
477. Survivor ID: En-028; Survivor ID: En-014.
478. Survivor ID: En-029.
479. The Prosecutor General's Office of the Russian Federation, "The court sentenced Natalya Shulga to 15 years in prison, who, on the instructions of the Ukrainian special services, planned sabotage in Energodar," *Telegram*, Mar. 6, 2025, <https://archive.ph/YGtjA>, last accessed Sep. 3, 2025.
480. Dmytro Orlov, "The occupiers sentenced 56-year-old Enehodar resident and ZNPP employee Natalya Shulga to 15 years in prison," *Telegram*, Mar. 6, 2025, <https://archive.ph/E8RHF>, last accessed Sep. 3, 2025.
481. Dmytro Orlov, "Today, March 26, the so-called 'Russian court' sentenced an energy provider and employee of the Zaporizhzhia NPP Serhiy Potinha to 19 years in prison," *Telegram*, Mar. 26, 2025, <https://archive.ph/lGh8D>, last accessed Sep. 3, 2025.
482. Survivor ID: En-025.
483. Survivor ID: En-013; Survivor ID: En-008; Survivor ID: En-029; Survivor ID: En-014; See also Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
484. Survivor ID: En-028; Survivor ID: En-011; Survivor ID: En-031; Survivor ID: En-010; Survivor ID: En-012; Survivor ID: En-023; Survivor ID: En-032.
485. Survivor ID: En-012.
486. Survivor ID: En-028.
487. Survivor ID: En-010; Survivor ID: En-020; Survivor ID: En-028; Survivor ID: En-019.
488. Survivor ID: En-031; Survivor ID: En-027.
489. Survivor ID: En-025; Survivor ID: En-004.
490. Survivor ID: En-013; Survivor ID: En-025; Survivor ID: En-014; Survivor ID: En-023.
491. Survivor ID: En-015; Survivor ID: En-014.
492. Survivor ID: En-027; Survivor ID: En-011; Survivor ID: En-013.
493. Survivor ID: En-028.
494. Survivor ID: En-011.
495. Survivor ID: En-028.
496. Survivor ID: En-028; Survivor ID: En-012.
497. Survivor ID: En-011.
498. Survivor ID: En-014.
499. Survivor ID: En-028.
500. Survivor ID: En-012.
501. Survivor ID: En-014; Survivor ID: En-012.
502. Survivor ID: En-028; Survivor ID: En-023.
503. Survivor ID: En-028; Survivor ID: En-020.
504. Survivor ID: En-020.
505. Survivor ID: En-028; Survivor ID: En-021; Survivor ID: En-025.
506. Survivor ID: En-014.
507. Survivor ID: En-028.
508. Survivor ID: En-028.
509. Survivor ID: En-011.
510. Survivor ID: En-012; Survivor ID: En-011; UPD Survivor ID: En-014; Survivor ID: En-020; Survivor ID: En-021; Survivor ID: En-005.
511. Survivor ID: En-012.
512. Survivor ID: En-020.
513. Survivor ID: En-028; Survivor ID: En-025; Survivor ID: En-020; Survivor ID: En-011.
514. Survivor ID: En-025.
515. Survivor ID: En-011; Survivor ID: En-010; Survivor ID: En-015; Survivor ID: En-016. See also Joe Parkinson and Drew Hinshaw, "'The Hole': Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," *Wall Street Journal*, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 3, 2025.
516. Kateryna Tyshchenko, "The occupiers tortured the diver of the Zaporizhzhia Nuclear Power Plant to death - the mayor of Enerhodar," *Ukrainska Pravda*, Jul. 3, 2022, <https://www.pravda.com.ua/eng/news/2022/07/3/7356157/>, last accessed Aug. 3, 2025.
517. Survivor ID: En-028.
518. Survivor ID: En-020.
519. Truth Hounds is unaware of the first name of the police officer in question.
520. Survivor ID: En-011.
521. Survivor ID: En-011.
522. Survivor ID: En-015; Survivor ID: En-012.
523. Survivor ID: En-015; Survivor ID: En-028.
524. Survivor ID: En-023; Survivor ID: En-013; Survivor ID: En-014.
525. Survivor ID: En-013.
526. Survivor ID: En-011.
527. Survivor ID: En-027; Survivor ID: En-018.
528. Survivor ID: En-027; See also Uliana Guz, "The body of journalist Roshchyna, who died in Russian captivity and was held in two of the most brutal prisons, will be returned to Ukraine, - People's Deputy," *Rubryka*, Oct. 11, 2024, <https://web.archive.org/web/20241113135954/https://rubryka.com/2024/10/11/u-rosijskomu-poloni-zhurnalistky/>, last accessed Aug. 3, 2025: "The only difference was that a doctor was present during the torture. When a prisoner feels sick, he gives him a pill."
529. Survivor ID: En-031.
530. Survivor ID: En-031.
531. Energom, "Enerhodar residents, be vigilant! The occupiers move around the city not only on military equipment!," *Telegram*, Mar. 10, 2022, <https://archive.ph/bFnMZ>, last accessed Sep. 3, 2025.
532. Survivor ID: En-026; Survivor ID: En-031; Survivor ID: En-021; Survivor ID: En-020; Survivor ID: En-004.
533. Survivor ID: En-014.
534. Survivor ID: En-026; Survivor ID: En-014.
535. Survivor ID: En-016; Survivor ID: En-033; Survivor ID: En-017; Survivor ID: En-022; Survivor ID: En-031; Survivor ID: En-004; Survivor ID: En-018; UPD Survivor ID: En-014.

536. Survivor ID: En-016; Survivor ID: En-013; Survivor ID: En-031; UPD Survivor ID: En-014; Survivor ID: En-011; Survivor ID: En-005; Survivor ID: En-025.
537. Survivor ID: En-033; Survivor ID: En-009; Survivor ID: En-014; UPD Survivor ID: En-014; Survivor ID: En-004; Survivor ID: En-020.
538. UPD Survivor ID: En-014.
539. UPD Survivor ID: En-014.
540. Survivor ID: En-016.
541. Survivor ID: En-025; Survivor ID: En-031.
542. Survivor ID: En-022; Survivor ID: En-017; Survivor ID: En-020; Survivor ID: En-025.
543. Survivor ID: En-004.
544. Survivor ID: En-022; Survivor ID: En-003; Survivor ID: En-009; Survivor ID: En-018.
545. Survivor ID: En-022.
546. Survivor ID: En-021; Survivor ID: En-009; Survivor ID: En-020; Survivor ID: En-035.
547. Survivor ID: En-026.
548. Survivor ID: En-017.
549. Survivor ID: En-016; Survivor ID: En-025.
550. Survivor ID: En-025.
551. Survivor ID: En-016.
552. Survivor ID: En-016.
553. Survivor ID: En-020.
554. Survivor ID: En-025; While Truth Hounds' working standards prohibit the disclosure of any individual suspected in the perpetration of offenses before the official notice of suspicion has been issued against the individual, Yuri Chernichuk has already been notified of a notice of suspicion and further convicted in absentia under Ukrainian Procedural Criminal Law for the coercion of Ukrainian ZNPP employees into cooperating with Russian occupying authorities: SBU, "SBU reported suspicion to the occupation head of the Zaporizhzhia NPP," Mar. 21, 2023, <https://ssu.gov.ua/novyny/sbu-povidomya-pro-pidozru-okupatsiinomu-ochilnyku-zaporizkoi-aes>, last accessed Aug. 4, 2025; Center for Investigative Journalism, "Yurii Chernichuk, who headed the occupied Zaporizhzhia NPP, received a 10-year prison sentence in absentia for aiding the enemy," Apr. 20, 2024, <https://investigator.org.ua/ua/news-2/novosti-vlast/266068/>, last accessed Aug. 4, 2025.
555. The attempted assassination of Shevchuk with an explosive device took place on May 22, 2022. See: Yurii Korohodtskiy, "Mayor Shevchuk's collaborator was blown up in Enerhodar," *Liviy Bereh*, May 22, 2024, https://web.archive.org/web/20220530222741/https://lb.ua/society/2022/05/22/517611_energodari_pidirvali.html, last accessed Aug. 4, 2025.
556. Survivor ID: En-025; Survivor ID: En-014.
557. Survivor ID: En-014.
558. Survivor ID: En-031.
559. Survivor ID: En-018; Survivor ID: En-026.
560. Survivor ID: En-005.
561. Survivor ID: En-017; Survivor ID: En-026.
562. Survivor ID: En-017; Survivor ID: En-009.
563. Survivor ID: En-004; Survivor ID: En-035; Survivor ID: En-017; Survivor ID: En-001.
564. Survivor ID: En-004.
565. RBMK stands for "reaktor bolshoy moshchnosti kanalnyi" in Russian, which translates as "high-power channel reactor."
566. Survivor ID: En-017.
567. Survivor ID: En-017; Survivor ID: En-022; Survivor ID: En-009; Survivor ID: En-029; Survivor ID: En-018; Survivor ID: En-003.
568. Survivor ID: En-022; Survivor ID: En-017.
569. Survivor ID: En-017; While Truth Hounds' working standards prohibit the disclosure of any individual suspected of committing offenses before the official notice of suspicion has been issued against the individual, Oleg Romanenko has already been notified of a notice of suspicion under Ukrainian Procedural Criminal Law for the coercion of Ukrainian ZNPP employees into cooperating with Russian occupying authorities: SBU, "The SBU reported suspicions to the occupation head of the Zaporizhzhia NPP, who disconnected the plant from the Ukrainian power system," Apr. 18, 2023, <https://ssu.gov.ua/novyny/sbu-povidomya-pro-pidozru-okupatsiinomu-ochilnyku-zaporizkoi-aes-yakyyi-viednav-stantsiiu-vid-enerhosystemy-ukrainy>, last accessed Aug. 4, 2025.
570. Survivor ID: En-017.
571. Survivor ID: En-017.
572. Survivor ID: En-017; Survivor ID: En-018; While Truth Hounds' working standards prohibit the disclosure of any individual suspected in the perpetration of offenses before the official notice of suspicion has been issued against the individual, Eduard Atakishchev has already been notified of a notice of suspicion under Ukrainian Procedural Criminal Law for the coercion of Ukrainian ZNPP employees into cooperating with Russian occupying authorities: SBU, "The SBU reported suspicions to Russian Gauleiter of the Zaporizhzhia NPP, who were trying to disconnect the plant from the Ukrainian energy system," Apr. 23, 2024, <https://ssu.gov.ua/novyny/sbu-povidomya-pro-pidozru-rosiiskym-hauiaileram-zaporizkoi-aes-yaki-viednaly-stantsiiu-vid-enerhosystemy-ukrainy>, last accessed Aug. 4, 2025.
573. Survivor ID: En-031.
574. On July 22, 2022, the Main Directorate of Intelligence of Ukraine struck a Russian tent camp and equipment, in particular, a car with anti-aircraft guns and a BM-21 Grad. According to available data, three Russian military servicemen were killed and 12 injured as a result of the attack. The tent camp was destroyed by a fire that could not be extinguished for a long time: the Main Directorate of Intelligence of Ukraine, "Ukrainian military personnel have worked hard on the positions of the Russian occupiers near the Zaporizhzhia NPP," YouTube, Jul. 22, 2022, <https://www.youtube.com/watch?v=F9QmYORKx8M>, last accessed Aug. 4, 2025.
575. Survivor ID: En-020.
576. Survivor ID: En-020.
577. Survivor ID: En-026.
578. Survivor ID: En-020; Survivor ID: En-016; Survivor ID: En-028; Survivor ID: En-018; Survivor ID: En-019; Survivor ID: En-022.
579. Truth Hounds is unable to disclose these sources at present, due to security considerations.
580. Survivor ID: En-026; Survivor ID: En-017; Survivor ID: En-022; Survivor ID: En-004; Survivor ID: En-021.
581. As stated above, the so-called "referendum" on the illegal annexation of Zaporizhzhia Oblast to the Russian Federation took place on Sep. 23-27, 2022.
582. Rosenergoatom is a subsidiary of Rosatom responsible for operating Russia's nuclear power plants.
583. As previously mentioned, this illegal appropriation was based on Vladimir Putin's decree of October 5, 2022, and the announcement of Rosatom on the evening of the same day. This is also mentioned in the statement of Survivor ID: En-004.
584. Survivor ID: En-017; Survivor ID: En-031; Survivor ID: En-018; Survivor ID: En-022; Survivor ID: En-004.
585. Survivor ID: En-003; Survivor ID: En-023; Survivor ID: En-004; Survivor ID: En-014.
586. Survivor ID: En-017; Survivor ID: En-004; Survivor ID: En-018; Survivor ID: En-022; Survivor ID: En-031.
587. Survivor ID: En-031.
588. Survivor ID: En-004.
589. Survivor ID: En-017.
590. Survivor ID: En-025; Survivor ID: En-022.
591. Survivor ID: En-031; Survivor ID: En-018; Survivor ID: En-022; Survivor ID: En-004; Survivor ID: En-026; Survivor ID: En-029; Survivor ID: En-003.
592. Survivor ID: En-017; Survivor ID: En-004; Survivor ID: En-022; Survivor ID: En-018; Survivor ID: En-031.
593. Survivor ID: En-017.
594. Survivor ID: En-021.
595. Survivor ID: En-029.
596. Survivor ID: En-033.
597. Survivor ID: En-033.
598. Survivor ID: En-031.
599. Survivor ID: En-022.
600. Survivor ID: En-029.
601. Survivor ID: En-017.
602. Survivor ID: En-018.
603. Survivor ID: En-018.
604. Survivor ID: En-004.
605. Survivor ID: En-004.
606. Survivor ID: En-031; Truth Hounds is unable at present to publicly reveal the identity of the individual in question due to legal considerations.
607. Survivor ID: En-026.
608. Survivor ID: En-026.
609. Survivor ID: En-018; Survivor ID: En-026; Survivor ID: En-022; Survivor ID: En-003; Survivor ID: En-017.
610. Survivor ID: En-018; Survivor ID: En-033.
611. Survivor ID: En-026; UPD Survivor ID: En-014.
612. Survivor ID: En-002.
613. Green can be defined as "unqualified" or "unexperienced".
614. Survivor ID: En-004.
615. Survivor ID: En-022; Survivor ID: En-017; Survivor ID: En-004; See also NV, "September 2022 report of the mayor of Melitopol on the Russian prohibition of men to evacuate from Vasylivka," Telegram, Sep. 22, 2022, <https://archive.ph/K2zLh>, last accessed Sep. 3, 2025; Olena Struk, "Where are you going? To dill? To Hochland?" What is hidden behind the short phrase "we left the occupied south," LB.UA, Oct. 18, 2022, https://lb.ua/society/2022/10/18/532726_kuda_edete_ukropam.html, last accessed Aug. 4, 2025; Joe Parkinson and Drew Hinshaw, "The Hole": Gruesome Accounts of Russian Occupation Emerge From Ukrainian Nuclear Plant," Wall Street Journal, Nov. 18, 2022, <https://www.wsj.com/articles/russian-occupation-of-nuclear-plant-turns-brutal-with-accusations-of-torture-and-beatings-11668786893>, last accessed Aug. 4, 2025. See also Vitkoria Roshchyna, "Two weeks in line. How Ukrainians leave Russian-occupied territories," *Ukrainska Pravda*, Oct. 25, 2022, <https://www.pravda.com.ua/articles/2022/10/25/7373324/>, last accessed Sep. 3, 2025.
616. Survivor ID: En-017.
617. Survivor ID: En-017; Survivor ID: En-018; Survivor ID: En-022; Survivor ID: En-004; Survivor ID: En-035.
618. Survivor ID: En-017; Survivor ID: En-022.
619. Survivor ID: En-022.
620. Survivor ID: En-017.
621. Survivor ID: En-025; See also: OHCHR, "Human rights situation during the Russian occupation of territory of Ukraine and its aftermath: 24 February 2022 - 31 December 2023," Mar. 20, 2024, <https://ukraine.ohchr.org/sites/default/>

- files/2024-04/2024-03-20%20OCHCHR%20Report%20on%20Occupation%20and%20Aftermath_EN.pdf, last accessed Aug. 4, 2025, para 100: "Some ZNPP staff who tried to flee Enerhodar city were stopped at checkpoints and prohibited from leaving. For example, a staff member attempting to leave occupied territory was detained at a checkpoint and held incommunicado for over eight months, during which time the FSB interrogated him and subjected him to physical violence".
622. Survivor ID: En-035.
 623. Survivor ID: En-035.
 624. Survivor ID: En-017.
 625. Survivor ID: En-004.
 626. Survivor ID: En-004.
 627. Survivor ID: En-031.
 628. Survivor ID: En-017.
 629. Survivor ID: En-017.
 630. UPD Survivor ID: En-014.
 631. Survivor ID: En-004.
 632. Survivor ID: En-014.
 633. Survivor ID: En-035.
 634. Survivor ID: En-004.
 635. Survivor ID: En-031; Survivor ID: En-004.
 636. Survivor ID: En-031.
 637. Survivor ID: En-027; Survivor ID: En-022.
 638. Survivor ID: En-035.
 639. Survivor ID: En-031.
 640. Survivor ID: En-004 (two incidents); Survivor ID: En-027 (one incident); Survivor ID: En-014 (one incident); Survivor ID: En-005 (one incident); Survivor ID: En-029 (one incident); One such documented incident involved a person being coerced into signing a Rosatom contract. There was at least one other incident in which a ZNPP worker was abducted and subsequently subjected to severe torture, without being detained.
 641. Survivor ID: En-031.
 642. Enerhoatom, "13 employees of the Zaporizhzhia NPP were illegally deprived of their liberty in the temporarily occupied territories," Telegram, May 13, 2025, <https://archive.ph/JwSW>, last accessed Sep. 3, 2025; Enerhoatom, "13 employees of Zaporizhzhia NPP illegally deprived of their liberty in temporarily occupied territories," May 13, 2025, <https://energoatom.com.ua/news/13-pracivnikov-zaporizkoyi-aes-nezakonno-pozbavleni-voli-na-timcasovo-okupovanix-teritoriiakh>, last accessed Aug. 4, 2025; Dmytro Orlov, "As of May 2025, there are 28 civilian Enerhodar residents held captive by Russian criminals. 13 of them are employees of the Zaporizhzhia Nuclear Power Plant," Telegram, May 14, 2025, <https://archive.ph/tlu2J>, last accessed Sep. 3, 2025.
 - Sevgil Musaieva, Stas Kozliuk, and Anastasiia Horpinchenko, "The Viktoriia Project: the story of the captivity and torture endured by journalist Viktoriia Roshchyna and thousands of Ukrainians imprisoned by Russia," *Ukrainska Pravda*, Apr. 29, 2025, <https://www.pravda.com.ua/eng/articles/2025/04/29/7509612/>, last accessed Aug. 4, 2025.
 644. IAEA, "History," <https://www.iaea.org/about/overview/history>, last accessed Mar. 27, 2025.
 645. IAEA, "History," <https://www.iaea.org/about/overview/history>, last accessed Mar. 27, 2025.
 646. IAEA, List of Member States," <https://www.iaea.org/about/governance/list-of-member-states>, Nov. 15, 2024, last accessed Jul. 30, 2025.
 647. IAEA, "History," <https://www.iaea.org/about/overview/history>, last accessed Mar. 27, 2025.
 648. IAEA Statute, Arts. II, III A.5, III A.6.
 649. IAEA Office of Public Information and Communication, "IAEA Factsheet. Safe Use of Nuclear Technology," Apr. 2019, <https://www.iaea.org/sites/default/files/19/04/safe-use-of-nuclear-technology.pdf>, last accessed Jul. 30, 2025.
 650. IAEA, "History of OSART Missions," <https://www.iaea.org/services/review-missions/operational-safety-review-team-osart/history>, last accessed Apr. 2, 2025.
 651. IAEA Statute, Arts. III B.4, III B.5.
 652. State Nuclear Regulatory Inspectorate of Ukraine, "About SNRIU," Nov. 27, 2020, <https://snriu.gov.ua/en/main-page/about-inspectorate/about-snriu>, last accessed Jul. 30, 2025.
 653. IAEA, Fundamental Safety Principles, 2006, para. 2.1, https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1273_web.pdf, last accessed Jul. 30, 2025.
 654. IAEA, Fundamental Safety Principles, 2006, para. 2.1, https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1273_web.pdf, last accessed Jul. 30, 2025.
 655. IAEA, Fundamental Safety Principles, 2006, para. 3.3, https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1273_web.pdf, last accessed Jul. 30, 2025.
 656. World Nuclear Association, "Nuclear Power in the World Today," Apr. 1, 2025, <https://world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today>, last accessed Jul. 30, 2025.
 657. World Nuclear Association, "Plans for New Reactors Worldwide," Mar. 25, 2025, <https://world-nuclear.org/information-library/current-and-future-generation/plans-for-new-reactors-worldwide>, last accessed Jul. 30, 2025.
 658. IAEA, "International Nuclear and Radiological Event Scale (INES)," <https://www.iaea.org/resources/databases/international-nuclear-and-radiological-event-scale>, last accessed Apr. 1, 2025.
 659. Plokhly, S., Atoms and Ashes. From Bikini Atoll to Fukushima (2023), at 279. See also World Nuclear Association, "Outline History of Nuclear Energy," Jul. 17, 2025, <https://world-nuclear.org/information-library/current-and-future-generation/outline-history-of-nuclear-energy>, last accessed Jul. 30, 2025.
 660. Perrow, C., Normal Accidents. Living With High-Risk Technologies, at 4 (1984).
 661. Perrow, C., Normal Accidents. Living With High-Risk Technologies, at 4 (1984).
 662. Perrow, C., Normal Accidents. Living With High-Risk Technologies, at 4 (1984).
 663. Perrow, C., "Fukushima and the Inevitability of Accidents," *Bulletin of the Atomic Scientists*, vol. 67, no. 6, at 44, 51 (2011).
 664. Lévêque, F., The Economics and Uncertainties of Nuclear Power , at 93-94 (2015).
 665. Rose T., and Sweeting, T., "Severe Nuclear Accidents and Learning Effects," *IntechOpen*, Nov. 5, 2018.
 666. Rose T., and Sweeting, T., "Severe Nuclear Accidents and Learning Effects," *IntechOpen*, Nov. 5, 2018.
 667. See, for instance: Ahearne, J. F., "Nuclear Power After Chernobyl," *Science*, 236/4802, at 673 (1987).
 668. IAEA, "Safety and Security Culture," <https://www.iaea.org/topics/safety-and-security-culture>, last accessed Apr. 1, 2025.
 669. IAEA, "Safety and Security Culture," <https://www.iaea.org/topics/safety-and-security-culture>, last accessed Apr. 1, 2025.
 670. IAEA, "Safety and Security Culture," <https://www.iaea.org/topics/safety-and-security-culture>, last accessed Apr. 1, 2025.
 671. Butler, D., Reactors, Residents and Risk," *Nature*, vol. 472 , at 401 (2011).
 672. IAEA, IAEA Safety Standards No. GSR Part 2: Leadership and Management for Safety, 2016, <https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1750web.pdf>, last accessed Jul. 30, 2025.
 673. Meserve R., and Brockman, K., "Safety for All. The New INSAG," *IAEA Bulletin*, 46/1, at 51-52 (Jun. 2004), <https://www.iaea.org/sites/default/files/18/06/insag-safety-for-all.pdf>, last accessed Jul. 30, 2025.
 674. World Association of Nuclear Operators, "Who We Are," <https://www.wano.info/about-wano/who-we-are/>, last accessed Apr. 3, 2025.
 675. Fetter, S., and Tsipis, K., "Catastrophic Nuclear Radiation Release", Report No. 5, Program in Science and Technology for International Security, Department of Physics, Cambridge, MA , tables 2, 3, 6, 8 (Sep. 1980), cited in R. Bennett, *Nuclear Power Plants as Weapons for the Enemy: An Unrecognized Military Peril* (1984).
 676. See, for example: Carnahan, B. M., "Protecting Nuclear Facilities from Military Attacks: Prospects after the Gulf War," *The American Journal of International Law*, vol. 86, no. 3, at 524-541 (1992).
 677. Final Declaration of the Third Review Conference of the NPT 1985, Art. IV and preambular paras. 6 and 7(11), Sep. 21, 1985, <https://www.nti.org/wp-content/uploads/2021/09/NPTRevCon85.pdf>, last accessed Jul. 30, 2025.
 678. Carnahan, B. M., "Protecting Nuclear Facilities from Military Attacks: Prospects after the Gulf War," *The American Journal of International Law*, Vol. 86, No. 3, at 540 (1992).
 679. IAEA General Conference, Prohibition of Armed Attack or Threat of Attack Against Nuclear Installations, During Operation or Under Construction, GC(53)/DEC/13, Sep. 18, 2009, https://www.iaea.org/sites/default/files/gc/gc53dec-13_en.pdf, last accessed Jul. 30, 2025.
 680. Some countries have also entered bilateral and multilateral treaties concerning attacks on nuclear facilities. India and Pakistan, for example, concluded a bilateral treaty in 1988 that prohibits attacks on nuclear facilities and installations. The only multilateral treaty on the subject to date is the 1996 African Nuclear-Weapon-Free Zone Treaty (the Pelindaba Treaty).
 681. Carlson, J., "Prohibition of Military Attacks on Nuclear Facilities," *Vienna Center for Disarmament and Non-Proliferation*, Sep. 2022, <https://vcdnp.org/wp-content/uploads/2022/09/Attacks-on-nuclear-facilities.pdf>, last accessed Jul. 30, 2025.
 682. See, for example, "Iran's Secretive Nuclear Site That Only a US Bomb Could Hit," *BBC Verify*, Jun. 22, 2025, <https://www.bbc.co.uk/news/resources/verify-868e3c3d-25ec-43cb-bcc0-8832464b91ca>.
 683. IAEA Director General, Nuclear Safety, Security and Safeguards in Ukraine, GOV/2022/52, Sep. 9, 2022, Section D.47, at 11, <https://www.iaea.org/sites/default/files/documents/gov2022-52.pdf>, last accessed Jul. 30, 2025.
 684. As Fedchenko et al. note, since Russia's initial invasion in 2014, the SNRIU "has lost control over nuclear materials, installations, radioactive sources and nuclear security infrastructure in both Crimea and the separatist-controlled areas of eastern Ukraine"; Fedchenko, V., et al., "Nuclear Security in Ukraine and the Black Sea Region: New Threats, New Risks, New Consequences," *Stockholm International Peace Research Institute*, at 3 (Mar. 2023).
 685. Fedchenko, V., "Nuclear Security During Armed Conflict: Lessons from Ukraine," *Stockholm International Peace Research Institute*, at 3 (Mar. 2023).
 686. IAEA Board of Governors, "The Safety, Security and Safeguards Implications of the Situation in Ukraine," Gov/2022/17, Mar. 3, 2022, <https://www.iaea.org/sites/default/files/documents/gov2022-17.pdf>, last accessed Jul. 30, 2025.
 687. IAEA, "Timeline of the IAEA's Response Activities to the Situation in Ukraine," <https://www.iaea.org/interactive/timeline/169792>, last accessed Apr. 22, 2025.
 688. OECD NEA, "Ukraine: Current Status of Nuclear Power Installations," Mar. 22, 2025, <https://www.oecd-neo.org/jcms/pl66130/ukraine-current-status-of-nuclear-power-installations>, last accessed Jul. 30, 2025.
 689. Plokhly, S., Atoms and Ashes. From Bikini Atoll to Fukushima, at 289 (2023).
 690. Liou, J., "IAEA Director General Calls for Restraint, Reiterates Need to Ensure Safety of Ukraine's Nuclear Facilities and Their Staff," IAEA Office of Public Information and Communication, Mar. 2, 2022, <https://www.iaea.org/newscenter/news/iaea-director-general-calls-for-restraint-reiterates-need-to-ensure-safety-of-ukraines-nuclear-facilities-and-their-staff>, last accessed Jul. 30, 2025.
 691. IAEA Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," GOV/2022/52, at 3 (Sep. 9, 2022), <https://www.iaea.org/sites/default/files/documents/gov2022-52.pdf>, last accessed Jul. 30, 2025.
 692. IAEA Board of Governors, "The Safety, Security and Safeguards Implications of the Situation in Ukraine," GOV/2022/58, para 3 (Sep. 15, 2022), <https://www.iaea.org/sites/default/files/documents/gov2022-58.pdf>, last accessed Jul. 30, 2025.
 693. UN General Assembly, Safety and Security of Nuclear Facilities of Ukraine, Including the Zaporizhzhia Nuclear Power Plant, A/RES/78/3316, Jul. 11, 2024, <https://digitallibrary.org>.

- un.org/record/4054565?ln=en&v=pdf, last accessed Jul. 30, 2025.
694. IAEA, "IAEA Director General Statement to the United Nations Security Council," May 30, 2023, <https://www.iaea.org/newscenter/statements/iaea-director-general-statement-to-United-nations-security-council-30-may-2023>, last accessed Jul. 30, 2025.
 695. IAEA, "Assistance to Ukraine," <https://www.iaea.org/topics/response/nuclear-safety-security-and-safeguards-in-ukraine/assistance>, last accessed Apr. 18, 2025.
 696. IAEA, "Assistance to Ukraine," <https://www.iaea.org/topics/response/nuclear-safety-security-and-safeguards-in-ukraine/assistance>, last accessed Apr. 18, 2025.
 697. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," (GOV/2024/63), para 20, at 7 (Nov. 13, 2024).
 698. IAEA Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," GOV/2024/63, para 23 (Nov. 13, 2024).
 699. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," (GOV/2024/63), paras 29-31, at 9-10 (Nov. 13, 2024).
 700. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," Gov/2025/11, para. 52, at 15, Feb. 27, 2025, <https://www.iaea.org/sites/default/files/documents/gov2025-11.pdf>, last accessed Jul. 30, 2025.
 701. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," Gov/2025/11, para. 52, at 15, Feb. 27, 2025, <https://www.iaea.org/sites/default/files/documents/gov2025-11.pdf>, last accessed Jul. 30, 2025.
 702. IAEA, "IAEA Vehicle Hit by Drone," Dec. 10, 2024, <https://www.iaea.org/newscenter/multimedia/videos/iaea-vehicle-hit-by-drone>, last accessed Jul. 30, 2025; Bandouil, S., "Russian Drone Hits IAEA Service Vehicle Near Zaporizhzhia Nuclear Power Plant," The Kyiv Independent, Dec. 10, 2024, <https://kyivindependent.com/russian-drone-hits-iaea-service-vehicle-near-zaporizhzhia-nuclear-power-plant/>, last accessed Jul. 30, 2025.
 703. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," Gov/2025/11, para. 22, at 8, Feb. 27, 2025, <https://www.iaea.org/sites/default/files/documents/gov2025-11.pdf>, last accessed Jul. 30, 2025.
 704. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," Gov/2025/11, at 4, Feb. 27, 2025, <https://www.iaea.org/sites/default/files/documents/gov2025-11.pdf>, last accessed Jul. 30, 2025.
 705. Dolzikova, D., and Watling, J., "In Nuclear Organisations, Russia Continues to Wield Outsized Influence," RUSI, Feb. 5, 2025, <https://www.rusi.org/explore-our-research/publications/commentary/nuclear-organisations-russia-continues-wield-outsized-influence>, last accessed Jul. 30, 2025.
 706. IAEA, IAEA Nuclear Safety and Security Glossary (Interim Edition), at 210 (2022), <https://www-pub.iaea.org/MTCD/Publications/PDF/IAEA-NSS-GLOweb.pdf>, last accessed Jul. 30, 2025.
 707. Fedchenko, V., "Nuclear Security During Armed Conflict: Lessons from Ukraine," Stockholm International Peace Research Institute, at 1-2 (Mar. 2023).
 708. Greenpeace Germany and McKenzie Intelligence Services, "A Nuclear Power Plant as Launch Pad," Sep. 2023, https://www.greenpeace.de/publikationen/McKenzie_Report_Zaporizhzhia.pdf, last accessed Aug. 5, 2025, at 7.
 709. The Insider, "Russian Troops Deliver Unknown Cargo to Zaporizhzhia NPP, Sources Say Power Plant is Mined (Video)" Aug. 5, 2022, <https://theins.ru/en/news/253868>, last accessed Sep. 3, 2025.
 710. McKenzie Intelligence Services, "Update to the Analysis of the Russian Occupation In the Vicinity of the Zaporizhzhia Nuclear Power Plant (ZNPP) Cooling Pond," Greenpeace Ukraine, Dec. 2024, <https://drive.google.com/file/d/1cbpkOQl9AjXlnirfQs94b4kBluqU1s/view>, last accessed Aug. 5, 2025.
 711. Greenpeace Germany and McKenzie Intelligence Services, "A Nuclear Power Plant as Launch Pad," Sep. 2023, https://www.greenpeace.de/publikationen/McKenzie_Report_Zaporizhzhia.pdf, last accessed Aug. 5, 2025, at 4, 27-28.
 712. McKenzie Intelligence Services, "Update to the Analysis of the Russian Occupation In the Vicinity of the Zaporizhzhia Nuclear Power Plant (ZNPP) Cooling Pond," Greenpeace Ukraine, Dec. 2024, <https://drive.google.com/file/d/1cbpkOQl9AjXlnirfQs94b4kBluqU1s/view>, last accessed Aug. 5, 2025, at 40.
 713. McKenzie Intelligence Services, "Update to the Analysis of the Russian Occupation In the Vicinity of the Zaporizhzhia Nuclear Power Plant (ZNPP) Cooling Pond," Greenpeace Ukraine, Dec. 2024, <https://drive.google.com/file/d/1cbpkOQl9AjXlnirfQs94b4kBluqU1s/view>, last accessed Aug. 5, 2025, at 40-41.
 714. Greenpeace Germany and McKenzie Intelligence Services, "A Nuclear Power Plant as Launch Pad," Sep. 2023, https://www.greenpeace.de/publikationen/McKenzie_Report_Zaporizhzhia.pdf, last accessed Aug. 5, 2025, at 47.
 715. SNRIU, "Appeal To The World Community Of The Board Of The State Nuclear Regulatory Inspectorate Of Ukraine," Apr. 5, 2022, <https://snriu.gov.ua/en/news/appeal-world-community-board-state-nuclear-regulatory-inspectorate-ukraine>, last accessed Aug. 5, 2025.
 716. IAEA, "IAEA Proposal for Ukraine Nuclear Safety and Security Protection Zone Wins Support as Talks Begin on Its Establishment," Sep. 22, 2022, <https://www.iaea.org/newscenter/news/iaea-proposal-for-ukraine-nuclear-safety-and-security-protection-zone-wins-support-as-talks-begin-on-its-establishment>, last accessed Aug. 5, 2025.
 717. Reuters, "Russia Calls U.N. Idea to Demilitarise Ukraine's Zaporizhzhia Nuclear Plant Unacceptable," Aug. 18, 2025, <https://www.reuters.com/world/europe/russian-foreign-ministry-says-un-proposal-demilitarise-zaporizhzhia-nuclear-2022-08-18/>, last accessed Aug. 5, 2025.
 718. TASS, "Russia Urges West to Stop Glossing over Kiev's Attacks on Zaporozhye NPP – Diplomat," Sep. 29, 2025, <https://tass.com/russia/1515549n>, last accessed Aug. 5, 2025.
 719. Gorchakov, D., and Nikitin, A., "The Potential Restart of the Zaporizhzhia Nuclear Power Plant. Analysis of Technical and Political Aspects," Bellona Foundation, at 14 (2024), <https://network.bellona.org/content/uploads/sites/4/2024/07/ZNPP-restart-eng.pdf>, last accessed Jul. 30, 2025.
 720. Burnie, S., and Vande Putte, J., "Annex B. Expert Research and Analysis of the Impacts of the Dam's Destruction on the Zaporizhzhia Nuclear Power Plant", Truth Hounds and Project Expedite Justice, Sunmerged: Study of the Destruction of the Kakhovka Dam and Its Impacts on Ecosystems, Agrarians, Other Civilians, and International Justice, at 3 (2024), <https://truth-hounds.org/wp-content/uploads/2024/06/submerged-annex-b.pdf>, last accessed Jul. 30, 2025.
 721. Five of the reactors were placed in cold shutdown prior to the destruction of the Kakhovka Dam in June 2023 and the final reactor was placed in cold shutdown in April 2024.
 722. Gorchakov, D., and Nikitin, A., "The Potential Restart of the Zaporizhzhia Nuclear Power Plant. Analysis of Technical and Political Aspects," Bellona Foundation, at 15 (2024), <https://network.bellona.org/content/uploads/sites/4/2024/07/ZNPP-restart-eng.pdf>, last accessed Jul. 30, 2025.
 723. IAEA, "Update 2305 - IAEA Director General Statement on Situation in Ukraine," Jul. 10, 2025, <https://www.iaea.org/newscenter/pressreleases/update-301-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025.
 724. OECD NEA, "Ukraine: Current Status of Nuclear Power Installations," Mar. 22, 2025, <https://www.oecd-nea.org/jcms/pl66130/ukraine-current-status-of-nuclear-power-installations>, last accessed Jul. 30, 2025..
 725. For an in-depth discussion of the causes and impact of the destruction of the Kakhovka Dam, see: Truth Hounds and Project Expedite Justice, Submerged: Study of the Destruction of the Kakhovka Dam and Its Impacts on Ecosystems, Agrarians, Other Civilians, and International Justice, Jun. 2024, <https://truth-hounds.org/en/cases/submerged-study-of-the-destruction-of-the-kakhovka-dam-and-its-impacts-on-ecosystems-agrarians-other-civilians-and-international-justice/>, last accessed Aug. 5, 2025.
 726. OECD NEA, "Ukraine: Current Status of Nuclear Power Installations," Mar. 22, 2025, <https://www.oecd-nea.org/jcms/pl66130/ukraine-current-status-of-nuclear-power-installations>, last accessed Jul. 30, 2025..
 727. Gorchakov, D., and Nikitin, A., "The Potential Restart of the Zaporizhzhia Nuclear Power Plant. Analysis of Technical and Political Aspects," Bellona Foundation, at 20 (2024), <https://network.bellona.org/content/uploads/sites/4/2024/07/ZNPP-restart-eng.pdf>, last accessed Jul. 30, 2025; According to Gorchakov and Nikitin, 4,000 m3 of water per hour is needed and the current supply is 250m3.
 728. Gorchakov, D., and Nikitin, A., "The Potential Restart of the Zaporizhzhia Nuclear Power Plant. Analysis of Technical and Political Aspects," Bellona Foundation, at 21 (2024), <https://network.bellona.org/content/uploads/sites/4/2024/07/ZNPP-restart-eng.pdf>, last accessed Jul. 30, 2025.
 729. The degradation of ZNPP equipment has been repeatedly raised by the SNRIU, which estimated in March 2024 that 75–90% of the systems and equipment at the ZNPP on which repairs should have been carried out had not been completed: Ukraine: Current status of nuclear power installations," OECD NEA, Apr. 9, 2025, <https://www.oecd-nea.org/jcms/pl66130/ukraine-current-status-of-nuclear-power-installations>, last accessed Jul. 30, 2025.
 730. Staff shortages have been repeatedly reported since the Russians captured the ZNPP. In February 2024, for example, IAEA Director General Rafael Grossi stated that the plant was facing a 50% staff shortage: Pylipiv, I., "The occupied Zapadnaya NPP has a 50% personnel shortage – IAEA," Economic Truth, Feb. 6, 2024, <https://epravda.com.ua/news/2024/02/6/709594/>, last accessed Jul. 30, 2025.
 731. Burnie, S., and Vande Putte, J., "Annex B. Expert Research and Analysis of the Impacts of the Dam's Destruction on the Zaporizhzhia Nuclear Power Plant" Truth Hounds and Project Expedite Justice, Submerged: Study of the Destruction of the Kakhovka Dam and Its Impacts on Ecosystems, Agrarians, Other Civilians, and International Justice, at 26-8 (2024), <https://truth-hounds.org/wp-content/uploads/2024/06/submerged-annex-b.pdf>, last accessed Jul. 30, 2025.
 732. Russian officials have made numerous statements about their intention to restart the ZNPP's reactors, including Alexei Likhachev, head of Rosatom, in February 2025: Bellona, "Rosatom head says Russia will restart seized Ukrainian nuclear plant," Mar. 3, 2025, <https://bellona.org/news/nuclear-issues/2025-03-rosatom-head-says-russia-will-restart-seized-ukrainian-nuclear-plant>, last accessed Aug. 5, 2025; The Wall Street Journal reported on April 12, 2024 that Vladimir Putin had notified the IAEA of his plan to restart the ZNPP: Laurence Norman, Drew Hinshaw, and Joe Parkinson, "Putin Told IAEA Russia Plans to Restart Zaporizhzhia Nuclear Plant," Apr. 12, 2024, <https://www.wsj.com/world/europe/putin-told-iaea-russia-plans-to-restart-zaporizhzhia-nuclear-plant-f2045f50>, last accessed Aug. 5, 2025. Reports from as recently as Mar. 2025 on Russia's intention to build pumping stations include: Maryna Kulakova, "Russia Prepares to Restart Occupied Zaporizhzhia Nuclear Plant, Posing New Security Risks," United24 Media, Mar. 11, 2025, <https://united24media.com/latest-news/russia-prepares-to-restart-occupied-zaporizhzhia-nuclear-plant-posing-new-security-risks-6620>, last accessed Aug. 5, 2025.
 733. Greenpeace Ukraine, "Russian Military Escalates Operations at Zaporizhzhia Nuclear Plant, Heightening Nuclear Risks," Dec. 10, 2024, <https://www.greenpeace.org/ukraine/en/news/3122/russian-military-escalates-operations-at-zaporizhzhia-nuclear-plant-heightening-nuclear-risks/>, last accessed Aug. 5, 2025.
 734. Report by the Director General to the Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," GOV/2022/66, IAEA, Nov. 10, 2022, <https://www.iaea.org/sites/default/files/documents/gov2022-66.pdf>, last accessed Aug. 5, 2025.
 735. Gorchakov, D., and Nikitin, A., "The Potential Restart of the Zaporizhzhia Nuclear Power Plant. Analysis of Technical and Political Aspects," Bellona Foundation, at 23-24 (2024), <https://network.bellona.org/content/uploads/sites/4/2024/07/ZNPP-restart-eng.pdf>, last accessed Jul. 30, 2025.
 736. Alberque, W., "The Wartime Weaponisation of Nuclear Power Stations," IISS, Jun. 28, 2023, <https://www.iiss.org/online-analysis/online-analysis/2023/06/the-wartime-weaponisation-of-nuclear-power-stations/>, last accessed Aug. 5, 2025.
 737. SNRIU, "Letter to António Guterres, Secretary-General of the United Nations," Mar. 5, 2022, https://snriu.gov.ua/storage/app/sites/1/uploaded-files/Letter_to_UN_05.03.22_FINAL.pdf, last accessed Aug. 5, 2025.
 738. IAEA, International Radiation Monitoring Information System. User Manual IRMIS Version 3.0.0, Feb. 20, 2020, https://www-pub.iaea.org/MTCD/Publications/PDF/IEComm-2019%20Att%202_web.pdf, last accessed Aug. 5, 2025, at 3 (2020).
 739. IAEA, "Update 235 - IAEA Director General Statement on Situation in Ukraine," Jun. 27, 2024, <https://www.iaea.org/newscenter/pressreleases/update-235-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025.

- general-statement-on-situation-in-ukraine-0, last accessed Aug. 5, 2025.
740. A substation is a facility that transforms voltage levels, controls the flow of electricity, and provides points for switching and protection. It connects different parts of the power system, such as transmission lines, distribution lines, and generating stations.
741. Switchyards connect and disconnect transmission lines or other electrical components and are often located at generating stations or substations. Switchyards mainly consist of disconnect switches, circuit breakers, busbars, and sometimes transformers. They deliver the electricity generated by the power plant at the required voltage level to the nearest grid or transmission line.
742. SNRIU, "Updated Information About Zaporizhzhia NPP (ZNPP) 11.35," Mar. 7, 2022, <https://snriu.gov.ua/en/news/updated-information-about-zaporizhzhia-npp-znpp>, last accessed Aug. 5, 2025.
743. SNRIU, "Information on the Zaporizhzhia NPP as of 12.00 of 10 March 2022," Mar. 10, 2022, <https://snriu.gov.ua/en/news/information-zaporizhzhia-npp-1200-10-march-2022>, last accessed Aug. 5, 2025.
744. SNRIU, "Information on the ZNPP Current Status," Mar. 19, 2022, <https://snriu.gov.ua/en/news/information-znpp-current-status-19032022>, last accessed Aug. 5, 2025.
745. SNRIU, "Zaporizhzhia NPP Status Update as of 18 March 2022," Mar. 18, 2022, <https://snriu.gov.ua/en/news/zaporizhzhia-npp-status-update-18-march-2022>, last accessed Aug. 5, 2025.
746. IAEA, "Director General's Statement on Serious Situation at Ukraine's Zaporizhzhia Nuclear Power Plant," Sep. 9, 2022, <https://www.iaea.org/newscenter/statements/director-generals-statement-on-serious-situation-at-ukraines-zaporizhzhia-nuclear-power-plant>, last accessed Aug. 5, 2025.
747. IAEA, "Update 120 – IAEA Director General Statement on Situation in Ukraine," Oct. 18, 2022, <https://www.iaea.org/newscenter/pressreleases/update-120-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025.
748. IAEA, "Update 293 - IAEA Director General Statement on Situation in Ukraine," May 29, 2025, <https://www.iaea.org/newscenter/pressreleases/update-293-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025; IAEA, "Update 306 - IAEA Director General Statement on Situation in Ukraine," Jul. 30, 2025, <https://www.iaea.org/newscenter/pressreleases/update-306-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025.
749. Survivor ID: En-017.
750. Survivor ID: En-017.
751. Survivor ID: En-017.
752. Greenpeace Ukraine, "Location of Illegal Russian Construction of New Electricity Line for Zaporizhzhia Nuclear Plant - as Rosatom Chief Tells Russian Politicians He is "Living the Dream of Restart"," May 27, 2025, <https://www.greenpeace.org/ukraine/en/news/3658/location-of-illegal-russian-construction-of-new-electricity-line-for-zaporizhzhia-nuclear-plant-as-rosatom-chief-tells-russian-politicians-he-is-living-the-dream-of-restart/>, last accessed Aug. 5, 2025; Greenpeace Ukraine, "Russians Continue to Install Electric Pylons for the Potential Restart of ZNPP: New Satellite Evidence from Greenpeace Ukraine," Jun. 10, 2025, <https://www.greenpeace.org/ukraine/en/news/3732/rosiyni-prodovzhuyut%CA%B9-vstanovlyuvaty-elektroopory-dlya-yavnoho-perezapuskuzaes-novi-suputnykovi-dokazy-vid-greenpeace-ukrayina/>, last accessed Aug. 5, 2025.
753. Tunik-Fryz, V., "Russia Begins Building Pumping Station to Restart Zaporizhzhia Nuclear Power Plant," *Ukrainska Pravda*, Jun. 8, 2025, <https://www.pravda.com.ua/eng/news/2025/06/8/7516209/>, last accessed Aug. 8, 2025.
754. IAEA Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," IAEA, Jun. 2, 2025, <https://www.iaea.org/sites/default/files/documents/gov2025-26.pdf>, last accessed Aug. 5, 2025, at 13. See also, for example: IAEA Board of Governors, "Nuclear Safety, Security and Safeguards in Ukraine," IAEA, Feb. 27, 2025, <https://www.iaea.org/sites/default/files/documents/gov2025-11.pdf>, last accessed Aug. 5, 2025, at 17.
755. IAEA, "Update 257 - IAEA Director General Statement on Situation in Ukraine," Oct. 31, 2024, <https://www.iaea.org/newscenter/pressreleases/update-257-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025.
756. IAEA, "Nuclear Safety, Security and Safeguards in Ukraine February 2022 - February 2023," Feb. 2023, <https://www.iaea.org/sites/default/files/documents/nuclear-safety-security-and-safeguards-in-ukraine-feb-2023.pdf>, last accessed Aug. 5, 2025, at 12.
757. IAEA, "Update 300 - IAEA Director General Statement on Situation in Ukraine," Jul. 4, 2025, <https://www.iaea.org/newscenter/pressreleases/update-300-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Aug. 5, 2025.
758. Survivor ID: En-017.
759. The US Nuclear Regulatory Commission set forth in Regulatory Guide 1.27 (Ref. 1) the following methods and procedures on ultimate heat sinks: (1) The ultimate heat sink must be able to dissipate the heat of a design-basis accident (for example, a loss-of-coolant accident) of one unit plus the heat of a safe shutdown and cooldown of all other units it serves; (2) the heat sink must provide a 30-day supply of cooling water at or below the design-basis temperature for all safety-related equipment; (3) the system must be shown to be capable of performing under the meteorologic conditions leading to the worst cooling performance and the conditions leading to the highest water loss; Nov. 2015, <https://www.nrc.gov/docs/ML1410/ML14107A411.pdf>, last accessed Aug. 5, 2025.
760. European Nuclear Safety Regulators Group, "Peer Review Report on EU Stress Tests for the Czech Republic," <https://www.ensreg.eu/sites/default/files/Country%20Report%20CZ%20Final.pdf>, last accessed Aug. 5, 2025.
761. Bundesamt für Strahlenschutz, "Environmental Impact of the Fukushima Accident: Radiological Situation in Japan," <https://www.bfs.de/EN/topics/ion/accident-management/emergency/fukushima/environmental-consequences.html>, last accessed Aug. 5, 2025.
762. FlexRISK University of Vienna, "Risk Per NPP Unit: Probability of Exceedance of Selected Contamination and Dose Levels Aggregated Over All Cases," <https://flexrisk.boku.ac.at/en/sites/zapo/index.html>, last accessed Aug. 5, 2025.
763. Rosatom, "Areas of Activity," <https://rosatom.ru/production/>, last accessed Aug. 3, 2025.
764. See, for example: Jane Nakano, "The Changing Geopolitics of Nuclear Energy A Look at the United States, Russia, and China, (Mar. 2020), <https://www.nature.com/articles/s41560-023-01228-5> ; https://www.sipri.org/sites/default/files/2019-02/eunpdc_no_61_final.pdf ; https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/200416_Nakano_NuclearEnergy_UPDATED%20FINAL.pdf, last accessed Jul. 29, 2025.
765. In Russian: "государственная корпорация."
766. Federal Law of 08.07.1999 N 140-FZ «On amendments to the Federal Law 'On non-profit organizations.'»
767. Denisov, S. A., *Real'noe gosudarstvennoe pravo sovremennoi Rossii* (Gumanitarnyi Universitet, 2016) at 74.
768. Federal Law "On Non-Commercial Organizations," Article 71.; Federation Council, "On the Economic Efficiency of State Corporations," <http://council.gov.ru/activity/activities/roundtables/106068/>, last accessed Jun. 3, 2025.
769. Federal Law "On Non-Commercial Organizations," Article 71.; Federation Council, "On the Economic Efficiency of State Corporations," <http://council.gov.ru/activity/activities/roundtables/106068/>, last accessed Jun. 3, 2025.
770. Alexander Nikitin, "Rosatom state corporation," *Bellona*, Nov. r. 26, 2007, <https://bellona.org/news/nuclear-issues/nuclear-russia/2007-11-rosatom-state-corporation>, last accessed Jun. 3, 2025.
771. Federal Law "About the State Atomic Energy Corporation "Rosatom,"" <https://rulings.ru/laws/Federalnyy-zakon-ot-01.12.2007-N-317-FZ/>, last accessed Jul. 29, 2025.
772. Rostec is a Russian state corporation established in 2007 to promote the development, production, and export of high-tech industrial products. It operates across numerous sectors including aviation, the automotive sector, electronics, medical equipment, and arms manufacturing, serving as a government partner in technology and industrial development.
773. «Meeting on Diversification of Civil Products by Defense Industry Organizations,» Kremlin, ru, Jan. 24, 2018, <http://kremlin.ru/events/president/news/56699>, last accessed Jun. 3, 2025.
774. «Rostec Special Projects Director: Our Task Is to See Civil Products and Promote Them to Market,» *Interfax*, Jul. 12, 2017, <https://www.interfax.ru/interview/570331>, last accessed Jun. 3, 2025.
775. "Sergey Chemezov: Rostec to Increase Share of Civilian Products to 50 Percent," *VPK*, Jun. 7, 2017, https://vpk.name/news/183662-sergei_chemezov_rosteh_uvelichit_dolyu_grazhdanskoi_produkcii_do_50_procentov.html, last accessed Jun. 3, 2025.
776. "Sergey Chemezov: Rostec to Increase Share of Civilian Products to 50 Percent," *VPK*, Jun. 7, 2017, https://vpk.name/news/183662-sergei_chemezov_rosteh_uvelichit_dolyu_grazhdanskoi_produkcii_do_50_procentov.html, last accessed Jun. 3, 2025.
777. Technological Development Concept through 2030, Approved by the Decree of the Government of the Russian Federation of May 20, 2023, No 1315-r, May 20, 2023, <http://static.government.ru/media/files/KIj6A00A1K5t8Aw93NfRG6P8OlbBp18F.pdf>, last accessed Jul. 29, 2025.
778. Technological Development Concept through 2030, Approved by the Decree of the Government of the Russian Federation of May 20, 2023, No 1315, May 20, 2023, <http://static.government.ru/media/files/KIj6A00A1K5t8Aw93NfRG6P8OlbBp18F.pdf>, at 9, last accessed Jul. 29, 2025.
779. Technological Development Concept through 2030, Approved by the Decree of the Government of the Russian Federation of May 20, 2023, No 1315, May 20, 2023, <http://static.government.ru/media/files/KIj6A00A1K5t8Aw93NfRG6P8OlbBp18F.pdf>, at 28, last accessed Jul. 29, 2025.
780. Andrea Bonelli, «Hybrid Atoms: Rosatom in Europe and Nuclear Energy in Belarus,» International Centre for Defence and Security, Mar. 11, 2021, <https://icds.ee/en/hybrid-atoms-rosatom-in-europe-and-nuclear-energy-in-belarus/>, last accessed Aug. 3, 2025.; NATO, «NATO 2022 Strategic Concept,» Jun. 29, 2022, <https://www.nato.int/strategic-concept/>, last accessed Aug. 3, 2025.
781. World Nuclear Association, "Nuclear Power in Egypt, Jul. 23, 2025, <https://world-nuclear.org/information-library/country-profiles/countries-ag-fn/egypt>, last accessed Jul. 29, 2025; World Nuclear Association, "Nuclear Power in Hungary, Dec. 3, 2024, <https://world-nuclear.org/information-library/country-profiles/countries-g-n/hungary>, last accessed Jun. 21, 2025.
782. Nucnet, "97% Of Europe's Natural Uranium Comes From Overseas, But Russia Deliveries Fall," Apr. 10, 2023, <https://www.nucnet.org/news/97-of-europe-s-natural-uranium-comes-from-overseas-but-russia-deliveries-fall-10-4-2023>, last accessed Jun. 3, 2025.
783. Nucnet, "97% Of Europe's Natural Uranium Comes From Overseas, But Russia Deliveries Fall," Apr. 10, 2023, <https://www.nucnet.org/news/97-of-europe-s-natural-uranium-comes-from-overseas-but-russia-deliveries-fall-10-4-2023>, last accessed Jun. 3, 2025.
784. "Putin: The main thing for Russia is strengthening sovereignty," *Vedomosti*, Dec. 14, 2023, <https://www.vedomosti.ru/politics/news/2023/12/14/101026-putin-dlya-rossii-glavnoe>, last accessed Jun. 3, 2025.
785. "Strengthening sovereignty, GDP growth and support for SVO participants: What Russian President Vladimir Putin spoke about at the "Year in Review"," *Rossiyskaya Gazeta*, Dec. 14, 2023, <https://rg.ru/2023/12/14/prezident-vas-slyshit.html>, last accessed Jun. 3, 2025.
786. "Andrey Belousov at the Znanie.Perviy marathon: "Sovereignty is the ability to implement one's own national agenda, one's own development goals in a changing world"," *Znanie Rossiya*, Nov. 5, 202, <https://znanierussia.ru/news/andrej-belousov-na-marafone-znaniepervye-suverenitet-eto-sposobnost-realizovyvat-sobstvennuyu-natsionalnuyu-povestku-sobstvennyye-celi-razvitiya-v-usloviyah-menyayushegosya-mira>, last accessed Jun. 3, 2025.
787. Strana Rosatom, <https://strana-rosatom.ru/>, last accessed Jun. 3, 2025.
788. Zhurnal "Luch," <https://goroda.media/about/>; *Vestnik Atomproma*, <https://atomvestnik.ru/o-zhurnale/>; *Atomicexpert*, <https://atomicexpertnew.ru/>, last accessed Jun. 3, 2025.
789. Denisov, S. A., *Real'noe gosudarstvennoe pravo sovremennoi Rossii* [Real state law of modern Russia] (Gumanitarnyi Universitet, 2016), at 71.
790. Andrei Pertsev, "Shattering the vertical. How Elites Are Adapting to the Era of "Wild Putinism"," *Carnegie Endowment for International Peace*, Apr. 2025, <https://carnegieendowment.org/research/2025/04/russia-elites-transit-anticipation?lang=ru&c>

- nter=russia-urasia, last accessed Jun. 3, 2025.
791. "US sanctions Russian propagandists amid crackdown on election interference," Kyiv Independent, Sep. 4, 2024, <https://kyivindependent.com/us-cracks-down-on-russian-interference-in-2024-election/>, last accessed Jun. 3, 2025.
 792. "Danilov named the 'main ideologist and lobbyist' for the destruction of Ukraine's energy infrastructure," Radio Svoboda, Oct. 25, 2022, <https://www.radiosvoboda.org/a/news-danilov-pro-kyryienka/32110665.html>, last accessed Jun. 3, 2025.
 793. International Energy Agency, "Nuclear Power," <https://www.iea.org/energy-system/electricity/nuclear-power>, last accessed Jun. 3, 2025.
 794. International Atomic Energy Agency, Nuclear Power Reactors in the World: 2024 Edition, Reference Data Series No. 2 (2024), https://www-pub.iaea.org/MTCD/Publications/PDF/p15748-RDS-2-44_web.pdf, last accessed Jun. 3, 2025.
 795. World Nuclear Association, "Uranium Markets," <https://world-nuclear.org/information-library/nuclear-fuel-cycle/uranium-resources/uranium-markets>, last accessed Jun. 3, 2025.
 796. International Atomic Energy Agency, Nuclear Power Reactors in the World: 2024 Edition, Reference Data Series No. 2 (2024) at 21, https://www-pub.iaea.org/MTCD/Publications/PDF/p15748-RDS-2-44_web.pdf, last accessed Jun. 3, 2025.
 797. World Nuclear Association, "Nuclear Power in the World Today," <https://world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today>, last accessed Jun. 3, 2025.
 798. World Nuclear Association, "Plans for New Reactors Worldwide," <https://world-nuclear.org/information-library/current-and-future-generation/plans-for-new-reactors-worldwide>, last accessed Jun. 3, 2025.
 799. World Nuclear Association, "Nuclear Power in the World Today," <https://world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today>, last accessed Jun. 3, 2025.
 800. World Nuclear Association, "Russia Nuclear Power," <https://world-nuclear.org/information-library/country-profiles/countries-o-s/russia-nuclear-power>, last accessed Jun. 3, 2025.
 801. See, for example: Andrea Bonelli, "Rosatom in Europe: Russia's Trojan Horse?," International Centre for Defence and Security, 2021, <https://www.jstor.org/stable/resrep54362>; Marco Siddi and Kristi Silvan, "Nuclear Energy and International Relations: the External Strategy of Russia's Rosatom," International Politics (2024) at 1-21, <https://link.springer.com/article/10.1057/s41311-024-00618-0>; Darya Dolzikova, "Power Plays: Developments in Russian Enriched Uranium Trade," RUSI, 2024, <https://static.rusi.org/SR-power-plays-web-final.pdf>; Pami Aalto et al., "Russian Nuclear Energy Diplomacy in Finland and Hungary," Eurasian Geography and Economics 58, No. 4, 2017, <https://doi.org/10.1080/15387216.2017.1396905>, last accessed Jun. 3, 2025.
 802. Pami Aalto et al., "Russian Nuclear Energy Diplomacy in Finland and Hungary," Eurasian Geography and Economics 58, No. 4, 2017, at 407, <https://doi.org/10.1080/15387216.2017.1396905>, last accessed Jun. 3, 2025.
 803. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 413-421.
 804. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 414.
 805. States included in this category are Armenia, Bangladesh, Belarus, Hungary, Slovakia, and Uzbekistan.
 806. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 413-421.
 807. Huseyin Hayatsever and Can Sezer, "Turkish Nuclear Plant Delayed by Withheld Siemens Parts, China to Supply," Reuters, Sep. 11, 2024, <https://www.reuters.com/business/energy/turkish-nuclear-plant-delayed-by-withheld-siemens-parts-china-supply-2024-09-11/>, last accessed Jun. 3, 2025.
 808. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 414-415.
 809. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 417.
 810. World Nuclear Association, "Russia Nuclear Power," <https://world-nuclear.org/information-library/country-profiles/countries-o-s/russia-nuclear-power>, last accessed Jun. 3, 2025.
 811. GlobalData, "State Atomic Energy Corporation Rosatom," Company Profile, <https://www.globaldata.com/company-profile/state-atomic-energy-corporation-rosatom/>, last accessed Jun. 3, 2025.
 812. Rosatom, Annual Report 2023, at 14, https://report.rosatom.ru/go_eng/go_rosatom_eng_2023/rosatom_2023_eng.pdf, last accessed Jun. 3, 2025.
 813. "Russian nuclear giant Rosatom's subsidiary thrives in Switzerland," Swissinfo, Sep. 23, 2024, <https://www.swissinfo.ch/eng/foreign-affairs/russian-nuclear-giant-rosatoms-subsidiary-thrives-in-switzerland/87600030>, last accessed Jun. 3, 2025.
 814. World Nuclear Association, "Nuclear Power in Russia," <https://world-nuclear.org/information-library/country-profiles/countries-o-s/russia-nuclear-power.aspx>; Rosatom, "Fuel and Enrichment," <https://www.rosatom.ru/en/rosatom-group/fuel-and-enrichment/>, last accessed Jun. 3, 2025.
 815. Caspian Policy Center, «Beyond the Contract: What Kazakhstan's Rosatom Deal Says About Its Foreign Policy Balancing Act», <https://caspianpolicy.org/research/energy/beyond-the-contract-what-kazakhstans-rosatom-deal-says-about-its-foreign-policy-balancing-act>, last accessed Aug. 3, 2025.
 816. "Rosatom reports growth despite challenges," Nuclear Engineering International, Oct. 18, 2024, <https://www.neimagazine.com/news/rosatom-reports-growth-despite-challenges/>, last accessed Jun. 3, 2025.
 817. UK sanctions have been imposed most recently, for instance, on Rosatom subsidiaries Joint Stock Company Kirov Energomash Plan and Limited Liability Company Rosatom Additive Technologies: HM Government, "UK targets Putin's inner circle with new sanctions," Feb. 14, 2025, <https://www.gov.uk/government/news/uk-targets-putins-inner-circle-with-new-sanctions>, last accessed Jul. 30, 2025; The US has included Rosatom-related designations in 11 rounds of sanctions: US Department of State, "Sanctions to Degrade Russia's Energy Sector," Jan. 10, 2025, <https://2021-2025.state.gov/office-of-the-spokesperson/releases/2025/01/sanctions-to-degrade-russias-energy-sector/>, last accessed Jul. 30, 2025; Canada has sanctioned Rosatom subsidiaries, including from Russia's nuclear weapons complex, and the agency that exports Russian nuclear technology: Government of Canada, "Canada announces additional sanctions against Russia's military and nuclear sectors," Aug. 23, 2023, <https://www.canada.ca/en/global-affairs/news/2023/08/canada-announces-additional-sanctions-against-russias-military-and-nuclear-sectors.html>, last accessed Jun. 3, 2025.
 818. "Europe's Russian nuclear fuel addiction continues unabated," Bellona, Mar. 2024, <https://bellona.org/news/nuclear-issues/2024-03-europe-russian-nuclear-fuel>, last accessed Jun. 3, 2025.
 819. Matt Bowen, and Paul M. Dabbar, "Reducing Russian Involvement in Western Nuclear Power Markets," Center on Global Energy Policy, Columbia University, May 23, 2022, <https://www.energypolicy.columbia.edu/publications/reducing-russian-involvement-western-nuclear-power-markets/>, last accessed Jun. 3, 2025.
 820. Enerdata, "Uranium Enrichment," <https://www.enerdata.net/publications/executive-briefing/uranium-enrichment.html>, last accessed Jun. 3, 2025.
 821. Bruegel, «Ending European Union imports of Russian uranium», Apr. 2025, <https://www.bruegel.org/analysis/ending-european-union-imports-russian-uranium>, last accessed Aug. 3, 2025.
 822. Darya Dolzikova, Atoms for Sale: Developments in Russian Nuclear Energy Exports, RUSI, 2023, at 11, https://static.rusi.org/RUSI-Russian-Exports-final-web_0.pdf, last accessed Jul. 30, 2025.
 823. "Russia completes fuel deliveries for China's CFR-600 fast reactor," Nuclear Engineering International, Jan. 3, 2023, <https://www.neimagazine.com/news/russia-completes-fuel-deliveries-for-chinas-cfr-600-fast-reactor-10486493/>, last accessed Jun. 3, 2025.
 824. "Concerns grow over China nuclear reactors 'hrouded in mystery'," Al Jazeera, May 19, 2021, <https://www.aljazeera.com/economy/2021/5/19/concerns-grow-over-china-nuclear-reactors-shrouded-in-mystery>, last accessed Jun. 3, 2025.
 825. International Atomic Energy Agency, "Global uranium resources meet projected demand," Jun. 2, 2006, <https://www.iaea.org/newscenter/news/global-uranium-resources-meet-projected-demand>, last accessed Jun. 3, 2025.
 826. Darya Dolzikova, Power Plays: Developments in Russian Enriched Uranium Trade, RUSI, 2024, <https://static.rusi.org/SR-power-plays-web-final.pdf>, last accessed Jun. 3, 2025.
 827. Rosatom, Annual Report 2023, https://report.rosatom.ru/go_eng/go_rosatom_eng_2023/rosatom_2023_eng.pdf, last accessed Jun. 3, 2025.
 828. US Department of Energy, "Biden-Harris Administration Takes Action to Secure Nuclear Fuel Supply Chain, Equip Revitalized Domestic Nuclear Industry for the Future," Apr. 19, 2024, <https://www.energy.gov/ne/articles/biden-harris-administration-takes-action-secure-nuclear-fuel-supply-chain-equip>, last accessed Jun. 3, 2025.
 829. Enerdata, "Global Uranium Enrichment & Future World Nuclear Energy | Dynamics and Challenges," Enerdata, 2024, <https://www.enerdata.net/publications/executive-briefing/uranium-enrichment.html>, last accessed Jun. 3, 2025.
 830. World Nuclear Association, "Uranium and Nuclear Power in Kazakhstan, Jun. 19, 2025, <https://world-nuclear.org/information-library/country-profiles/countries-g-n/kazakhstan>, last accessed Jul. 30, 2025.
 831. International Atomic Energy Agency, "Nuclear Fuel Cycle Information Database," <https://inficis.iaea.org/NFCFDB/statistics>, last accessed Jun. 3, 2025.
 832. "Namibia: Rosatom to mine uranium by 2029," Energy Capital Power, Jul. 25, 2023, <https://energycapitalpower.com/namibia-rosatom-to-mine-uranium-by-2029/>, last accessed Jun. 3, 2025; Will Ross, and Danai Nesta Kupemba, "Niger junta takes control of French uranium mine," BBC News, Dec. 4, 2024, <https://www.bbc.com/news/articles/c7ve6y735djo>, last accessed June 3, 2025).
 833. World Nuclear Association, "Niger," Jul. 23, 2024, <https://world-nuclear.org/information-library/country-profiles/countries-g-n/niger>, last accessed Jun. 3, 2025.
 834. US Department of Energy, "Centrus Produces Nation's First Amounts of HALEU," Nov. 7, 2023, <https://www.energy.gov/ne/articles/centrus-produces-nations-first-amounts-haleu>, last accessed Jun. 3, 2025.
 835. Pressurized heavy-water reactors utilize heavy water as a moderator and natural uranium fuel without enrichment, providing nuclear technology pathways that reduce reliance on the concentrated global uranium enrichment market, which is dominated by a small number of international suppliers.
 836. World Nuclear Association, "World Uranium Mining Production," May 16, 2025, <https://world-nuclear.org/information-library/nuclear-fuel-cycle/mining-of-uranium/world-uranium-mining-production>, last accessed Jun. 3, 2025.
 837. Rosatom, Annual Report 2023, https://report.rosatom.ru/go_eng/go_rosatom_eng_2023/rosatom_2023_eng.pdf, last accessed Jun. 3, 2025.
 838. Rosatom, Annual Report 2023, https://report.rosatom.ru/go_eng/go_rosatom_eng_2023/rosatom_2023_eng.pdf, last (accessed Jun.e 3, 2025).
 839. The VVER-1200 (Water-Water Energetic Reactor) is Russia's modern 1,200 MW pressurized water reactor design, representing Rosatom's flagship export product. These third-generation reactors incorporate enhanced safety features and are specifically designed for international markets, creating long-term dependencies on Russian nuclear fuel and technical support.
 840. "Our geography," Vestnik Atomproma, Jan. 1, 2021, <https://atomvestnik.ru/2021/01/01/nasha-geografija/>, last accessed Jun. 3, 2025.
 841. Tamara Vaal, "Russia's Rosatom to Lead Consortium to Build First Nuclear Power Plant in Kazakhstan," Reuters, Jun. 14, 2025, , <https://www.reuters.com/business/energy/russias-rosatom-lead-consortium-build-first-nuclear-power-plant-kazakhstan-2025-06-14/>, last accessed Jun. 14, 2025.
 842. Tamara Vaal, "Russia's Rosatom to Lead Consortium to Build First Nuclear Power Plant in

- Kazakhstan," Reuters, Jun. 14, 2025, <https://www.reuters.com/business/energy/russias-rosatom-lead-consortium-build-first-nuclear-power-plant-kazakhstan-2025-06-14/>, last accessed Jun. 14, 2025.
843. "\$11.38b loan deal signed for nuclear power plant," The Daily Star, Jul. 3, 2018, <https://www.thedailystar.net/business/1138b-loan-deal-signed-nuclear-power-plant-1259944>, last accessed Jun. 3, 2025.
844. "El Dabaa: Installation of first unit's inner containment," World Nuclear News, Mar. 13, 2024, <https://www.world-nuclear-news.org/articles/el-dabaa-installation-of-first-unit-s-C2%A0inner-contai>, last accessed Jun. 3, 2025.
845. World Nuclear Association, "Turkey," Dec. 17, 2024, <https://world-nuclear.org/information-library/country-profiles/countries-t-z/turkey>, last accessed Jun. 3, 2025.
846. World Association of Nuclear Operators, "Akkuyu Nuclear Power Plant in Turkey," Jun. 5, 2020, <https://www.wano.info/inside-wano/akkuyu-nuclear-power-plant-in-turkey/>, last accessed Jun. 3, 2025.
847. David M. Herszenhorn, Sara Stefanini, and Nicholas Hirst, "Questions grow over Hungarian no-bid nuclear deal," Politico, Nov. 18, 2016, <https://www.politico.eu/article/questions-grow-over-hungarian-no-bid-nuclear-deal/>, last accessed Jun. 3, 2025.
848. World Nuclear Association, "Hungary," Dec. 3, 2024, <https://world-nuclear.org/information-library/country-profiles/countries-g-n/hungary>, last accessed Jun. 3, 2025.
849. Ryan Tan, "The 2022 Russian Invasion of Ukraine: Nuclear Supply Chains vs. Sanctions," in Doreen Horschig (Ed.), On the Horizon: A Collection of Papers from the Next Generation, Mar. 1, 2024, at 31-41, <https://www.jstor.org/stable/resrep65618>, last accessed Jul. 30, 2025.
850. DiXi Group, "Russian nuclear technologies in Europe: is it really worth it?" <https://dixigroup.org/en/analytic/russian-nuclear-technologies-in-europe-is-it-really-worth-it/>, last accessed Aug. 3, 2025.
851. Darya Dolzikova, "Power Plays: Developments in Russian Enriched Uranium Trade, RUSI, 2024, <https://www.rusi.org/explore-our-research/publications/special-resources/power-plays-developments-russian-enriched-uranium-trade>, last accessed Jul. 30, 2025.
852. US Department of the Treasury, "Treasury Targets Russian Defense Sector with New Sanctions," Mar. 2, 2021, <https://home.treasury.gov/news/press-releases/jy0045>, last accessed Jun. 3, 2025.
853. "Alexey Evgenyevich Likhachev," OpenSanctions, <https://www.opensanctions.org/entities/Q9956195/>, last accessed Jul. 30, 2025.
854. US Department of State, "Sanctions to Degrade Russia's Energy Sector," Jan. 10, 2025, <https://2021-2025.state.gov/office-of-the-spokesperson/releases/2025/01/sanctions-to-degrade-russias-energy-sector/>, last accessed Jun. 3, 2025.
855. "Rosatom sees interest in its NPP projects from 10 countries, 3-4 of which close to formalizing relations - Likhachev," Interfax, Feb. 6, 202, <https://interfax.com/newsroom/top-stories/87699/>, last accessed Jun. 3, 2025.
856. "The US government has lifted sanctions related to the Paks expansion," Kemma, Jun. 29, 2025, <https://www.kemma.hu/orszag-vilag/2025/06/paksi-atomeromu-bovites-szankciok-feloldas-trump>, last accessed Jul. 15, 2025.
857. "Fennovoima cancels Hanhikivi-1 contract with Russian supplier," World Nuclear News, May 3, 2022, <https://www.world-nuclear-news.org/Articles/Fennovoima-cancels-Hanhikivi-1-contract-with-Russi>, last accessed Jun. 3, 2025.
858. "Rosatom sees interest in its NPP projects from 10 countries, 3-4 of which close to formalizing relations - Likhachev," Interfax, Feb. 6, 202, <https://interfax.com/newsroom/top-stories/87699/>, last accessed Jun. 3, 2025.
859. Ariel Cohen, "China and Russia Now Dominate the Global Nuclear Trade," Forbes, Jun. 7, 2024, <https://www.forbes.com/sites/arielcohen/2024/06/07/china-and-russia-now-dominate-the-global-nuclear-trade/>, last accessed Jun. 3, 2025.
860. "Rosatom manufactures first nuclear fuel for a research reactor in Bolivia," AtomMedia, Oct. 28, 2024, <https://atommedia.online/en/2024/10/28/v-rosatome-vpervye-izgotovleno-yade/>, last accessed Jun. 3, 2025.
861. Rosatom, Annual Report 2023, https://report.rosatom.ru/go_eng/go_rosatom_eng_2023/rosatom_2023_eng.pdf, last accessed Jun. 3, 2025.
862. "Cost estimate for Rosatom battery factory in Kaliningrad nearly doubles to 51.5 bln rubles - paper," Interfax, Jan. 31, 2023, <https://interfax.com/newsroom/top-stories/87433/>, last accessed Jun. 3, 2025; "Rosatom nearly fully buys out South Korean manufacturer of energy storage systems - media," Interfax, May 15, 2023, <https://interfax.com/newsroom/top-stories/90488/>, last accessed Jun. 3, 2025; TAdviser, "Kama (AO)," <https://tinyurl.com/5nmxxu6s>, last accessed Jun. 3, 2025).
863. "Rosatom Acquires One of Russia's Largest Titanium and Zirconium Producers," TASS, May 15, 2023, <https://tass.ru/ekonomika/17748115>, last accessed Jun. 3, 2025; "Rosatom acquired the Kirov-Energomash plant," TASS, Jun. 14, 2023, <https://tass.ru/ekonomika/18005531>, last accessed Jun. 3, 2025.
864. "DZhET," Atomic Energy, <https://www.atomic-energy.ru/organizations/dzhzet>, last accessed Jun. 3, 2025.
865. "DZhET," Atomic Energy, <https://www.atomic-energy.ru/organizations/dzhzet>, last accessed Jun. 3, 2025).
866. World Nuclear Association, "Emerging Nuclear Energy Countries," Jul. 29, 2025, <https://world-nuclear.org/information-library/country-profiles/others/emerging-nuclear-energy-countries>, last accessed Jul. 29, 2025.
867. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 417.
868. Kacper Szulecki and Indra Overland, "Russian nuclear energy diplomacy and its implications for energy security in the context of the war in Ukraine," Nature Energy 8, 2023, at 417.
869. International Court of Justice, Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Jul. 8, 1996, paras. 78-79.
870. AP(I), Art. 48. See also Henckaerts, J.-M., & Doswald-Beck, L., Customary International Humanitarian Law Volume I: Rules, Rule 1 (2005).
871. AP(II), Art. 48. See also, AP(I), Art. 51(2) provides protection to civilians, and AP(II), Art. 52(1) provides protection to civilian objects.
872. AP(II), Art. 52(1) and 52(2). The definition of a military objective comprises a two-pronged test: (i) whether the nature, location, purpose, or use of the object makes an effective contribution to military action; and (ii) whether the total or partial destruction, capture, or neutralization of the object offers a definite military advantage under the circumstances at the time. See in: Y., Swinarski, C., and Zimmermann, B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 635, para. 2018 (1987); Bothe, M., Partsch, K.J., and Solf, W.A., New Rules for Victims of Armed Conflict: Commentaries on the Two 1977 Protocols Additional to the Geneva Conventions of 1949, at 365, para. 2.4.1 (1982).
873. Sandoz, Y., Swinarski, C., and Zimmermann, B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 635, para. 2017 (1987).
874. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 669, para. 2152 (1987): "The works and installations concerned are civilian objects a priori, and may therefore not be attacked."
875. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 669-670, para. 2154 (1987).
876. AP(II), Art. 56(1).
877. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 670, paras. 2155-2157 (1987).
878. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 605, para. 1890 (1987): "In addition, it should be noted that destructive acts undertaken by a belligerent in his own territory would not comply with the definition of attack given in paragraph 1, as such acts, though they may be acts of violence, are not mounted "against the adversary." Moreover, such destruction is most often carried out by very different means from those used in an attack."
879. AP(II), Article 49 provides that "attacks" means acts of violence against the adversary, whether in offense or in defense". See: Truth Hounds and Project Expedite Justice, SUBMERGED: Study of the Destruction of the Kakhovka Dam and Its Impacts on Ecosystems, Agrarians, Other Civilians, and International Justice, Jun. 2024, <https://truth-hounds.org/wp-content/uploads/2024/06/submerged-annex-b.pdf>, last accessed Jul. 30, 2025.
880. AP(II), Article 85(3)(c) provides that "launching an attack against works or installations containing dangerous forces in the knowledge that such attack will cause excessive loss of life, injury to civilians or damage to civilian objects, as defined in Article 57, paragraph 2 a) iii)"; Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 670, para. 2158 (1987).
881. Rome Statute, Article 8(2)(b)(iv): "Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated."
882. AP(II), Art. 56(2)(b).
883. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 671, para. 2162 (1987).
884. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 672, paras. 26165-26166 (1987). See also Anne Dienelt, "How Are Nuclear Power Plants Protected by Law During War?," Völkerrechtsblog, Mar. 7, 2022, <https://voelkerrechtsblog.org/how-are-nuclear-power-plants-protected-by-law-during-war/>, last accessed Jul. 31, 2025: "Thus, before a nuclear power plant and its reactors may be lawfully attacked, the infrastructure to the nuclear power plant (e.g., power lines or transformers) could be lawfully attacked first to interrupt the energy supply of the enemy forces (with consequences on the civilian population), with less serious harm than a nuclear catastrophe."
885. Before an attack: AP(II), Art. 57(2)(a)(i) [verification of targets]; AP(II), Art. 57(2)(a)(ii) [minimization of harm]; AP(II), Art. 57(2)(a)(iii) [proportionality]; AP(II), Art. 57(3) [choosing the least harmful option]; AP(II), Art. 57(2)(c) [issuing of warnings]. During an attack: AP(II), Art. 57(2)(b) [re-evaluating targets and re-evaluating proportionality].
886. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 672, para. 2169 (1987).
887. AP(II), Art. 56(3); Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 672-673, paras. 2169-2170 (1987).
888. Sandoz Y., Swinarski C., Zimmermann B. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 674, paras. 2175-2176 (1987).
889. ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-T, Trial Judgment, Trial Chamber, Feb. 26, 2001, para. 301: "In the light of this analysis, the Trial Chamber concurs with the arguments of the Prosecution with regard to the identity of the elements of the crime of imprisonment and those of unlawful confinement." See also: OCHR, "Detention of civilians in the context of the armed attack by the Russian Federation against Ukraine: 24 February 2022 - 23 May 2023," at 6, para. 27 (Jun. 27, 2023), <https://rive.google.com/drive/u/0/folders/1VaSU3XEFmYE1rdHWK9CzUcDopk-SPJmN>, last accessed Jul. 31, 2025: "Detention which does not conform with IHL is referred to as "unlawful confinement" and considered a grave breach under article 147 of the Fourth Geneva Convention, as well as a war crime under the Rome Statute of the International Criminal Court. If committed as part of a widespread or systematic attack directed against a civilian population, "imprisonment or other severe deprivation of physical liberty in violation of fundamental rules of international law" may also constitute a crime against

- humanity.”
890. ICTY, Prosecutor v. Krnojelac, IT-97-25, Trial Judgment, Trial Chamber, Mar. 15 2002, para. 111: “This Trial Chamber shares the view of the Trial Chamber in Kordic and Cerkez that imprisonment as a crime against humanity pursuant to Article 5 may be established when the criteria set out above are met. However, the Trial Chamber considers that, as a crime against humanity, the definition of imprisonment is not restricted by the grave breaches provisions of the Geneva Conventions. The Trial Chamber is thus not satisfied that imprisonment as a crime against humanity can only be established if the requirements of unlawful confinement pursuant to Article 2 are met.”
891. In line with this approach, since unlawful confinement is a grave breach under GC(IV) and not under GC(III), the analysis in this subsection is limited to the detention of Enerhodar civilians, excluding any isolated acts of the detention of prisoners of war at the detention centers in Enerhodar and its vicinity.
892. ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-T, Trial Judgment, Trial Chamber, Feb. 26, 2001, para. 302, upheld on appeal.
893. As Ambos notes, this reflects a broad customary definition of the term imprisonment: Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 201, para. 50 (2016); Robert Cryer et al, *An Introduction to International Criminal Law and Procedure*, at 250 (2010).
894. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 200-202, para. 50 (2016), referring to the Report of the Working Group on Arbitrary Detention, UN Doc. E/ CN.4/1993/24, para. 20 (Deliberation 01). See also, Robert Cryer et al, *An Introduction to International Criminal Law and Procedure*, at 251 (2010): “Out of an abundance of caution, the ICC Statute added “or other severe deprivation of physical liberty” to ensure that a narrow definition was not applied, and that situations such as house arrest were included.”
895. Knut Dörmann, *Elements of War Crimes under the Rome Statute*, at 112-113 (2003).
896. Kai Ambos, *Treatise on International Criminal Law: Volume II: The Crimes and Sentencing*, at 89 (2022); Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 202, para 51 (2016).
897. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 202, para 50 (2016). See also Robert Cryer et al, *An Introduction to International Criminal Law and Procedure*, at 250 (2010): “The requirement that the imprisonment be “arbitrary” (and similarly, in violation of “fundamental rules”) does not mean that a minor procedural defect would expose the authorities involved to international prosecution; significant failings are required. For this reason, the ICC Elements refer to the “gravity of the conduct” being such as to violate fundamental rules of international law.”
898. ICTY, Prosecutor v. Krnojelac, IT-97-25, Trial Judgment, Trial Chamber, Mar. 15, 2002, paras. 119-122; ICTR, Prosecutor v. Ntagerura, ICTR-99-46-T, Trial Judgment, Trial Chamber, Feb. 25, 2004, para. 702.
899. On the contrary, GC(IV), Articles 42-3, which also touch upon the material and procedural rules on internment and assigned residence, are enshrined in GC(IV), Part III, Section II concerning “aliens in the territory of a party to the conflict”. See: ICTY, Prosecutor v. Delalic et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para. 578.
900. GC(IV), Art. 78: “If the Occupying Power considers it necessary, for imperative reasons of security, to take safety measures concerning protected persons, it may, at the most, subject them to assigned residence or to internment.”
901. ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para 72, citing ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para. 321.
902. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para. 568. See also: para 475: “Subversive activity carried on inside the territory of a party to the conflict, or actions which are of direct assistance to an opposing party may threaten the security of the former, which may, therefore, intern people or place them in assigned residence if it has serious and legitimate reasons to think that they may seriously prejudice its security by means such as sabotage or espionage.”
903. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, paras. 557, 576; Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 349, para 160 (2016), referring to ICRC Opinion Paper, *Internment in Armed Conflict: Basic Rules and Challenges*, Nov. 2014, <https://www.onlinelibrary.ihl.org/wp-content/uploads/2021/05/ICRC-Opinion-Internment-in-Armed-Conflict.pdf>, last accessed Aug. 1, 2025, at 4: “Under the Fourth Geneva Convention, internment - and assigned residence - are the severest “measures of control” that may be taken by a State with respect to civilians whose activity is deemed to pose a serious threat to its security. It is undisputed that the direct participation of civilians in hostilities falls into that category, as do other acts that meet the same threshold. Civilians who take a direct part in hostilities are colloquially called “unprivileged belligerents” (or, incorrectly referred to as “unlawful combatants”).”
904. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998. This view was upheld by Prosecutor v. Delalic et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para 327; ICTY, Prosecutor v. Prlić et al., IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para 134. See also: ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Closing statement of the Prosecution, Trial Judgment, Trial Chamber, Nov. 16, 1998, Annex 1, at A1-8 et seq.; Jean Pictet (ed.), *Commentary IV*, Article 42, at 258 (1949): “the mere fact that a person is a national of, or aligned with, an enemy party cannot be considered as threatening the security of the opposing party where he is living and is not, therefore, a valid reason for interning him or placing him in assigned residence. To justify recourse to such measures, the party must have good reason to think that the person concerned, by his activities, knowledge or qualifications, represents a real threat to its present or future security.” See also: ICTY, Prosecutor v. Delalic et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para 567: “The language of article 5 is very broad and its provisions may be applicable in a wide variety of situations. The concept of “activities prejudicial or hostile to the security of the State” is difficult to define. What appears to be included is, above all, espionage, sabotage and intelligence activities for the enemy forces or enemy nationals. The clause cannot simply refer to an individual's political attitude towards the State. However, no further guidance as to the kinds of action envisaged is given in the text of article 5.”
905. ICTY, Prosecutor v. Krnojelac, IT-97-25, Trial Judgment, Trial Chamber, Mar. 15, 2002, para. 118.
906. ICTY, Prosecutor v. Krnojelac, IT-97-25, Trial Judgment, Trial Chamber, 15 Mar. 15, ch
- 2002, para 124
907. ICTY, Prosecutor v. Prlić et al., IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para. 134.
908. ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para 329.
909. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para 578.
910. ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeals Judgment, Appeals Chamber, Feb. 20, 2001, para. 323: “[...] even taking into account the measure of discretion which should be afforded to the detaining power in assessing what may be detrimental to its own security, several of the detained civilians could not reasonably have been considered to pose any sufficiently serious danger as to warrant their detention. The Trial Chamber specifically accepted the evidence of a number of witnesses who had testified that they had not participated in any military activity or even been politically active, including a 42-year old mother of two children. It concluded that at least this category of people were detained in the camp although there existed no serious and legitimate reason to conclude that they seriously prejudiced the security of the detaining party, which indicated that the detention was a collective measure aimed at a specific group of persons, based mainly on their ethnic background.”
911. ICTY, Prosecutor v. Krnojelac, IT-97-25, Trial Judgment, Trial Chamber, Mar. 2002, para. 114; ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para. 579.
912. In particular, the practice of the ICTY, as well as commentaries to the Rome Statute, show that the unlawful detention can take place not only in the case of a violation of GC(IV), Article 42, but also where there are procedural violations under GC(IV), Article 43. While the named articles refer to the protected persons “in the territory of a party to the conflict”, GC(IV), Article 78 concerns protected persons in occupied territories with regard to the basis of their internment / assigned residence and respective procedural guarantees. AP(I), Article 75 is complementary, providing fundamental guarantees to protected persons, which constitute customary international law. See: ICTY, Prosecutor v. Delalic et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para 582; ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para. 322; ICTY, Prosecutor v. Prlic et al., IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para. 133; Knut Dörmann, *Elements of War Crimes under the Rome Statute*, at 113-114 (2003); Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 351, para 167 (2016).
913. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para 581: “[t]he fundamental consideration must be that no civilian should be kept in assigned residence or in an internment camp for a longer time than the security of the detaining party absolutely requires.”
914. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 350, para. 164 (2016).
915. Although some detainees may have been part of the armed resistance to the Russian occupation of Enerhodar as a *levée en masse*, these civilians were no longer combatants under IHL after the occupation of the city—they were civilians. Under IHL, a *levée en masse* are inhabitants of a non-occupied territory who, on the approach of the enemy, spontaneously take up arms to resist the invading forces, without having had time to form themselves into regular armed units, provided they carry arms openly and respect the laws and customs of war: GC(III), Art. 4(A)(6). See David Wallace and Shane Reeves, “*Levé en masse* in Ukraine: Applications, Implications, and Open Questions,” *Lieber Institute*, Mar. 11, 2022, <https://lieber.westpoint.edu/levee-en-masse-ukraine-applications-implications-open-questions/>, last accessed Aug. 1, 2025. Individuals participating in a *levée en masse* have the status of combatant only during the time they carry weapons and comply with IHL: Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Law: Volume 1: Rules*, Rule 106, at 386-387 (2005); Botche, M., *New Rules for Victims of Armed Conflict: Commentaries on the Two 1977 Protocols Additional to the Geneva Conventions of 1949*, at 279, para 2.1.1 (2nd Edn. 2013).
916. Although the notions of “imprisonment” and “other severe deprivation of liberty” are disjunctive, proving both notions helps to establish the crime under Rome Statute, Article 7(1)(e).
917. GC(IV), Article 48 recognizes the right of protected persons who are not nationals of the power whose territory is occupied to leave the occupied territory, referring to GC(IV), Article 35 on the right of protected persons to leave the territory of one of the state parties to the conflict, unless their departure is contrary to the national interests of the state.
918. Walter L. Williams Jr., “The Freedom of Civilians of Enemy Nationality to Depart from Territory Controlled by a Hostile Belligerent,” *College of William and Mary Law School Faculty Publications*, at 149 (1983), <https://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1835&context=facpubs>, last accessed Aug. 1, 2025, referring to GC(IV), Art. 49(5): “The Occupying Power shall not detain protected persons in an area particularly exposed to the dangers of war unless the security of the population or imperative military reasons so demand.” See also: Nilz Melzer, *International Humanitarian Law: A Comprehensive Introduction*, at 243 (2020): “The Fourth Geneva Convention therefore does not prohibit voluntary departures from occupied territory by protected persons of any nationality; it even provides those who are not nationals of the occupied State with an express right to leave comparable to protected persons in a belligerent party's own territory. The Convention also provides that, unless required for the security of the population or for imperative military reasons, the occupying power may not retain protected persons in areas of the occupied territory that are particularly exposed to the dangers of war.”
919. Jean Pictet, GC(IV) Commentary, Article 49, at 282-283 (1949). See also: Walter L. Williams Jr., “The Freedom of Civilians of Enemy Nationality to Depart from Territory Controlled by a Hostile Belligerent,” *College of William and Mary Law School Faculty Publications*, at 151 (1983), <https://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1835&context=facpubs>, last accessed Aug. 1, 2025.
920. Walter L. Williams Jr., “The Freedom of Civilians of Enemy Nationality to Depart from Territory Controlled by a Hostile Belligerent,” *College of William and Mary Law School Faculty Publications*, at 151 (1983), <https://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1835&context=facpubs>, last accessed Aug. 1, 2025.
921. Jean Pictet, GC(IV) Commentary, Article 49, at 283 (1949).
922. Jean Pictet, GC(IV) Commentary, Article 51, at 295 (1949); For example, work that is

- necessary for the feeding, sheltering, clothing, transport, or health of the population of the occupied country.
923. Jean Pictet, GC(IV) Commentary, Article 51, at 296 (1949). See also: GC(IV), Art. 52: "All measures aiming at creating unemployment or at restricting the opportunities offered to workers in an occupied territory, in order to induce them to work for the Occupying Power, are prohibited."
924. The Elements of Crimes (EoC) for the Rome Statute, Article 7(1)(e) require that the "gravity of the conduct was such that it was in violation of fundamental rules of international law" (*i.e.*, requiring significant failings in relation to deprivation of liberty and excluding minor procedural defects); Robert Cryer et al, An Introduction to International Criminal Law and Procedure, at 250 (2010). The definition of the crime in the Rome Statute, detailed in the EoC, indicates that all forms of imprisonment and all other severe deprivations of liberty in violation of fundamental rules of international law would satisfy such a gravity requirement: Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 203, para. 51 (2016).
925. 1984 Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), Art. 1(1).
926. See also ICTY, Prosecutor v. Kunarać et al., IT-96-23 and 23/2, Appeal Judgment, Appeals Chamber, Jun. 12, 2002, para. 148.
927. ICTY, Prosecutor v. Kunarać et al., IT-96-23-T & IT-96-23/1-T, Trial Judgment, Trial Chamber, Feb. 22, 2001, para. 495.
928. ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 195; Elements of Crimes, Arti. 7(1)(f), fn 14 provides "it is understood that no specific purpose need to be proved for this crime".
929. Knut Dörmann, Elements of War Crimes under the Rome Statute, at 46 (2003); Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 332, para. 87.
930. ICTY, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7) (a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 193.
931. ICTR, Prosecutor v. Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 682; ICTY, Prosecutor v. Martić, IT-95-11-T, Trial Judgment Jun. 12, 2007, para. 76; ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Nov. 2, 2001, paras. 146-149. In the Kvocka case, the ICTY referred to the practice of the International Military Tribunal for the Far East, which found that the most common forms of torture systematically inflicted by Japanese soldiers upon Allied forces and occupied civilians included water treatment, burning, electric shocks, the knee spread, suspension, kneeling on sharp instruments, and flogging. Clearly, it is impossible to compile an exhaustive list of torturous practices.
932. Report of the Special Rapporteur on Torture, E/CN.4/1986/15, Feb. 19, 1986, para 119, <https://docs.un.org/en/E/CN.4/1986/15>, last accessed Aug. 3, 2025. See also UN Secretary-General, Report of the International Commission of Inquiry on Darfur to the Secretary-General, delivered to the Security Council, U.N. Doc. S/2005/60, Jan. 31, 2005, para. 369; Knut Dörmann, Elements of War Crimes under the Rome Statute, at 54 (2003), referring to different reports of the UN Human Rights Committee.
933. For more detail, see Knut Dörmann, Elements of War Crimes under the Rome Statute, at 52 (2003).
934. A method of torture in which intense pressure is applied to the victim's thumbs, often using mechanical devices or manual force.
935. ICTR, Prosecutor v. Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, paras. 597-598; ICTY, Prosecutor v. Kunarać et al., IT-96-23&IT-96-23/1-A, Appeal Judgment, Appeals Chamber, Jun. 12, 2002, paras. 149-151: "Sexual violence necessarily gives rise to severe pain or suffering, whether physical or mental, and in this way justifies its characterisation as an act of torture... Severe pain or suffering, as required by the definition of the crime of torture, can thus be said to be established once rape has been proved, since the act of rape necessarily implies such pain or suffering."; ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para. 495; ICTR, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Jun. 12, 2002, paras. 163, 171: "...the use of rape in the course of detention and interrogation as a means of torture and, therefore, as a violation of international law. Rape is resorted to either by the interrogator himself or by other persons associated with the interrogation of a detainee, as a means of punishing, intimidating, coercing or humiliating the victim, or obtaining information, or a confession, from the victim or a third person... Depending upon the circumstances, under international criminal law rape may acquire the status of a crime distinct from torture." See also: William Schabas, The Crime of Torture and the International Criminal Tribunals, at 362-363 (2006).
936. ICTR, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Jun. 12, 2002, paras. 163, 171.
937. ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Trial Chamber, Nov. 2, 2001, paras 148-149: "Although such torture practices often cause permanent damage to the health of the victims, permanent injury is not a requirement for torture. Damage to physical or mental health will be taken into account in assessing the gravity of the harm inflicted. The Trial Chamber notes that abuse amounting to torture need not necessarily involve physical injury, as mental harm is a prevalent form of inflicting torture..."
938. ICTR, Prosecutor v. Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, paras. 682, 684.
939. ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Trial Chamber, Nov. 2, 2001, para. 149.
940. ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, para. 267: "Witness D was then forced to watch Accused B's sexual attacks on Witness A, which have already been described. The physical attacks upon Witness D, as well as the fact that he was forced to watch sexual attacks on a woman, in particular, a woman whom he knew as a friend, caused him severe physical and mental suffering."
941. ICTY, Prosecutor v. Krnojelac, IT-97-25, Trial Judgment, Trial Chamber, Mar. 15, 2002, para. 182; See also ICTY, Prosecutor v. Martinović, IT-98-34-A, Appeal Judgment, Appeals Chamber, May 3, 2006, para. 300; ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Trial Chamber, Nov. 2, 2001, para. 143; ICTY, Prosecutor v. Mršić et al., IT-95-13/1-T, Trial Judgment, Trial Chamber, Sep. 27, 2007, para. 514.
942. ICTY, Prosecutor v. Krnojelac, IT-97-25-T, Trial Judgment, Trial Chamber, Mar. 15, 2002, paras.182-183; See also ICTY, Prosecutor v. Limaj, IT-03-66-T, Trial Judgment, Trial Chamber, Nov. 30, 2005, para. 237; ICTY, Prosecutor v. Mršić et al., IT-95-13/1-T, Trial Judgment, Trial Chamber, Sep. 27, 2007, para. 514.
943. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para 468: "From the foregoing discussion it can be seen that the most characteristic cases of torture involve positive acts. However, omissions may also provide the requisite material element, provided that the mental or physical suffering caused meets the required level of severity and that the act or omission was intentional, that is an act which, judged objectively, is deliberate and not accidental. Mistreatment that does not rise to the threshold level of severity necessary to be characterised as torture may constitute another offence."
944. David Kretzmer, "Prohibition of Torture," Oxford Public International Law, May 2022, para. 22, <https://opil.ouplaw.com/display/10.1093/law/epil/9780199231690/law-9780199231690-e880>, last accessed Aug. 1, 2025.
945. Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 271-272, para. 133 (2016): "The terms "custody" and "under the control of the accused" are not synonymous with the terms "imprisonment or other severe deprivation of liberty"; Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 90-91 (2022): "With this requirement, the particular vulnerability of a victim who is "in the custody or under the control" of the perpetrator and thus has no possibility to escape is expressed."
946. RS, Art. 21(1)(a).
947. EoC Art. 8(2)(a)(ii): "The perpetrator inflicted the pain or suffering for such purposes as: obtaining information or a confession, punishment, intimidation or coercion or for any reason based on discrimination of any kind."
948. CAT, Art. 1(1); ICTR, Prosecutor v. Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 594. Such a list of prohibited purposes constitutes customary international law. See, for example: ICTY, Prosecutor v. Krnojelac, IT-97-25-T, Trial Judgment, Trial Chamber, Mar. 15, 2002, para. 185: "The Trial Chamber is satisfied that the following relevant purposes have become part of customary international law..."
949. The ICTY used very cautious reasoning in Prosecutor v. Kunarać et al., IT-96-23-T & IT-96-23/1-T, Trial Judgment, Trial Chamber, Febr. 22, 2001, paras. 483-96 and Prosecutor v. Krnojelac, IT-97-25-T, Trial Judgment, Trial Chamber, Mar. 15, 2002, para. 186: "There may be a tendency, particularly in the field of human rights, towards the enlargement of the list of prohibited purposes, but the Trial Chamber must apply customary international humanitarian law as it finds it to have been at the time when the crimes charged were alleged to have been committed. In light of the principle of legality, the proposition that "the primary purpose of humanitarian law is to safeguard "human dignity" is not sufficient to permit the court to introduce, as part of the mens rea, a new and additional prohibited purpose, which would in effect enlarge the scope of the criminal prohibition against torture beyond what it was at the time relevant to the indictment under consideration." However, other ICTY decisions and state practice shows the non-exhaustive nature of the prohibited purposes for the crime of torture.
950. Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 332, para. 88 (2016): "It always required the pain or suffering to be inflicted to obtain a specific prohibited purpose along the lines of the Torture Convention."
951. ICTY, Prosecutor v. Brđanin, IT-99-36-T, Trial Judgment, Trial Chamber, Sep. 1, 2004, para 486: "The prohibited purposes mentioned above do not constitute an exhaustive list, and there is no requirement that the conduct must solely serve a prohibited purpose. If one prohibited purpose is fulfilled by the conduct, the fact that such conduct was also intended to achieve a non- listed purpose is immaterial."
952. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para 470: "Further, there is no requirement that the conduct must be solely perpetrated for a prohibited purpose. Thus, in order for this requirement to be met, the prohibited purpose must simply be part of the motivation behind the conduct and need not be the predominating or sole purpose."; ICTY, Prosecutor v. Brđanin, IT-99-36-T, Trial Judgment, Trial Chamber, Sep. 1, 2004, para 486.
953. EoC, Art. 8(2)(a)(ii).
954. While the Rome Statute requires the same levels of severity for the war crimes of torture and inhuman treatment, it remains to be seen whether the practice of the *ad hoc* tribunals holding to a lower level of severity for inhuman treatment, notwithstanding the adoption of the Rome Statute, would have an impact on any cases before the ICC. See: Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 335, para. 97 (2016).
955. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, para. 516-544; ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 39. See also Knut Dörmann, Elements of War Crimes under the Rome Statute, at 63 (2003).
956. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, paras. 442, 543; ICTY, Prosecutor v. Kordić and Čerkez, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para. 39.
957. ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, paras 713-716 and para 738.
958. ICTY, Prosecutor v. Delalić et al., IT-96-21-T, Trial Judgment, Trial Chamber, Nov. 16, 1998, paras. 534-541; ICTY, Prosecutor v. Prlić et al., IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, paras. 115, 117.
959. ICTY, Prosecutor v. Prlić et al., IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para. 119, referring to the Krnojelac trial judgment (paras. 130 and 131) and highlighting that "the extent of mental or physical suffering required for inhuman treatment is less than that required for torture".
960. EoC, Art. 7, Introduction, para. 3.
961. Mettraux, Guénâël, "Chapeau or Contextual Elements", in International Crimes: Law and Practice: Volume II: Crimes Against Humanity,, at 194 (2020).
962. RS, Art. 7(2)(a).
963. EoC, Art. 7, Introduction, para. 3.
964. Under customary international law, the acts making up the attack should not necessarily

- constitute crimes against humanity. For instance, they can constitute war crimes: ICTY, Prosecutor v. Nahimana et. al., ICTR-99-52-A, Appeal Judgment, Appeals Chamber, Nov. 28, 2007, paras. 915-918; ICTY, Prosecutor v. Mladić, IT-09-92-T, Trial Judgment, Trial Chamber, Nov. 22, 2017, para. 3024. See Mettraux, Guénaël, "Chapeau or Contextual Elements," in International Crimes: Law and Practice: Volume II: Crimes Against Humanity at 209, fns. 73-74 (2020). However, with the formulation in Rome Statute, Article 7(2), "limited by the Statute to those 'referred to in paragraph 1' of Article 7", the Rome Statute limits the acts forming an attack solely to crimes against humanity: Mettraux, Guénaël, "Chapeau or Contextual Elements," in International Crimes: Law and Practice: Volume II: Crimes Against Humanity, at 201-204, 209-210 (2020). At the same time, the ICC's practice signals that the commission of other crimes, such as war crimes, could still be demonstrative as to the direction of an attack against the civilian population or that it was carried out pursuant to, or in furtherance of, a state or organizational policy: Mettraux, Guénaël, "Chapeau or Contextual Elements," in International Crimes: Law and Practice: Volume II: Crimes Against Humanity, at 201-204, 209-210 (2020); ICC, Prosecutor v. Ntaganda, CC-01/04-02/06, Trial Judgment, Trial Chamber VI, Jul. 8, 2019, para. 663, citing ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7) (a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 151.
965. The attack of September 11, 2001, in the US, which included one single conduct that was followed by multiple acts, is often mentioned as an example. See: Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 59 (2022); Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 243, para. 106, fn. 620 (2016). See also: ICTY, Prosecutor v. Tolimir, IT-05-88/2-T, Trial Judgment, Trial Chamber, Dec. 12, 2012, para. 701: "This single attack encompassed several interrelated components, namely the military actions against both enclaves that preceded their fall, the restrictions on humanitarian aid, the removal of women, children, and elderly, and the killing of the men.," EoC, General Introduction, para. 9; ICTR, Prosecutor v. Kayishema and Ruzindana, ICTR-95-1-T, Trial Judgment, Trial Chamber, May 21, 1999, para. 122: "The attack is the event in which the enumerated crimes must form part. Indeed, within a single attack, there may exist a combination of the enumerated crimes, for example murder, rape and deportation." See also: Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 59 (2022); Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 243, para. 106. (2016).
966. Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 244, para. 107 (2016).
967. Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 59 (2022); Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 243, para. 106, fn. 618.
968. ICTY, Prosecutor v. *Tadić*, IT-94-1-AR72, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, Appeals Chamber, Oct., 1995, para. 140.
969. ICTY, Prosecutor v. *Perišić*, IT-04-81-T, Trial Judgment, Trial Chamber, Sep. 6, 2011, para. 82; ICTY, Prosecutor v. Kunarac et al., IT-69-23/IT-96-23-1, Appeal Judgment, Appeals Chamber, Jun. 12, 2002, para. 86; ICTY, Prosecutor v. Radovan Karadžić, IT-95-5/18-T, Public Redacted Version of Judgment Issued on 24 March 2016 – Volume I of IV, Trial Chamber, Mar. 24, 2016, para. 473.
970. ICTR, Prosecutor v. Jean-Paul Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 581.
971. EoC, Art. 7, Introduction, para. 3: "...The acts need not constitute a military attack..."; See: AP(II), Art. 49(1) on the meaning of an attack under IHL: 1. "Attacks" means acts of violence against the adversary, whether in offence or in defence." See also Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 55, 58 (2022); Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 165, para. 15 (2016).
972. ICTY, Prosecutor v. Popović et al., IT- 05- 88- T, Trial Judgment, Trial Chamber, Jun. 10, 2001, para. 752. See Mettraux, Guénaël, "Chapeau or Contextual Elements," in International Crimes: Law and Practice: Volume II: Crimes Against Humanity, at 198 (2020).
973. ICTY, Prosecutor v. *Tadić*, IT-94-1-T, Trial Judgment, Trial Chamber, May 7, 1997, paras. 55, 257.
974. Court of Bosnia & Herzegovina, Prosecutor v. *Sarić*, S11 K 008793 12 krl, Verdict, Aug. 28, 2013, para. 69. Although the appellate panel acquitted the accused, *Sarić*, its verdict concerned the grounds of essential violations of the criminal procedure provisions, established the state of facts and the decision on criminal sanction related to the responsibility of the accused, held by the first instance court, and not the matter of law with respect to the contextual element of crimes against humanity.
975. ICC, The Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, paras. 730, 757, 1162, 1165. The trial chamber classified the attack as "systematic" and did not consider whether it was also widespread.
976. ICTY, Prosecutor v. Kunarac et al., IT-96-23-T & IT-96-23/1-T, Trial Judgment, Trial Chamber, Feb. 22, 2001, para. 429: "The adjective "systematic" signifies the organised nature of the acts of violence and the improbability of their random occurrence. Patterns of crimes – that is the non- accidental repetition of similar criminal conduct on a regular basis – are a common expression of such systematic occurrence.," Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 244-245, para. 109 (2016): "For any kind of systematic conduct requires, however small, a degree of organisation which, in turn, requires a policy and an entity powerful enough to implement it. Thus, the "systematic attack" element indeed inevitably implies a policy element."
977. Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 246, para. 109 (2016): Christopher K. Hall and Kai Ambos explain that while it is hard to imagine a policy with regard to the widespread attack, it seems only possible when policy consists of an omission. Then, the example with the deliberate denial of protection for the victims of widespread, but unsystematic crimes, through toleration is mentioned. The formulation "active policy" is mentioned by the authors when they refer to policy standing behind the systematic character of an attack, while a lack of an "active policy" is mentioned when the authors scrutinize the existence of a policy based on the widespread character of an attack; See also: Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 69 (2022).
978. ICC, The Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, para. 117.
979. ICC, The Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, para. 117. See also Otto Triffterer, The Rome Statute of the ICC: A Commentary, at 245, para. 110 (2016).
980. ICC, Situation in the Republic of Kenya, ICC-01/09-19, Decision pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, Pre-Trial Chamber II, Mar. 31, 2010, para. 89, citing ICTY, Prosecutor v. Blaškić, IT-95-14-T, Trial Judgment, Trial Chamber, Mar. 3, 2000, para. 205; ICC, Situation in the Republic of the Philippines, ICC-01/21, Decision on the Prosecutor's request for authorisation of an investigation pursuant to Article 15(3) of the Statute, Pre-Trial Chamber I, Sep. 15, 2021, para. 76, citing its Côte d'Ivoire Article 15 Decision, para. 4.
981. ICTR, Prosecutor v. *Akayesu*, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 580: "There is no requirement that this policy must be adopted formally as the policy of a state. There must however be some kind of preconceived plan or policy.," ICTR, Prosecutor v. Rutaganda, ICTR-96-3-T, Trial Judgment, Trial Chamber, Dec. 6, 1999, para. 69; ICTR, Prosecutor v. Musema, ICTR-96-13-A, Trial Judgment and Sentence, Trial Chamber, Jan. 27, 2000, para. 204.
982. ICTY, Prosecutor v. Blaškić, IT-95-14-T, Trial Judgment, Trial Chamber, Mar. 3, 2000, para. 204: "This plan, however, need not necessarily be declared expressly or even stated clearly and precisely. It may be surmised from the occurrence of a series of events.," In the Bemba case, the ICC mentioned that while the policy requirement implies that "the attack follows a regular pattern", such policy does not have to be formalized: ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, 15 June 2009, para. 81; ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04-01/07-717, Confirmation Decision, Pre-Trial Chamber, Sep. 30, 2008, para. 396.
983. ICC, Prosecutor v. Ruto, Koshey and Sang, ICC-01/09-01/11, Decision on the Confirmation of Charges, Pre-Trial Chamber, Jan. 23, 2012, para. 210; ICC, Katanga and Ngudjolo, ICC-01/04-01/07-717, Confirmation Decision, Pre-Trial Chamber, Sep. 30, 2008, para. 396; ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision pursuant to Article 61(7) (a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 81; ICC, Prosecutor v. Gbagbo, ICC-02/11-01/11-656-Red, Decision on the Confirmation of Charges against Laurent Gbagbo, Pre-Trial Chamber I, Jun. 12, 2014, para. 215.
984. EoC, Art. 7, Introduction, para. 3, fn. 6
985. OHCHR, Human rights situation during the Russian occupation of territory of Ukraine and its aftermath: 24 February 2022 – 31 December 2023, Mar. 20, 2024, https://ukraine.ohchr.org/sites/default/files/2024-04/2024-03-20%20OHCHR%20Report%20on%20Occupation%20and%20Aftermath_EN.pdf, last accessed May 20, 2024, at 12, para. 40.
986. For example, in the 2024 OHCHR report, enforced disappearances are mentioned under the scope of arbitrary detentions: "Russian armed forces conducted widespread arbitrary detentions, including enforced disappearances." OHCHR, Human rights situation during the Russian occupation of territory of Ukraine and its aftermath: 24 February 2022 – 31 December 2023, Mar. 20, 2024, https://ukraine.ohchr.org/sites/default/files/2024-04/2024-03-20%20OHCHR%20Report%20on%20Occupation%20and%20Aftermath_EN.pdf, last accessed May 20, 2024, at 10, para. 37.
987. Report of the independent international commission of inquiry on Ukraine , UN Doc. A/ HRC/58/67, UN Human Rights Council, Mar. 11, 2025, <https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/sessions-regular/session58/advance-version/a-hrc-58-67-auv-en.pdf>, last accessed May 19, 2025, at 3, para. 7.
988. For completeness, the existence of an attack against one side's civilian population is not a justification for an attack by that side against the opponent civilian population. See, ICTY, Prosecutor v. Kunarac et al., IT-96-23 and 23/2, Appeal Judgment, Appeals Chamber, Jun. 12, 2002, paras. 87, 91; ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 105; ICTY, Prosecutor v. Jadranko Prlić, IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para. 36.
989. ICTY, Prosecutor v. *Tadić*, IT-94-1-T, Trial Judgment, Trial Chamber, May 7, 1997, para. 644; ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7) (a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 77.
990. ICTY, Prosecutor v. *Tadić*, IT-94-1-A, Appeals Judgment, Appeals Chamber, Jul. 15, 1999, para. 248: "[I]t is not essentially important whether the actions of the accused were directed against civilian population or his victim, but rather that the accused committed a certain criminal offense, at least accepting the risk that they might constitute an integral part of the attack against civilians."
991. Mettraux, Guénaël, "Chapeau or Contextual Elements," in International Crimes: Law and Practice: Volume II: Crimes Against Humanity, at 235 (2020), referring to ICTY, Prosecutor v. Đorđević, IT-05-87/I-T, Trial Judgment, Trial Chamber, Feb. 23, 2011, para. 600: "The Chamber finds that such an attack "directed against" the civilian population is reflective of the physical perpetrators intent to specifically target civilians."
992. ICTY, Prosecutor v. *Tadić*, IT-94-1-T, Trial Judgment, Trial Chamber, May 7, 1997, para. 644. See i Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 63 (2022); Mettraux, Guénaël, "Chapeau or Contextual Elements," in International Crimes: Law and Practice: Volume II: Crimes Against Humanity at 246 (2020).
993. Some war crimes in Rome Statute, Article 8 require as an element the protection of the victim(s) of the war crime by GC(IV), which protects "those who at a given moment and in any manner whatsoever, find themselves, in case of a conflict or occupation, in the hands of persons a Party to the conflict or Occupying Power of which they are not nationals". The *Tadić* trial judgment highlighted that a de facto (substantial links) and not a formal link (bond) between the person and a state party to the conflict was necessary. See: ICTY, Prosecutor v. *Tadić*, IT-94-1-T, Trial Judgment, Trial Chamber, May 7, 1997, paras. 164-166. There are also crimes under Rome Statute, Article 8 that do not require the protection of the victim(s) by GC(IV) as an element. For example, the war crime of an attack on a civilian population under Article 8(b)(i) foresees the protection of the civilian population under AP(II), which offers broader protection with no nationality limit. This means, for example, that a Russian aerial attack on Russian civilians in Kursk Oblast, partially occupied by Ukraine as a self-defense measure, could constitute a war crime. See: AP(II), Art. 50(1)-(2) on the definitions of civilian and civilian population.

994. Rome Statute, Article 7(2)(a) refers to “any civilian population”. This is mirrored in the EoC, Article 7, Introduction, para. 3.
995. ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04-01/07-717, Confirmation Decision, Pre-Trial Chamber, Sep. 30, 2008, para. 399; ICTY, Prosecutor v. Jadranko Prlić, IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para. 39.
996. The very rationale for recognizing crimes against humanity originally lay in the inclusion of a state's own population within the scope of such crimes: Mettraux, Guénaël, “Chapeau or Contextual Elements,” in International Crimes: Law and Practice: Volume II: Crimes Against Humanity, at 244., fn. 232 (2020).
997. ICTY, Prosecutor v. Kunarac, IT-96-23-T & IT-96-23/1-T, Trial Judgment, Trial Chamber, Feb. 2001, para. 423: “The protection of Article 5 extends to “any” civilian population including, if a state takes part in the attack, that state's population. It is therefore unnecessary to demonstrate that the victims are linked to any particular side of the conflict.”; ICTY, Prosecutor v. Vasiljević, IT-98-32-T, Trial Judgment, Trial Chamber, Nov. 29, 2002, para. 33. As for the absence of any discriminatory intent element, see: ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 305. Hence, the only exception would be the crime of persecution under Rome Statute, Article 7(1)(h), requiring as a separate element that the crime be committed based on specific grounds, namely political, racial, national, ethnic, cultural, religious, gender, or other grounds that are universally recognized as impermissible under international law.
998. Mettraux, Guénaël, “Chapeau or Contextual Elements,” in International Crimes: Law and Practice: Volume II: Crimes Against Humanity, at 235 (2020).
999. ICTY, Prosecutor v. Đorđević, IT-05-87/1-T, Trial Judgment, Trial Chamber, Feb. 23, 2011, para. 600.
1000. The definition of the term “civilian” is contained in AP(I), Article 50(1), which refers to certain parts of GC(III), Article 4 and AP(I), Article 43: “A civilian is any person who does not belong to one of the categories of persons referred to in Article 4 A 1), 2), 3) and 6) of the Third Convention and in Article 43 of this Protocol.”; According to AP(I), Article 50(2), “the civilian population comprises all persons who are civilians”.
1001. ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 78; ICTY, Prosecutor v. Martić, IT-95-11, Appeals Judgment, Appeals Chamber, Oct. 8, 2008, paras. 291-314.
1002. Although crimes against humanity originated within IHL, the growing influence of international human rights law has shifted the focus toward the protection of human rights more generally, not limited to the protection of war crimes victims (civilians in most crimes) only: Kai Ambos, Treatise on International Criminal Law: Volume II: The Crimes and Sentencing, at 52, 64 (2022).
1003. AP(I), Art. 50(2). See also ICTY, Prosecutor v. Krnojelac, IT-97-25-T, Trial Judgment, Trial Chamber, Mar. 2002, para. 56; ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-T, Trial Judgment, Trial Chamber, Feb. 26, 2001, para. 180.
1004. ICTY, Prosecutor v. Nikola Šainović et al., IT-05-87-A, Appeals Judgment, Appeals Chamber, Jan. 23, 2014, para. 549: “The Appeals Chamber notes that the Trial Chamber did not conclude that all of the 287 Kosovo Albanians killed were civilians but rather found that the only reasonable inference to be drawn from the evidence was that “many of these killed people were civilians or *hors de combat* at the time of their killing...”. The Appeals Chamber therefore concludes that the fact that some combatants may have been among those killed does not deprive the Kosovo Albanian population at hand of its “civilian” status pursuant to Article 5 of the Statute.”
1005. ICTY, Prosecutor v. Tadić, IT-94-1-T, Trial Judgment, Trial Chamber, May 7, 1997, paras. 626, 639.
1006. ICTY, Prosecutor v. Kupreskić et al., IT-95-16-T, Trial Judgment, Trial Chamber, Jan. 2000, para. 547: “One fails to see why only civilians and not also combatants should be protected by these rules (in particular by the rule prohibiting persecution), given that these rules may be held to possess a broader humanitarian scope and purpose than those prohibiting war crimes. However, faced with the explicit limitation laid down in Article 5, the Trial Chamber holds that a broad interpretation should nevertheless be placed on the word “civilians,” the more so because the limitation in Article 5 constitutes a departure from customary international law.”; ICTY, Prosecutor v. Blaškić, IT-95-14-T, Trial Judgment, Trial Chamber, Mar. 3, 2000, paras. 209-210, 214; ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-T, Trial Judgment, Trial Chamber, Feb. 26, 2001, para. 180; ICTY, Prosecutor v. Kunarac et al., IT-96-23-T & IT-96-23/1-T, Trial Judgment, Trial Chamber, Feb. 22, 2001, para. 425: Like in Tadić, the ICTY found that the civilian population comprises “all persons who are civilians as opposed to members of armed forces and other legitimate combatants”.
1007. ICTY, Prosecutor v. Blaškić, IT-95-14-T, Trial Judgment, Trial Chamber, Mar. 3, 2000, para. 214. The Tribunal additionally stated that “it also follows that the specific situation of the victim at the moment the crimes were committed, rather than his status, must be taken into account in determining his standing as a civilian”. The definition of *hors de combat* is provided in AP(I), Article 42 : (a) in the power of an adverse party; (b) a person who clearly expresses an intention to surrender; or (c) a person who has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself; provided that, in any of these cases, the person abstains from any hostile act and does not attempt to escape.
1008. ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, paras. 110-116.
1009. ICTY, Prosecutor v. Kunarac et al., IT-96-23 and 23/2, Appeals Judgment, ICTY Appeals Chamber, Jun. 12, 2002, para. 91: “To the extent that the alleged crimes against humanity were committed in the course of an armed conflict, the laws of war provide a benchmark against which the Chamber may assess the nature of the attack and the legality of the acts committed in its midst.” By reiterating that the definition of “civilian” applicable in international armed conflicts via AP(I) constitutes the core of the customary law applicable in international armed conflicts, namely under AP(I), Article 50, the ICTY reflected its earlier line of argument in Kunarac: ICTY, Prosecutor v. Galić, IT-98-29, Appeal Judgment, Appeals Chamber, Nov. 30, 2006, para. 110.
1010. ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, paras. 114.
1011. ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 114. The Tribunal added that if the victim “is indeed a member of an armed organization, the fact that he is not armed or in combat at the time of the commission of crimes, does not accord him civilian status”.
1012. ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para. 97: “The Appeals Chamber considers that Article 50 of Additional Protocol I contains a definition of civilians and civilian populations, and the provisions in this article may largely be viewed as reflecting customary law.”
1013. ICTY, Prosecutor v. Galić, IT-98-29-A, Appeals Judgment, Appeals Chamber, Nov. 30, 2006, para. 114: while the ICTY Appeals Chamber held that those *hors de combat* do not fall under the definition of “civilians”, thus, there was no room for broad interpretation of the term “civilians”, the tribunal reiterated that “the presence within a population of members of resistance groups, or former combatants, who have laid down their arms, does not alter its civilian characteristic”, having repeated itself in the Blaškić appeal judgment; ICTY, Prosecutor v. Martić, IT-95-11-T, Trial Judgment, Trial Chamber, Jun. 12, 2007, paras. 54-56: the Trial Chamber supported the narrow definition of “civilian,” excluding *hors de combat* from it; ICTY, Prosecutor v. Martić, IT-95-11-A, Appeal Judgment, Appeals Chamber, Oct. 8, 2008, paras. 311, 313; ICTY, Prosecutor v. Mrškić et al., IT-95-13/1-A, Appeal Judgment, Appeals Chamber, May 5, 2009, paras. 29-34.
1014. ICTY, Prosecutor v. Martić, IT-95-11-A, Appeal Judgment, Appeal Chamber, Oct. 8, 2008, paras. 311, 313: “In light of the above, the Appeals Chamber finds that the interpretation of the Statute according to which persons *hors de combat* fall within the purview of Article 5 of the Statute as victims is consistent with the status of applicable customary international... Under Article 5 of the Statute, a person *hors de combat* may thus be the victim of an act amounting to a crime against humanity, provided that all other necessary conditions are met, in particular that the act in question is part of a widespread or systematic attack against any civilian population.”; ICTY, Prosecutor v. Mrškić et al., IT-95-13/1-A, Appeal Judgment, Appeals Chamber, May 5, 2009, paras. 29-34: “Further, it held that under customary international law, persons *hors de combat* can also be victims of crimes against humanity, provided that all the other necessary conditions are met... Further, the fact that a population under the chapeau of Article 5 of the Statute must be “civilian” does not imply that such population shall only be comprised of civilians. The status of the victims will thus also be relevant to determining whether the population against which the attack is directed is civilian... Accordingly, whereas the civilian status of the victims, the number of civilians, and the proportion of civilians within a civilian population are factors relevant to the determination of whether the chapeau requirement of Article 5 of the Statute that an attack be directed against a “civilian population” is fulfilled, there is no requirement nor is it an element of crimes against humanity that the victims of the underlying crimes be “civilians,” thus, finding a Trial Chamber’s error of law.” In this regard, the Appeals Chamber limited the requirement about a civilian population to a jurisdictional requirement, meaning that once it is established, non-civilians could also be victims of the crime against humanity. See: Sadat, Leila N., “Putting Peacetime First: Crimes Against Humanity and the Civilian Population Requirement,” Emory International Law Review, Vol. 31, No. 197, 2017 and Washington University in St. Louis Legal Studies Research Paper No. 16-08-02, at 220 (2017).
1015. Sadat, Leila N., “Putting Peacetime First: Crimes Against Humanity and the Civilian Population Requirement,” Emory International Law Review, Vol. 31, No. 197, 2017 and Washington University in St. Louis Legal Studies Research Paper No. 16-08-02, at 224 (2017).
1016. ICTR, Prosecutor v. Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 582.
1017. ICTR, Prosecutor v. Rutaganda, ICTR-96-3-T, Trial Judgment, Trial Chamber, Dec. 6, 1999, para. 72; ICTR, Prosecutor v. Musema, ICTR-96-13-T, Trial Judgment, Trial Chamber, Jan. 27, 2000, para. 207; ICTR, Prosecutor v. Paul Bisengimana, ICTR 00-60-T, Trial Judgment, Trial Chamber, Apr. 13, 2006, para. 48; ICTR, Prosecutor v. Athanasie Seromba, ICTR-2001-66-I, Trial Judgment, Trial Chamber, Dec. 13, 2006, para. 358.
1018. ICTR, Prosecutor v. Paul Bisengimana, ICTR 00-60-T, Trial Judgment, Trial Chamber, Apr. 13, 2006, para. 49.
1019. It is not required that individual victims of the crimes should be civilians, provided that the targeted population was civilian. However, it is unlikely that a combatant who has not acquired *hors de combat* status would be considered a victim of crimes against humanity.
1020. ICTY, Prosecutor v. Jadranko Prlić et al., IT-04-74-T, Trial Judgment, Trial Chamber, May 29, 2013, para. 38.
1021. ICTY, Prosecutor v. Kunarac et al., IT-96-23 and 23/2, Appeal Judgment, ICTY Appeals Chamber, Jun. 12, 2002, para. 93; ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeals Judgment, Appeals Chamber, Jul. 29, 2004, para. 101; ICC, Situation in the Republic of Kenya, ICC-01/09-19, Decision pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, Pre-Trial Chamber II, Mar. 31, 2010, para. 94.
1022. ICTY, Prosecutor v. Kunarac et al., IT-96-23 and 23/2, Appeal Judgment, ICTY Appeals Chamber, Jun. 12, 2002, para. 94; ICTY, Prosecutor v. Blaškić, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul., 2004, para. 101; ICTY, Prosecutor v. Kordic and Cerkez, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para. 94; ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04- 01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 394.
1023. ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7) (a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, paras. 116-126.
1024. ICC, Situation in the Republic of Kenya, ICC-01/09-19, Decision pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, Pre-Trial Chamber II, Mar. 31, 2010, para. 95.
1025. ICC, Situation in the Republic of Kenya, ICC-01/09-19, Decision pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, Pre-Trial Chamber II, Mar. 31, 2010, para. 95; ICC, Prosecutor v. Bosco Ntaganda, ICC-01/04-02/06-309, Decision on the Charges, Pre-Trial Chamber, Jun. 9, 2014; ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 83; ICTY, Prosecutor v. Blagojević and Jokić, IT-02-60-T, Trial Judgment, Trial Chamber, Jan. 17, 2005, para. 545: “crime may be widespread by the “cumulative effect of a series of inhumane acts or the singular effect of an inhumane act of extraordinary magnitude”,” referring to ILC’s

- 1996 Draft Code of Crimes Against Peace and Mankind.
1026. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 169, para. 19 (2016); Kai Ambos, *Treatise on International Criminal Law: Volume II: The Crimes and Sentencing*, at 61 (2022). See also, Mettraux, Guénaël, "Chapeau or Contextual Elements," in *International Crimes: Law and Practice: Volume II: Crimes Against Humanity*, at 270 (2020).
 1027. ICTY, *Prosecutor v. Tadić*, IT-94-1-T, Trial Judgment, Trial Chamber, May 7, 1997, para. 648. The ICTY cited the Commentary to the ILC's 1996 Draft Code, which defines large-scale through a multiplicity of victims.
 1028. ICTR, *Prosecutor v. Kayishema and Ruzindana*, ICTR-95-1-T, Trial Judgment, Trial Chamber, May 21, 1999, para. 123.
 1029. ICTY, *Prosecutor v. Blaškić*, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 101; ICTY, *Prosecutor v. Kunarac et al.*, IT-96-23 and 23/2, Appeal Judgment, Appeals Chamber, Jun. 12, 2002, para. 94; See also: ICTR, *Prosecutor v. Akayesu*, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 580 with a strict definition of widespread; ICC, *Situation in the Republic of Kenya*, ICC-01/09-19, Decision pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, Pre-Trial Chamber II, Mar. 31, 2010, para. 95: adopted ICTR's *Akayesu* quantitative approach but added that the assessment should be taken "based on individual facts".
 1030. *Court of Bosnia & Herzegovina, Prosecutor v. Sarić*, No. S11 K 008793 12 krl, Verdict, Aug. 28, 2013, para. 69. Although the appellate panel acquitted the accused, Sarić, its verdict concerned the grounds of essential violations of the criminal procedure provisions, established the state of facts and the decision on criminal sanction related to the responsibility of the accused, held by the first instance court, and not the matter of law with respect to the contextual element of crimes against humanity.
 1031. ICC, *Prosecutor v. Bemba*, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, paras. 116-126.
 1032. ICC, *Situation in the Republic of Côte d'Ivoire*, ICC-02/11-01/11-656-Red, Decision on the confirmation of charges against Laurent Gbagbo, Pre-Trial Chamber I, Jun. 13, 2014, para. 224. The Pre-Trial Chamber explicitly mentioned the large-scale nature of the attack through the described facts.
 1033. ICTY, *Prosecutor v. Kunarac et al.*, IT-96-23 and 23/2, Appeal Judgment, Appeals Chamber, Jun. 12, 2002, para. 94; ICTY, *Prosecutor v. Blaškić*, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 101; ICTY, *Prosecutor v. Kordic and Cerkez*, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para. 94; ICC, *Situation in the Republic of Kenya*, ICC-01/09-19, Decision pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, Pre-Trial Chamber II, Mar. 31, 2010, para. 94; ICC, *Prosecutor v. Katanga and Ngudjolo*, ICC-01/04-01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 394; ICC, *Prosecutor v. Gbagbo*, ICC-02/11-01/11-656-Red, Decision on the Confirmation of Charges against Laurent Gbagbo, Pre-Trial Chamber I, Jun. 12, 2014, para. 223.
 1034. Mettraux, Guénaël, "Chapeau or Contextual Elements," in *International Crimes: Law and Practice: Volume II: Crimes Against Humanity*, at 275 (2020), citing ICTY, *Prosecutor v. Nahimana et al.*, ICTR-99-52-A, Appeal Judgment, Appeals Chamber, Nov. 28, 2007, paras. 931-932. The ICTY Appeals Chamber found that the Trial Chamber erred in identifying any evidence showing that there was a systematic attack against the Tutsi population between January 1 and April 6, 1994, since, despite the 17 attacks on Tutsi civilians between 1990 or 1991 and 1993, nothing supported the conclusion that there was an ongoing systematic attack against Tutsi civilians between January 1 and April 6, 1994.
 1035. ICC, *Prosecutor v. Kayishema and Ruzindana*, ICTR-95-1-T, Trial Judgment, Trial Chamber, May 21, 1999, para. 123; ICTY, *Prosecutor v. Katanga and Ngudjolo*, ICC-01/04-01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 397; ICC, *Prosecutor v. Harun and Abd-Al-Rahman*, ICC-02/05-01/07-1-Corr, Decision on the Prosecution Application under Article 58(7) of the Statute, Pre-Trial Chamber I, Apr. 29, 2007, para. 62.
 1036. ICTY, *Prosecutor v. Blaškić*, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 101; ICTY, *Prosecutor v. Kordic and Cerkez*, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para. 94.
 1037. NV, "More than 1,000 people passed through Russian torture chambers in Energodar – Dmytro Orlov," YouTube, Aug. 13, 2022, https://www.youtube.com/watch?v=fYtAGQyiy_M, last accessed Aug. 2, 2025.
 1038. Hromadske.Radio, "Only 2,000 of the 11,000 Ukrainian personnel remain at the occupied Zaporizhzhia NPP – the mayor of Energodar," Nov. 25, 2023, <https://hromadske.radio/podcasts/my-ie-buly-y-budem-informatsiynyy-maraton/na-okupovanii-zaporizhzhia-aes-iz-11-tyslach-ukrainskoho-personalu-zalyshylysia-tilky-2-tysyachi-mer-enerhodara>, last accessed Aug. 2, 2025: "Dmytro Orlov: Already more than one and a half thousand. There is no exact number, because some people cannot leave the city. And there are always about 100 people who are currently being held in Russian torture chambers."
 1039. Olena Badiuk, "The fate of the captured workers of the Zaporizhzhia NPP. What are they being tried for? Where are they being held?," Radio Svoboda, Apr. 8, 2025: "If we talk about what happened since 2022, then we understand, according to rough estimates, that at least 2,000 civilians went through torture chambers, through illegal detention, and most of them were released on their own. Most of them are verified employees of the ZNPP."
 1040. Statistics Ukraine, "Number of Present Population of Ukraine, as of January 1, 2022," Jan. 1, 2022, https://ukrstat.gov.ua/druk/publicat/kat_u/2022/zb/05/zb_Nas.pdf, last accessed Aug. 2, 2025; The latest report, published by the Ukrainian State Statistics Service two months before the Russian full-scale invasion of Ukraine, indicated up to 52,237 civilian residents of Enerhodar.
 1041. Ukrinform, "About 15 thousand people remain in the temporarily occupied Enerhodar," Jun. 24, 2023, <https://www.ukrinform.ua/rubric-regions/3727193-u-timasovo-okupovanomu-energodari-zalisautsa-blizko-15-tisac-ludej.html>, last accessed Aug. 2, 2025.
 1042. Radio Svoboda, "Only a fifth of the population remained in Energodar during the occupation – the mayor," Jan 18, 2024, <https://www.radiosvoboda.org/a/news-enerhodar-naseleennia-okupatsia/32782067.html>, last accessed Aug. 2, 2025; Inform.ZP.UA, "Staff shortage, non-working elevators, 20% of the city's population – how occupied Energodar lives," Nov. 21, 2024, https://www.inform.zp.ua/uk/2024/11/21/303234_kadrovij-golod-nerobochi-lifty-20-naseleennya-v-misti-yak-zhyve-okupovanyj-energodar/, last accessed Aug. 2, 2025: 75-80% of Enerhodar civilians fled. The latest assessments by the Ukrainian State Statistics Service, dated January 2, 2022, estimated a population of up to 52,237 Enerhodar civilians. 75-80% of 52,237 is approximately 39,178 and 41,790, respectively. Deducting 75% from 52,237 leaves approximately 13,059 people, while deducting 80% leaves approximately 10,447 people.
 1043. Strana Rosatom, "'I don't know what kind of view from my office': the new mayor of Energodar Maksym Pukhov – about the situation in the city," Mar. 7, 2025, <https://strana-rosatom.ru/2025/03/07/ne-znaju-kakoj-vid-iz-moego-kabineta/>, last accessed Aug. 2, 2025: "Many people left in 2022: out of 54,000 citizens, 8,000-9,000 remained at that time." The so-called mayor of Enerhodar himself admitted the limited number of civilians remaining in the city of Enerhodar as of 2025.
 1044. See Subsections 2.1. and 2.5. See also Olena Badiuk, "The fate of the captured workers of the Zaporizhzhia NPP. What are they being tried for? Where are they being held?," Radio Svoboda, Apr. 8, 2025, <https://www.radiosvoboda.org/a/novyny-pryazovyya-enerhodar-vyroky-rf-poloneni-pratsivnyky-zaes/33376057.html>, last accessed Aug. 2, 2025.
 1045. Independent International Commission of Inquiry on Ukraine, UN. Doc. A/HRC/52/62, Mar. 15, 2023, https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/coiukraine/A_HRC_52_62_AUV_EN.pdf, last accessed Aug. 2, 2025, paras. 71-72.
 1046. Independent International Commission of Inquiry on Ukraine, UN. Doc. A/78/540, Oct. 19, 2023, <https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/coiukraine/A-78-540-AEV.pdf>, last accessed Aug. 2, 2025, paras. 48-69.
 1047. Independent International Commission of Inquiry on Ukraine, UN. Doc. A/79/549, Oct. 25, 2024, <https://docs.un.org/en/A/79/549>, last accessed Aug. 2, 2025, paras. 33, 74, Annex.
 1048. For example, in its October 2024 report, the Commission referred to the findings made during the first 2 mandates in UN. Doc. A/HRC/52/62, Mar. 15, 2023, https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/coiukraine/A_HRC_52_62_AUV_EN.pdf, last accessed Aug. 2, 2025; UN Doc. A/HRC/52/CRP.4, Aug. 29, 2023, https://www.ohchr.org/sites/default/files/2023-08/A_HRC_52_CRP.4_En%20%28003%29.pdf, last accessed Aug. 2, 2025, paras. 489 and 532; and UN. Doc. A/HRC/55/66, Mar. 18, 2024, <https://docs.un.org/en/A/HRC/55/66>, last accessed Aug. 2, 2025, paras. 58 and 79-80.
 1049. Independent International Commission of Inquiry on Ukraine, UN. Doc. A/HRC/58/67, Mar. 11, 2025, <https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/sessions-regular/session58/advance-version/a-hrc-58-67-auv-en.pdf>, last accessed Aug. 2, 2025, para. 7, Annex III.
 1050. This stems from the formulation "committed as part of a[n] ... attack," prescribed in Rome Statute, Article 7 for each crime, as one of the two contextual elements of each of the crimes against humanity. See also: Rome Statute, Art. 7(1).
 1051. ICTR, *Prosecutor v. Akayesu*, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 594.
 1052. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 167, para. 17 (2016).
 1053. Mettraux, Guénaël, "Chapeau or Contextual Elements," in *International Crimes: Law and Practice: Volume II: Crimes Against Humanity*, at 235 (2020), referring to ICTY, *Prosecutor v. Đorđević*, IT-05-87/1-T, Trial Judgment, Trial Chamber, Feb. 23, 2011, para. 600: "The Chamber finds that such an attack "directed against" the civilian population is reflective of the physical perpetrators intent to specifically target civilians."
 1054. Rome Statute, Art. 7(1); EoC, Introduction to the Elements of Art. 7, para. 2. See also EoC, 5th element of Art. 7(1)(f), 5th element of Art. 7(1)(e).
 1055. ICTY, *Prosecutor v. Blaškić*, IT-95-14-A, Appeal Judgment, Appeals Chamber, Jul. 29, 2004, para. 124; ICTY, *Prosecutor v. Kordic and Cerkez*, IT-95-14/2-A, Appeal Judgment, Appeals Chamber, Dec. 17, 2004, para. 99.
 1056. Rome Statute, Article 30 provides that "a person shall be criminally responsible and liable for punishment for a crime within the jurisdiction of the Court only if the material elements are committed with intent and knowledge", going on to elaborate the meaning of those terms.
 1057. Kai Ambos, *Treatise on International Criminal Law: Volume II: The Crimes and Sentencing*, at 77 (2022).
 1058. The only exception, as stated earlier, would be the crime of persecution: ICTY, *Prosecutor v. Tadić*, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 305; ICTR, *Prosecutor v. Akayesu*, ICTR-96-4-A, Appeal Judgment, Appeals Chamber, Jun. 1, 2001, paras. 464-465.
 1059. Kai Ambos, *Treatise on International Criminal Law: Volume II: The Crimes and Sentencing*, at 77-78 (2022). See i Mettraux, Guénaël, "Chapeau or Contextual Elements," in *International Crimes: Law and Practice: Volume II: Crimes Against Humanity*, at 343-344 (2020).
 1060. EoC, Introduction to the Elements of Art. 7, para. 2.
 1061. ICTY, *Prosecutor v. Kunarac et al.*, IT-69-23/IT-96-23-1, Appeal Judgment, Appeals Chamber, Jun. 12, 2022, para. 102; ICC, *Prosecutor v. Katanga and Ngudjolo*, ICC-01/04-01/07-717, Confirmation Decision, Pre-Trial Chamber, Sep. 30, 2008, para. 401; ICC, *Prosecutor v. Omar Hassan Ahmad Al Bashir*, ICC-02/05-01/09, Decision on the Prosecution's Application for a Warrant of Arrest against Omar Hassan Ahmad Al Bashir, Pre-Trial Chamber I, Mar. 4, 2009, para. 87.
 1062. Kai Ambos, *Treatise on International Criminal Law: Volume II: The Crimes and Sentencing*, at 78 (2022); Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 176, para. 26 (2016): Hall and Ambos explain this by highlighting that "it is not necessary to demonstrate that the perpetrator knew that his actions were inhumane, or rose to the level of crimes against humanity, but only that he was aware of the facts related to the attack which increased the dangerousness of his conduct for the victims or turned this conduct into a contribution to the crimes of others".
 1063. ICTY, *Prosecutor v. Blaškić*, IT-95-14-T, Trial Judgment, Trial Chamber, Mar. 3, 2000, para. 254; ICTY, *Prosecutor v. Kunarac et al.*, IT-69-23/IT-96-23-1, Appeal Judgment, Appeals

- Chamber, Jun. 12, 2022, para. 102.
1064. Court of Bosnia & Herzegovina, Prosecutor v. Ćirković, X-KR-10/1029, Verdict, Sep. 28, 2010, at 8-9: "Therefore, the perpetrator must be aware of the existence of the widespread or systematic attack against civilian population, and that, at least, he must accept the risk that his action constitutes an integral part of that attack. On the other hand, the motives of the accused to commit the specific criminal offense can be entirely independent of the reasons due to which the attack was carried out, and they can be exclusively personal, for example. Furthermore, it is not essentially important whether the actions of the accused were directed against the civilian population or his victim, but rather that the accused committed a certain criminal offense, at least accepting the risk that they might constitute an integral part of the attack against civilians."
1065. ICC, The Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, para. 1125.
1066. EoC, Introduction to the Elements of Art. 7, para 2: "In the case of an emerging widespread or systematic attack against a civilian population, the intent clause of the last element indicates that this mental element is satisfied if the perpetrator intended to further such an attack."
1067. In this report, the terms "participation", "commission", and "perpetration" are used interchangeably.
1068. RS, Art. 25(3)(a); Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 17-18, paras. 1-3 (2019); Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 987-988, paras. 7, 9 (2016), referring to ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 191; SCSL, Prosecutor v. Brima et al., SCSL-2004-16-A, Appeal Judgment, Appeals Chamber, Feb. 22, 2008, para. 73-79.
1069. Rome Statute, Art. 25(3)(a); ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 318; ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04- 01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 488. The clear listing of different forms of principal perpetration in the Rome Statute distinguishes it from the ICTY, ICTR, and SCSL Statutes, as well as the law establishing the Extraordinary Chambers in the Courts of Cambodia (ECCC), all of which lack such clarity: ICTR Statute, Art. 6(1); ICTY Statute, Art. 7(1); SCSL Statute, Art. 6(1); ECCC Law, Art. 29.
1070. Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 17-18, paras. 1-3 (2019).
1071. ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 188; ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para. 342; ICTY, Prosecutor v. Krstić, IT-96-33-T, Trial Judgment, Trial Chamber, Aug. 2, 2001, para. 601; ICTY, Prosecutor v. Stakić, IT-97-24-T, Trial Judgment, Trial Chamber, Jul. 31, 2003, paras. 438-439; ICTR, Prosecutor v. Renzaho, ICTR-97-31-T, Trial Judgment, Trial Chamber, Jul. 14, 2009, para. 739.
1072. ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 188; ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para. 342; ICTY, Prosecutor v. Krstić, IT-96-33-T, Trial Judgment, Trial Chamber, Aug. 2, 2001, para. 601; ICTY, Prosecutor v. Stakić, IT-97-24-T, Trial Judgment, Trial Chamber, Jul. 31, 2003, paras. 438-439; ICTR, Prosecutor v. Renzaho, ICTR-97-31-T, Trial Judgment, Trial Chamber, Jul. 14, 2009, para. 739.
1073. ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 188; SCSL, Prosecutor v. Sesay, SCSL-04-15-T, Trial Judgment, Trial Chamber I, Mar. 2, 2009, para. 249; SCSL, Prosecutor v. Brima et al., SCSL-04-16-T, Trial Judgment, Trial Chamber II, Jun. 20, 2007, para. 762; ICTR, Prosecutor v. Nahimana et al., ICTR-99-52-A, Appeal Judgment, Appeals Chamber, Nov. 28, 2007, para. 478; ECCC, KAING Guek Eav alias Duch, 001/18-07-2007/ECCC/TC, Jul. 26, 2010, para. 480, fn. 845.
1074. RS, Art. 30(1).
1075. RS, Art. 30. See also: Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 25, paras. 21-22 (2019).
1076. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, paras. 326, 342; ICC, Prosecutor v. Al Mahdi, ICC-01/12-01/15-84-Red, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Mar. 24, 2016, para. 24.
1077. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, paras. 330, 338. See also: para. 332, where the ICC Pre-Trial Chamber used the "control over the crime" theory with respect to other forms of principal perpetration, namely direct (individual) and indirect perpetration, while mentioning the "joint control over crime" theory specifically in the context of co-perpetration.
1078. ICC, Prosecutor v. Lubanga, ICC-No. 01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 342.
1079. Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 90, para. 13 (2019).
1080. van Sliedregt E., Yanev L., de Hemptinne J., et al., "Co-Perpetration Based on Joint Control over the Crime," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 86-87, para. 6, at 102, para. 35 (2019).
1081. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 343-345; ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04-01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 522; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute, Trial Chamber I, Mar. 14, 2012, para. 981; ICC, Prosecutor v. Muthaura et al., ICC-01/09-02/11, Confirmation of Charges, Pre-Trial Chamber II, Jan. 23, 2012, para. 297; ICC, Prosecutor v. Blé Goudé, ICC-02/11-02/11-186, Confirmation of charges, Pre-Trial Chamber II, Dec. 11, 2014, para. 137.
1082. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 345: "its existence can be inferred from the subsequent concerted action of the co-perpetrators"; ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04- 01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 523: "its existence can be inferred from the subsequent concerted action of the co-perpetrators"; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute, Trial Chamber I, Mar. 14, 2012, para. 988: "The agreement can be inferred from circumstantial evidence"; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, ICC Trial Chamber VII, Oct. 19, 2016, para. 66: "Its existence may be inferred from subsequent concerted action of the co-perpetrators, and proven by direct evidence or inferred from circumstantial evidence."
1083. ICC, Prosecutor v. Dominic Ongwen, ICC-02/04-01/15-422-Red, Confirmation of charges, Pre-Trial Chamber II, Mar. 23, 2016, para. 38; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, ICC Trial Chamber VII, Oct. 19, 2016, para. 66.
1084. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 347; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute, Trial Chamber I, Mar. 14, 2012, paras. 999-1000.
1085. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute, Trial Chamber I, Mar. 14, 2012, para. 997; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06 A 5, Appeal Judgment, Appeals Chamber, Dec. 1, 2014, paras. 467-469.
1086. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06 A 5, Appeal Judgment, Appeals Chamber, Dec. 1, 2014, paras. 7, 469, 473; ICC, Prosecutor v. Blé Goudé, ICC-02/11-02/11-186, Confirmation of charges, Pre-Trial Chamber II, Dec. 11, 2014, para. 134; See also Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 992, para. 10, fn. 54 (2016): Ambos highlights academic criticism of "essential contribution" during the preparatory stage, which notes such contribution is accessory in nature.
1087. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06 A 5, Appeal Judgment, Appeals Chamber, Dec. 1, 2014, para. 366; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute, Trial Chamber I, Mar. 14, 2012, paras. 1004-1005.
1088. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 346; ICC, Prosecutor v. Katanga and Ngudjolo, ICC-01/04- 01/07-717, Decision on the Confirmation of Charges, Pre-Trial Chamber I, Sep. 30, 2008, para. 523.
1089. Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 97-98, para. 24 (2019).
1090. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, paras. 349-350.
1091. ICC, Prosecutor v. Ruto, Koshey and Sang, ICC-01/09-01/11, Decision on the Confirmation of Charges, Pre-Trial Chamber, Jan. 23, 2012, para. 292; ICC, Prosecutor v. Bosco Ntaganda, ICC-01/04-02/06-309, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Bosco Ntaganda, Pre-Trial Chamber II, Jun. 9, 2014, para. 121; ICC, Prosecutor v. Muthuara et al., ICC-01/09-02/11-382-Red, Decision on the Confirmation of Charges Pursuant to Article 61(7)(a) and (b) of the Rome Statute, Pre-Trial Chamber II, Jan. 23, 2012, para. 297. With one exception, which includes the ICC's approach taken in the Lubanga Decision on Confirmation of Charges on *dolus eventualis* as for "may result" in the commission of crime (paras. 352-354, 361), the ICC has consistently used the standard that the common plan "will result" in the commission of the crime.
1092. ICC, Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, para. 1396; ICC, Prosecutor v. Ruto, Koshey and Sang, ICC-01/09-01/11, Decision on the Confirmation of Charges, Pre-Trial Chamber, Jan. 23, 2012, para. 292; ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, paras. 348-351.
1093. ICC, The Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, para. 777; ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 362. See Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 992-993, para. 10 (2016); Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 99, para. 26 (2019).
1094. ICC, Prosecutor v. Germain Katanga, ICC-01/04-01/07-3436-tENG, Judgment pursuant to Article 74 of the Statute, Trial Chamber II, Mar. 7, 2014, para. 777; ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 362. See Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 992-993, para. 10; Gal T., de Hemptinne J., Roth R., et al., "Direct Commission," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 99, para. 26 (2019).
1095. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 334; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06 A 5, Appeal Judgment, Appeals Chamber, Dec. 1, 2014, para. 451.
1096. ICC, Prosecutor v. Lubanga, ICC-01/04-01/06, Confirmation of charges, Pre-Trial Chamber I, Jan. 29, 2007, para. 367.
1097. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 993, para. 10 (2016), referring to the non-adoption of such a subjective element of co-perpetration by the ICC Pre-Trial Chamber in Katanga and the ICC Trial Chamber in Lubanga.
1098. Despite the slight difference between accomplice and accessory liability in national law (the latter often refers to less involvement in the principal's crime commission, for example, due to not being present at the crime scene), these two terms have been used interchangeably in international jurisprudence and authoritative commentaries to international criminal law provisions, with respect to aiding or abetting.
1099. ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, para. 88; ICC, Prosecutor v. Jean-Pierre Bemba Gombo, ICC-01/05-01/08-3636-Red, Judgment on the appeal of Mr Jean-Pierre Bemba Gombo against Trial Chamber III's "Judgment pursuant to Article 74 of the Statute," Appeals Chamber, Jun. 8, 2018, para. 1325.
1100. ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, paras. 89-90.
1101. ICTR, Prosecutor v. Akayesu, ICTR-96-4-A, Appeal Judgment, Appeal Chamber, Jun. 1,

- 2001, para. 484.
1102. ICTY, Prosecutor v. Aleksovski, IT-95-14/1-T, Trial Judgment, Trial Chamber, Jun. 25, 1999, para. 62; ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Nov. 2, 2001, para. 256; SCSL, Prosecutor v. Taylor, SCSL-03-01-A, Appeal Judgment, Appeals Chamber, Sep. 26, 2013, para. 480: "While an accused may be physically distant from the commission of the crime, he may in fact be in proximity to and interact with those ordering and directing the commission of crimes.," ICTY, Prosecutor v. Aleksovski, IT-95-14/1-T, Trial Judgment, Trial Chamber, Jun. 25, 1999, para. 62; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, para. 96.
1103. ICTY, Prosecutor v. Aleksovski, IT-95-14/1-T, Trial Judgment, Trial Chamber, Jun. 25, 1999, para. 62; ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, paras. 204, 229-230; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13-2275-Red, Judgment on the appeals against the decision of Trial Chamber VII entitled "Judgment pursuant to Article 74 of the Statute," Appeals Chamber, Mar. 8, 2018, para. 20.
1104. Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 1005, para. 23 (2016), referring to the ICTY Trial Judgment in the Strugar case; Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 233-237 (2019).
1105. ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, paras. 270-275.
1106. RS, Art. 25(3)(c): "For the purpose of facilitating the commission of such a crime, aids, abets or otherwise assists in its commission or its attempted commission, including providing the means for its commission."
1107. ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, ICC Trial Chamber VII, Oct. 19, 2016, para. 94; ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, paras. 233-234, 249; ICTY, Prosecutor v. Kunarac et al., IT-96-23-T & IT-96-23/1-T, Trial Judgment, Trial Chamber, Feb. 22, 2001, para. 391; ICTR, Prosecutor v. Kayishema and Ruzindana, ICTR-95-1-T, Trial Judgment, Trial Chamber, May 21, 1999, para. 200.
1108. ICTY, Prosecutor v. Furundžija, IT-95-17/1-A, Appeal Judgment, Appeals Chamber, Jul. 21, 2000, paras. 124-127; ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, paras. 273-274. In particular, the ICTY found that the presence of the accomplice and his role in the interrogation facilitated and otherwise aided and abetted the crimes committed by the physical perpetrator.
1109. The level of contribution required by aiding or abetting, as interpreted by the *ad hoc* and hybrid tribunals, is lower ("substantial") than the one required for co-perpetration ("essential"): Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 179 (2019).
1110. SCSL, Prosecutor v. Taylor, SCSL-03-01-A, Appeal Judgment, Appeals Chamber, Sep. 26, 2013, para. 384.
1111. ICTY, Prosecutor v. Nikola Šainović et al., IT-05-87-A, Appeal Judgment, Appeals Chamber, Jan. 23, 2014, paras. 1621-1650; SCSL, Prosecutor v. Taylor, SCSL-03-01-A, Appeal Judgment, Appeals Chamber, Sep. 26, 2013, paras. 466-481; ICTY, Prosecutor v. Perišić, IT-04-81-A, Appeal Judgment, Appeals Chamber, Feb. 28, 2013, paras. 37-44; ICTY, Prosecutor v. Mrkić et al., IT-95-13/1-A, Appeal Judgment, Appeals Chamber, May 5, 2009, paras. 41-44; ICTR, Prosecutor v. Seromba, ICTR-2001-66-A, Appeal Judgment, Appeals Chamber, Mar. 12, 2008; ICTY, Prosecutor v. Blagojević and Jokić, IT-02-60-A, Appeal Judgment, Appeals Chamber, May 9, 2007, para. 189; ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, para. 352; ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeal Judgment, Appeals Chamber, Jul. 15, 1999, para. 229.
1112. ICC, Prosecutor v. Mbarushimana, ICC-01/04-01/10-465-Red, Confirmation of charges, Pre-Trial Chamber I, Dec. 16, 2011, para. 279; ICC, Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute, Trial Chamber I, Mar. 14, 2012, para. 997; ICC, Prosecutor v. Ruto and Sang, ICC-01/09-01/11-373, Confirmation of charges, Pre-Trial Chamber II, Jan. 23, 2012, para. 354.
1113. ICC, Prosecutor v. Dominic Ongwen, ICC-02/04-01/15-422-Red, Confirmation of charges, Pre-Trial Chamber II, Mar. 23, 2016, para. 43; ICC, Prosecutor v. Al Mahdi, ICC-01/12-01/15-84-Red, Confirmation of charges, Pre-Trial Chamber I, Mar. 24, 2016, para. 26; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, para. 93.
1114. ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13-2275-Red, Judgment on the appeals against the decision of Trial Chamber VII entitled "Judgment pursuant to Article 74 of the Statute," Trial Chamber VII, Mar. 8, 2018, paras. 18, 1326-1327; See also: ICC, Prosecutor v. Bemba, ICC-01/05-01/08-424, Decision pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, Pre-Trial Chamber II, Jun. 15, 2009, para. 35; ICC, Prosecutor v. Blé Goudé, ICC-02/11-02/11-186, Confirmation of charges, Pre-Trial Chamber II, Dec. 11, 2014, para. 167; See Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 212, para. 73 (2019).
1115. RS, Art. 17(1)(d); See Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 211-212, paras. 72-73 (2019).
1116. Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 206, para. 61 (2019).
1117. SCSL, Prosecutor v. Taylor, SCSL-03-01-A, Appeal Judgment, Appeals Chamber, Sep. 26, 2013, para. 372-378.
1118. ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Trial Chamber, Nov. 2, 2001, para. 257; ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, para. 232; ICTY, Prosecutor v. Aleksovski, IT-95-14/1-T, Trial Judgment, Trial Chamber, Jun. 25, 1999, paras. 64-65.
1119. ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Trial Chamber, Nov. 2, 2001, para. 258 referring to ICTY, Prosecutor v. Aleksovski, IT-95-14/1-T, Trial Judgment, Trial Chamber, Jun. 25, 1999, paras. 87-88. See also ICTR, Prosecutor v. Akayesu, ICTR-96-4-T, Trial Judgment, Trial Chamber, Sep. 2, 1998, para. 693.
1120. ICTY, Prosecutor v. Blagojević and Jokić, IT-02-60-A, Appeal Judgment, Appeals Chamber, May 9, 2007, para. 284; SCSL, Prosecutor v. Taylor, SCSL-03-01-A, Appeal Judgment, Appeals Chamber, Sep. 26, 2013, para. 362, fn 1128.
1121. "Concentration camps cases" means cases decided post-Second World War (Subsequent Nuremberg Trials and Post-War War Crimes Trials by the Allies) about the responsibility of perpetrators in relation to the functioning of Nazi concentration camps and related crimes.
1122. ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, paras. 217-233: In this judgment, the ICTY Trial Chamber scrutinized the levels of participation required to establish aiding and abetting.
1123. ICTY, Prosecutor v. Delalić et al., IT-96-21-A, Appeal Judgment, Appeals Chamber, Feb. 20, 2001, paras. 357-358, 364.
1124. ICTY, Prosecutor v. Blagojević and Jokić, IT-02-60-A, Appeal Judgment, Appeals Chamber, May 9, 2007, para. 196: The Appeals Chamber, however, noted that "the Trial Chamber considered Jokić's role as duty officer solely in connection with his knowledge of the mass killings and not as part of the *actus reus* of aiding and abetting".
1125. ICTY, Prosecutor v. Blagojević and Jokić, IT-02-60-A, Appeal Judgment, Appeals Chamber, May 9, 2007, paras. 190-193.
1126. Rome Statute, Art. 30; See: Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 1117, paras. 11-13 (2016); Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 214 (2019); Caspar Plompp, "Aiding and Abetting: The Responsibility of Business Leaders under the Rome Statute of the International Criminal Court" (2014) 30(79) *Utrecht Journal of International and European Law* 4, <http://dx.doi.org/10.5334/ujiel.cl>, last accessed Aug. 3, 2025, at 14.
1127. ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13-2275-Red, Judgment on the appeals against the decision of Trial Chamber VII entitled "Judgment pursuant to Article 74 of the Statute," Trial Chamber VII, Mar. 8, 2018, para. 21; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, para. 98: Similarly, the ICC Trial Chamber mentioned the absence of any requirement of the knowledge of specific details about the principal's offense and the circumstances in which it was committed by the accessory in context of the general Article 30 *mens rea* standard.
1128. RS, Art. 25(3)(c): "For the purpose of facilitating the commission of such a crime, aids, abets or otherwise assists in its commission or its attempted commission, including providing the means for its commission."
1129. ICTY, Prosecutor v. Tadić, IT-94-1-A, Appeals Judgment, Appeals Chamber, Jul. 15, 1999, para. 229; ICTY, Prosecutor v. Aleksovski, IT-95-14/1-A, Appeal Judgment, Appeals Chamber, Mar. 24, 2000, paras. 162-163; ICTY, Prosecutor v. Miroslav Kvocka et al., IT-98-30/1-T, Trial Judgment, Nov. 2, 2001, para. 255; SCSL, Prosecutor v. Taylor, SCSL-03-01-A, Appeal Judgment, Appeals Chamber, Sep. 26, 2013, para. 384; ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, para. 97. See Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 177-178 (2019).
1130. ICC, Prosecutor v. Bemba et al., ICC-01/05-01/13, Judgment pursuant to Article 74 of the Statute, Trial Chamber VII, Oct. 19, 2016, para. 97; See Ventura M.J., de Hemptinne J., Roth R., et al., "Aiding and Abetting," in Cupido M., Ventura M.J., Yanev L., eds., *Modes of Liability in International Criminal Law*, at 214, para. 77 (2019).
1131. ICTY, Prosecutor v. Furundžija, IT-95-17/1-T, Trial Judgment, Trial Chamber, Dec. 10, 1998, paras. 250-257.
1132. For example, Kai Ambos highlights that there are commonly three levels of participation: (1) highest-level perpetrators that organize the crimes and belong to the leadership level; (2) mid-level perpetrators that exercise some form of control over a part of the organization; and (3) the accomplices that merely execute the crimes. See: Otto Triffterer, *The Rome Statute of the ICC: A Commentary*, at 1000-1001, para. 15 (2016).
1133. Survivor ID: En-033.
1134. Survivor ID: En-015.
1135. Survivor ID: En-028.
1136. Survivor ID: En-034; Survivor ID: En-032.
1137. Survivor ID: En-013.
1138. As stated earlier, the perpetrator's co-perpetration is established if there is a common plan or agreement and the perpetrator's essential contribution to that plan or agreement is proven.
1139. "Velykyi luh" in Ukrainian.
1140. <https://tinyurl.com/bdcr8kwh>, last accessed Jul. 25, 2025.
1141. Oleksandr Galenko, "The history of Ukraine begins in the south, its culmination is there, and it must be rewritten from the south," *historians.in.ua*, Oct. 14, 2014, <https://www.historians.in.ua/index.php/en/dyskusiya/1297-oleksandr-halenko-istoriia-ukrainy-pochynaetsia-z-pivdnia-tam-il-kulminatsiia-i-z-pivdnia-vona-maie-buty-perepysana>, last accessed Jul. 25, 2025.
1142. T. I. Lazanska, "Military Settlements," in V. A. Smolii (Ed), *Encyclopedia of the History of Ukraine: Vol. 1: A-B*, (2003), <https://tinyurl.com/wakse382>, last accessed Jul. 25, 2025.
1143. A "povit", also known as a county, was a type of historical territorial-administrative and judicial unit in Ukraine until the adoption of the "raion" administrative unit in 1923.
1144. "The first general census of the Russian Empire in 1897," *demoscope.ru*, https://www.demoscope.ru/weekly/ssp/rus_lan_97_uezd.php?reg=1439, last accessed Jul. 25, 2025.
1145. "The first general census of the Russian Empire in 1897," *demoscope.ru*, https://www.demoscope.ru/weekly/ssp/rus_lan_97_uezd.php?reg=428, last accessed Jul. 25, 2025.
1146. "National composition of the population according to the 2001 census," *datatowel.in.ua*, <https://datatowel.in.ua/pop-composition/ethnic-raions>, last accessed Jul. 25, 2025.
1147. "National composition of the population according to the 2001 census," *datatowel.in.ua*, <https://datatowel.in.ua/pop-composition/ethnic-raions>, last accessed Jul. 25, 2025.

1148. "National composition of the population, citizenship," State Statistics Committee of Ukraine, https://web.archive.org/web/20130501080708/http://2001.ukrcensus.gov.ua/results/nationality_population/nationality_popul5/, last accessed Jul. 25, 2025.
1149. "Beyond the Dnieper Rapids. Zaporizhia Oblast, Russian Federation," histrf.ru, <https://histrf.ru/read/articles/za-dneprovskimi-porogami-zaporozhskaya-oblast-rossiyskaya-federaciya>, last accessed Jul. 25, 2025.
1150. "Energodar: a city of unbridled energy," Ukrainer,Aug. 8, 2023, <https://www.ukrainer.net/enerhodar/>, last accessed Jul. 25, 2025.
1151. The Ukrainian Soviet Socialist Republic was formally a separate republic within the USSR. Having limited sovereignty and its own governing bodies, it was at the same time under the control of the central Soviet authorities in Moscow between 1922 and 1991.
1152. Rem Henoch, <https://rem-henoch.narod.ru/remBuch/pr04s1970.htm>, last accessed Jul. 25, 2025.
1153. Rem Henoch (1926–2004) was a Soviet engineer and manager of several large construction projects in the Soviet Union. He was born in Smolensk and lived with his mother (Henoch's father was executed by shooting in 1938). He studied at the Irkutsk School of Military Mathematicians and the All-Soviet Remote Engineering and Construction Institute in Moscow. Following the Second World War, he took part in the rebuilding of the Belarus and Stalingrad Thermal Power Plants and the construction of the Starobesheve, Prydniprov, and Zaporizhzhia Thermal Power Plants, as well as the ZNPP and the city of Enerhodar.
1154. Rem Henoch, <https://rem-henoch.narod.ru/remBuch/kuchugury.htm>, last accessed Jul. 25, 2025.
1155. E. Radchenko, "The history of the city of Energodar," in Historical Regions of Ukraine: Past and Present, Nov. 28–9, 2013, https://keui.wordpress.com/wp-content/uploads/2013/12/30_radchenko.pdf, at 97–8, last accessed Jul. 25, 2025.
1156. "Energodar," Great Ukrainian Encyclopedia, May 31, 2022, <https://vue.gov.ua/%D0%95%D0%BD%D0%B5%D1%80%D0%B3%D0%BE%D0%B4%D0%B0%D1%80>, last accessed Jul. 25, 2025.
1157. Zheleznyy Potok, "Part One Dawn over the Kuchegurs," <https://zounb.zp.ua/sites/default/files/imce/pdf/zheleznyy%20potok.pdf>, at 106, last accessed Jul. 25, 2025.
1158. "Energodar is Rem Henoch's dream come true," misto.zp.ua, Sep. 14, 2016, <https://misto.zp.ua/article/partners21578.html>, last accessed Jul. 25, 2025.
1159. Zheleznyy Potok, "Part One Dawn over the Kuchegurs," <https://zounb.zp.ua/sites/default/files/imce/pdf/zheleznyy%20potok.pdf>, at 106, last accessed Jul. 25, 2025.
1160. Zheleznyy Potok, "Part One Dawn over the Kuchegurs," <https://zounb.zp.ua/sites/default/files/imce/pdf/zheleznyy%20potok.pdf>, at 106, last accessed Jul. 25, 2025.
1161. Zheleznyy Potok, "Part One Dawn over the Kuchegurs," <https://zounb.zp.ua/sites/default/files/imce/pdf/zheleznyy%20potok.pdf>, at 106–7, last accessed Jul. 25, 2025.
1162. Rem Henoch, <https://rem-henoch.narod.ru/remBuch/projekt.htm>, last accessed Jul. 25, 2025.
1163. Rem Henoch, <https://rem-henoch.narod.ru/remBuch/projekt.htm>, last accessed Jul. 25, 2025.
1164. <https://zounb.zp.ua/sites/default/files/imce/pdf/zaporozhskaya-atomnaya-elektrostantsiya.pdf>, last accessed Jul. 25, 2025.
1165. Zaporizhzhia Nuclear Power Plant, "At the Zaporizhzhia NPP, 1581 employees must submit declarations," Facebook, Mar. 18, 2019, last accessed Jul. 25, 2025.
1166. "Zaporizhzhia NPP reaches full capacity, fifth power unit connected to the grid – Energoatom," <https://www.radiosvoboda.org>, Jan. 15, 2021, last accessed Jul. 25, 2025.
1167. In the Soviet era, cities of this type were commonly referred to as "atomograds", a term denoting settlements built around nuclear infrastructure.
1168. Rem Henoch, <https://rem-henoch.narod.ru/remBuch/pr04s1970b.htm>, last accessed Jul. 25, 2025; Rem Henoch, <https://rem-henoch.narod.ru/remBuch/pr03a80.htm>, last accessed Jul. 25, 2025; Energotom, "Branch of Atomenergomash," <https://old.energoatom.com.ua/vp/atomenergomash.html>, last accessed Jul. 25, 2025.
1169. "Energodar: a city of unbridled energy," Ukrainer,Aug. 8, 2023, <https://www.ukrainer.net/enerhodar/>, last accessed Jul. 25, 2025.
1170. The construction of three more satellite cities stopped after the Chernobyl disaster—namely Teplodar, Orbita, and Shcholkine.
1171. Evgenia Gubkina, "Nuclear cities of Ukraine: before and after Chernobyl," Nov. 4, 2014, <https://www.lvivcenter.org/urban-seminar/atomograds-of-ukraine-2/>, last accessed Jul. 25, 2025.
1172. Urbanist's synopsis: Yevgeny Gubkin on Ukrainian nuclear cities," <https://hmarochos.kiev.ua/2014/12/23/konspekt-urbanistki-yevgeniya-gubkina-pro-ukrayinski-atomogradil/>, last accessed Jul. 25, 2025.
1173. Evgenia Gubkina, "Nuclear cities of Ukraine: before and after Chernobyl," Nov. 4, 2014, <https://www.lvivcenter.org/urban-seminar/atomograds-of-ukraine-2/>, last accessed Jul. 25, 2025.
1174. artemig721, "We remember," pikabu, 2021, https://pikabu.ru/story/pomnim_7647193, last accessed Jul. 25, 2025.
1175. Zaporizhzhia Regional State Administration, "The first monument to the heroes of the ATO in the region was opened in Energodar," Sep. 28, 2015, <https://www.zoda.gov.ua/news/28737/v-energodari-vidkrito-pershiy-v-oblasti-pamyatnik-geroyam-ato.html>, last accessed Jul. 25, 2025.
1176. Book of Memory of the Fallen, "Poluliakh Serhiy Volodymyrovych," <https://memorybook.org.ua>, <https://memorybook.org.ua/19/polulyah.htm>, last accessed Jul. 25, 2025.
1177. PLEDG, Implementation and Improvement of the Public Budget: Experience of Ukrainian cities and recommendations, 2020, https://decentralization.ua/uploads/library/file/708/PLEDDG_Casestudy_Participatory_Budgeting_2020.pdf, last accessed Jul. 25, 2025.
1178. "Young people from Zaporizhia region visited the Boiling Point «Resident» in Energodar," Telegram, Dec. 18, 2023, <https://archive.ph/FVDuu>, last accessed Sep. 03, 2025.
1179. IAEA Power Reactor Information System, "Ukraine," Jun. 15, 2025, <https://pris.iaea.org/pris/CountryStatistics/CountryDetails.aspx?current=UA>, last accessed Jul. 31, 2025.
- Of Ukraine's operable reactors, the first (Rivne Reactor 1) was connected to the grid in December 1980 and the last (Rivne Reactor 4) in October 2004. For more detail on the construction of Ukraine's nuclear reactors, see: Bellona, "A Brief Guide to Ukraine's Nuclear Plants," Mar. 21, 2022, <https://bellona.org/news/nuclear-issues/2022-03-a-brief-guide-to-ukraines-nuclear-power-plants>, last accessed Jul. 31, 2025.
1180. Plokhly, S., Atoms and Ashes. From Bikini Atoll to Fukushima, at 188 (2023).
1181. World Nuclear Association, "Nuclear Generation by Country," Aug. 6, 2024, <https://world-nuclear.org/information-library/facts-and-figures/nuclear-generation-by-country>, last accessed Jul. 31, 2025.
1182. Euracoal, "Ukraine," <https://euracoal.eu/info/country-profiles/ukraine-8/>, last accessed Jun. 11, 2025.
1183. Statistics derived from data provided by the World Nuclear Association, "Nuclear Generation by Country," Aug. 6, 2024, <https://world-nuclear.org/information-library/facts-and-figures/nuclear-generation-by-country>, last accessed Jul. 31, 2025.
1184. Ministry of Energy of Ukraine, "Ukraine's Electricity System Has Become Part of Europe's Electricity System, Says German Galushchenko," Mar. 16, 2022, <https://www.kmu.gov.ua/en/news/energositema-ukrayini-stala-chastinoyu-energositemi-yevropi-german-galushchenko>, last accessed Jul. 31, 2025.
1185. Westinghouse Electric Company, "Energoatom and Westinghouse Reaffirm Clean Energy Partnership, Announce Expanded Cooperation on Westinghouse-supplied VVER Fuel and AP1000 Plants to be Built in Ukraine," Jun. 3, 2022, <https://info.westinghousenuclear.com/news/energoatom-and-westinghouse-reaffirm-clean-energy-partnership>, last accessed Jul. 31, 2025.
1186. World Nuclear Association, "Nuclear Generation by Country," Aug. 6, 2024, <https://world-nuclear.org/information-library/facts-and-figures/nuclear-generation-by-country>, last accessed Jul. 31, 2025.
1187. Relevant initiatives include the EU's "Together We Bring Light!" program, which exchanged 40 million incandescent bulbs for more energy-efficient LED bulbs and saved approximately 2 GW of energy. See: "The light bulb exchange programme concluded, while the EU continues to strengthen its support for Ukraine's energy sector," European Union Delegation to Ukraine, Aug. 28, 2024, https://www.eeas.europa.eu/delegations/ukraine/light-bulb-exchange-programme-concluded-while-eu-continues-strengthen-its-support-ukraine%E2%80%99s-energy_en, last accessed Jul. 31, 2025.
1188. International Energy Agency, Ukraine's Energy System Under Attack, at 13 (2024), <https://iea.blob.core.windows.net/assets/cec49dc2-7d04-442f-92aa-54c18e6f51d6/UkrainesEnergySecurityandtheComingWinter.pdf>, last accessed Jul. 31, 2025.
1189. Eurostat, "Nuclear Energy Statistics," Jan. 2025, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Nuclear_energy_statistics, last accessed Jul. 31, 2025; Eurostat, "Slight Increase in Nuclear Power Production in 2023," Feb. 2025, <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20250225-1>, last accessed Jul. 31, 2025.
1190. World Nuclear Association, "Nuclear Power in Ukraine," Mar. 25, 2025, <https://world-nuclear.org/information-library/country-profiles/countries-t-z/ukraine>, last accessed Jul. 31, 2025.
1191. International Energy Agency, "Ukraine's Energy System Under Attack, at 12 (2024), <https://iea.blob.core.windows.net/assets/cec49dc2-7d04-442f-92aa-54c18e6f51d6/UkrainesEnergySecurityandtheComingWinter.pdf>, last accessed Jul. 31, 2025.
1192. Enerdata, "Portugal Energy Information," <https://www.enerdata.net/estore/energy-market/portugal/>, last accessed Jun. 12, 2025. According to the most recent data from 2023, Portugal's power consumption was 50.3 TWh, which equates to 5.74 GW.
1193. Watling, J., and Dolzikova, D., "Fighting for the Light: Protecting Ukraine's Energy System," Royal United Services Institute, Aug. 12, 2024, <https://www.rusi.org/explore-research/publications/commentary/fighting-light-protecting-ukraines-energy-system>, last accessed Jul. 31, 2025.
1194. IAEA, "Nuclear Safety, Security and Safeguards in Ukraine," GOV/2024/63, at 10 (Nov. 13, 2024), <https://www.iaea.org/sites/default/files/documents/gov2024-63.pdf>, last accessed Jul. 31, 2025.
1195. OECD NEA, "Ukraine: Current Status of Nuclear Power Installations," Apr. 9, 2025, <https://www.oecd-neo.org/jcms/pl66130/ukraine-current-status-of-nuclear-power-installations>, last accessed Jul. 31, 2025.
1196. Hobhouse, C., "Keeping the Lights On: How Ukraine Can Build a Resilient Energy System (and Why This Matters to the EU)," European Union Institute for Security Studies, Mar. 28, 2025, <https://www.iss.europa.eu/publications/commentary/keeping-lights-how-ukraine-can-build-resilient-energy-system-and-why>, last accessed Jul. 31, 2025.
1197. Borger, J., "Fears for All Ukraine's Nuclear Plants After Emergency Shutdowns," The Guardian, Nov. 26, 2022, <https://www.theguardian.com/world/2022/nov/26/fears-for-all-ukraines-nuclear-plants-after-emergency-shutdowns>, last accessed Jul. 31, 2025.
1198. Borger, J., "Fears for All Ukraine's Nuclear Plants After Emergency Shutdowns," The Guardian, Nov. 26, 2022, <https://www.theguardian.com/world/2022/nov/26/fears-for-all-ukraines-nuclear-plants-after-emergency-shutdowns>, last accessed Jul. 31, 2025.
1199. EU Neighbours East, "EU at UN Security Council: Ukraine Has Lost up to 80% of its Pre-War Thermal Electricity Production Capacity," Sep. 11, 2024, <https://euneighbourseast.eu/news/latest-news/eu-at-un-security-council-ukraine-has-lost-up-to-80-of-its-pre-war-thermal-electricity-production-capacity/>, last accessed Jul. 31, 2025.
1200. Hobhouse, C., "Keeping the Lights On: How Ukraine Can Build a Resilient Energy System (and Why This Matters to the EU)," European Union Institute for Security Studies, Mar. 28, 2025, <https://www.iss.europa.eu/publications/commentary/keeping-lights-how-ukraine-can-build-resilient-energy-system-and-why>, last accessed Jul. 31, 2025.
1201. International Energy Agency, "Empowering Ukraine Through a Decentralised Electricity System," at 16 (Dec. 2024), <https://iea.blob.core.windows.net/assets/1cb1324f-e145-41c3-b0c2-d78561b4f1fd/EmpoweringUkraineThroughaDecentralisedElectricitySystem.pdf>, last accessed Jul. 31, 2025.
1202. Hobhouse, C., "Keeping the Lights On: How Ukraine Can Build a Resilient Energy System (and Why This Matters to the EU)," European Union Institute for Security Studies, Mar. 28, 2025, at 14, <https://www.iss.europa.eu/publications/commentary/keeping-lights-how-ukraine-can-build-resilient-energy-system-and-why>, last accessed Jul. 31, 2025.

1203. See, for example, Mills, C., Russia's Use of Nuclear Threats During the Ukraine Conflict, House of Commons Research Briefing, Dec. 20, 2024, <https://commonslibrary.parliament.uk/research-briefings/cbp-9825/>, last accessed Jul. 31, 2025.
1204. Dolzikova, D., "Nuclear Facilities as Targets of Military Attack. Assessing Drivers and Implications for Nuclear Safety," Royal United Services Institute, at 21 (Apr. 25, 2025), <https://static.rusi.org/nuclear-facilities-as-targets-of-military-attack.pdf>, last accessed Jul. 31, 2025.
1205. Dolzikova, D., "Nuclear Facilities as Targets of Military Attack. Assessing Drivers and Implications for Nuclear Safety," Royal United Services Institute, at 2 (Apr. 25, 2025), <https://static.rusi.org/nuclear-facilities-as-targets-of-military-attack.pdf>, last accessed Jul. 31, 2025.
1206. Kryzhnyi, A., "Russian Shahed UAV Flies Critically Close to Khmelnytskyi Nuclear Power Plant Unit," *Ukrainska Pravda*, Oct. 28, 2024, <https://www.pravda.com.ua/eng/news/2024/10/28/7481728/>, last accessed Jul. 31, 2025.
1207. Cook, C., and Seddon, M., "Russia Trained Officers for Attacks on Japan and South Korea," *Financial Times*, Dec. 31, 2024, <https://www.ft.com/content/d345a6e7-2d72-4dcb-9c12-76d571ba75eb>, last accessed Jul. 31, 2025.
1208. Peter, L., "Ukraine War: Chernobyl Scarred by Russian Troops' Damage and Looting," *BBC*, Jun. 3, 2022, <https://www.bbc.co.uk/news/world-europe-61685643>, last accessed Jul. 31, 2025.
1209. Sinead Harvey, IAEA Delivers Specialized Safety and Security Equipment to Chornobyl," *IAEA*, Apr. 27, 2022, <https://www.iaea.org/newscenter/pressreleases/update-47-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Jul. 31, 2025.
1210. IAEA, "Update 47 - IAEA Director General Statement on Situation in Ukraine," Apr. 9, 2022, <https://www.iaea.org/newscenter/pressreleases/update-47-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Jul. 31, 2025.
1211. Plokhly, S., Chernobyl Roulette. A War Story, at 90-91 (2024).
1212. IAEA, "Update 1 - IAEA Director General Statement on Situation in Ukraine, Feb. 25, 2022, <https://www.iaea.org/newscenter/pressreleases/update-iaea-director-general-statement-on-situation-in-ukraine-25-feb-2022>, last accessed Jul. 31, 2025; IAEA, <https://www.iaea.org/newscenter/pressreleases/update-47-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Jul. 31, 2025; "Update 47 - IAEA Director General Statement on Situation in Ukraine," Apr. 9, 2022, .
1213. See, for example, IAEA, "Update 278 - IAEA Director General Statement on Situation in Ukraine," Feb. 27, 2025, <https://www.iaea.org/newscenter/pressreleases/update-278-iaea-director-general-statement-on-situation-in-ukraine>, last accessed Jul. 31, 2025.
1214. Ukrinform, "Ministry of Environment: the results of the analysis of the state of the Chernobyl shelter after the Russian drone attack will be in May," Apr. 12, 2025, <https://www.ukrinform.ua/rubric-society/3981352-mindovkilla-rezultati-analizu-stanu-ukrityta-caes-pisla-ataki-rosijskogo-drona-budut-u-travni.html>, last accessed Jul. 31, 2025.
1215. Sabbagh, D., "Russian Drone Strike Caused Tens of Millions Worth of Damage to Chornobyl," *The Guardian*, May 7, 2025, <https://www.theguardian.com/world/2025/may/07/russian-drone-strike-caused-tens-of-millions-worth-of-damage-to-chornobyl>, last accessed Jul. 31, 2025.
1216. Hodunova, K., "Russia Attacked Chornobyl Nuclear Plant in February, Damaging Confinement. Can It Be Fully Restored?," *The Kyiv Independent*, Apr. 26, 2025, <https://kyivindependent.com/russia-attacked-chornobyl-nuclear-plant-in-february-damaging-confinement-can-it-be-fully-restored/>, last accessed Jul. 31, 2025.
1217. Sabbagh, D., "Russian Drone Strike Caused Tens of Millions Worth of Damage to Chornobyl," *The Guardian*, May 7, 2025, <https://www.theguardian.com/world/2025/may/07/russian-drone-strike-caused-tens-of-millions-worth-of-damage-to-chornobyl>, last accessed Jul. 31, 2025.
1218. Greenpeace Ukraine, "Greenpeace Mission Reports: Fifty Percent of North Roof Structure of Chornobyl New Safe Confinement Shelter Severely Damaged After Russian Drone Attack," Mar. 20, 2025, <https://www.greenpeace.org/ukraine/en/news/3504/fifty-percent-of-north-roof-structure-of-chornobyl-new-safe-confinement-shelter-severely-damaged/>, last accessed Jul. 31, 2025.
1219. Romanenko, V., "The SBU showed the wreckage of the Russian drone that attacked the Chernobyl nuclear power plant," *Ukrainska Pravda*, Feb. 14, 2025, <https://www.pravda.com.ua/news/2025/02/14/7498343/>, last accessed Jul. 31, 2025.
1220. Reuters, "Ukraine Says Russia Strikes Pivdenoukrainsk Nuclear Power Plant, Reactors Undamaged," Sep. 19, 2022, <https://www.reuters.com/world/europe/ukraine-says-russia-strikes-pivdenoukrainsk-nuclear-power-plant-reactors-2022-09-19/>, last accessed Jul. 31, 2025.
1221. See, for example, reports of drones breaching the no-fly zone in October 2024: "Drone flight near nuclear power plant: Energoatom suggests that Russia is preparing strikes on Ukraine's nuclear energy sector," *Radio Svoboda*, Oct. 8, 2024, <https://www.radiosvoboda.org/a/news-enerhoatom-rosila-iaerna-enerhetyka/33151286.html>, last accessed Jul. 31, 2025.
1222. "Drone flight near nuclear power plant: Energoatom suggests that Russia is preparing strikes on Ukraine's nuclear energy sector," *Radio Svoboda*, Oct. 8, 2024, <https://www.radiosvoboda.org/a/news-enerhoatom-rosila-iaerna-enerhetyka/33151286.html>, last accessed Jul. 31, 2025.
1223. Vock, I., "Ukraine War: Russians Likely Targeted Khmelnytsky Nuclear Plant - Zelensky," *BBC*, Oct. 26, 2023, <https://www.bbc.co.uk/news/world-europe-67226741>, last accessed Jul. 31, 2025; Court, E., "Buildings Near Khmelnytskyi Nuclear Power Plant Damaged in Overnight Attack," *The Kyiv Independent*, Oct. 25, 2025, <https://kyivindependent.com/buildings-near-khmelnytskyi-nuclear-power-plant-damaged-in-overnight-attack/>, last accessed Jul. 31, 2025.
1224. Romanenko, V., ("Russian Shahed Drone Flew Near Khmelnytskyi Nuclear Power Plant During 12 September Nighttime Attack," *Ukrainska Pravda*, Sep. 12, 2024, <https://www.pravda.com.ua/eng/news/2024/09/12/7474720/>, last accessed Jul. 31, 2025.
1225. Ukrinform, "A Russian drone flew near the Khmelnytskyi nuclear power plant again," Sep. 20, 2025, <https://www.ukrinform.ua/rubric-regions/3907622-rosijskij-bezpilotnik-znovu-proletiv-poruch-iz-hmelnickou-aes.html>, last accessed Jul. 31, 2025; Enerhoatom, "A Russian Shahed once again flew near the site of the Khmelnytskyi nuclear power plant," Sep. 23, 2024, <https://energoatom.com.ua/news/rosijskij-shahed-vchergove-proletiv-poruch-z-majdanchikom-hmelnickoyi-aes>, last accessed Jul. 31, 2025.
1226. Kryzhnyi, A., "'Outright terrorism': 'Shahed' RJ flew critically close to the power unit of the Khmelnytskyi nuclear power plant," *Economic Truth*, Oct. 28, 2024, <https://epravda.com.ua/news/2024/10/28/721104/>, last accessed Jul. 31, 2025.
1227. Ukrinform, "During the night attack, a Russian drone flew near the Rivne nuclear power plant - Energoatom," Sep. 26, 2025, <https://www.ukrinform.ua/rubric-economy/3909841-pid-cas-nicoln-ataki-rosijskij-dron-proletiv-bila-rivnenskoj-aes-energoatom.html>, last accessed Jul. 31, 2025; Kryzhnyi, A., "Russian UAV Nearly Hits Rivne Nuclear Power Plant," *Ukrainska Pravda*, Sep. 26, 2025, <https://www.pravda.com.ua/eng/news/2024/09/26/7476887/>, last accessed Jul. 31, 2025.
1228. "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework," OHCHR, Jan. 1, 2012, <https://www.ohchr.org/en/publications/reference-publications/guiding-principles-business-and-human-rights>, last accessed Aug. 2, 2025.
1229. "The Ten Principles of the UN Global Compact," UN Global Compact, <https://unglobalcompact.org/what-is-gc/mission/principles>, last accessed Aug. 2, 2025.
1230. United Nations Development Programme, Heightened Human Rights Due Diligence for business in conflict-affected contexts; A Guide, at 11 (2022), <https://www.undp.org/publications/heightened-human-rights-due-diligence-business-conflict-affected-contexts-guide>, last accessed Aug. 2, 2025.
1231. "Activities: Working Group on Business and Human Rights," OHCHR, <https://www.ohchr.org/en/special-procedures/wg-business/activities>, last accessed Aug. 2, 2025.
1232. For more information about the Working Group, see <https://www.ohchr.org/en/special-procedures/wg-business>, last accessed Aug. 2, 2025.
1233. "Outcome of the tenth session of the Working Group on the issue of human rights and transnational corporations and other business enterprises," A/HRC/WG.12/10/1, Mar. 23, 2015, <https://docs.un.org/en/A/HRC/WG.12/10/1>, last accessed Aug. 2, 2025.
1234. IACtHR, Case of the Miskito Divers (Lemoth Morris et al. v. Honduras), Judgment, Aug. 31, 2021, https://www.corteidh.or.cr/docs/casos/articulos/seriec_432_ing.pdf, last accessed Aug. 2, 2025.
1235. IACtHR, Case of the Miskito Divers (Lemoth Morris et al. v. Honduras), Judgment, Aug. 31, 2021, https://www.corteidh.or.cr/docs/casos/articulos/seriec_432_ing.pdf, last accessed Aug. 2, 2025.
1236. ACHPR, LIDHO and Others v. Republic of Cote d'Ivoire (Application 041/2016) [2023] AfCHPR 21, Sep. 5, 2023, para 142.
1237. Directive (EU) 2022/2464 of the European Parliament and of the Council of Dec. 14, 2022, amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, on corporate sustainability reporting, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464>, last accessed Aug. 2, 2025.
1238. Directorate-General for Financial Stability, Financial Services and Capital Markets Union, "The Commission adopts the European Sustainability Reporting Standards," Jul. 31, 2023, https://finance.ec.europa.eu/news/commission-adopts-european-sustainability-reporting-standards-2023-07-31_en, last accessed Aug. 2, 2025.
1239. Niriksha Sanghvi, "Trials of Economic Actors at Nuremberg - An Incomplete Legacy in Corporate Criminal Liability," Oct. 28, 2021, <https://law.kuleuven.be/tijb/trials-of-economic-actors-at-nuremberg-an-incomplete-legacy-in-corporate-criminal-liability/>, last accessed Aug. 2, 2025.
1240. Joe DelGrande, "Corporate Accountability: Prosecuting Corporations for the Commission of International Crimes of Atrocity," May 24, 2021, <https://nyujilp.org/corporate-accountability-prosecuting-corporations-for-the-commission-of-international-crimes-of-atrocity>, last accessed Aug. 2, 2025.
1241. In the French occupation zone in Germany at the time.
1242. While Subsection 5.4 is limited to direct and secondary participation liability forms, omitting command/superior responsibility due to the lack of evidence about the superior-subordinate relationships between representatives of Rosatom and the occupying forces, the post-Second World War judgments in relation to the responsibility of superiors, such as heads of enterprises, are crucial in highlighting the role of Rosatom's leadership in the commission of crimes at the ZNPP and against the ZNPP's Ukrainian staff members.
1243. Bishop W.W., "The Case Against Hermann Roelching and Others," 43(1) *American Journal of International Law*, at 191-193 (1949); *Military Tribunal VI, United States v. Krauch*, Jul. 29-30, 1948, https://www.worldcourts.com/imt/eng/decisions/1948.07.30.United_States_v_Krauch.pdf, last accessed Aug. 2, 2025, at 1178, 1179. See also Jacobson, Kyle Rex, Doing business with the devil: the challenges of prosecuting corporate officials whose business transactions facilitate war crimes and crimes against humanity, *The Free Library*, Dec. 22, 2005, <https://www.thefreelibrary.com/Doing+business+with+the+devil:+the+challenges+of+prosecuting+...+a0133368633>, last accessed July 24 2025, fn. 221.
1244. Speech by Alexey Likhachev, Head of the Russian delegation, Rosatom's Director General, at the 68th session of the IAEA General Conference, Vienna, Sep. 16, 2024, https://www.iaea.org/sites/default/files/24/09/russian_federation-gc68.pdf, last accessed Aug. 2, 2025, at 4.
1245. "Rosatom together with Energodar," Rosatom, <https://web.archive.org/web/20241214184512/https://rosatom-energodar.ru/>, last accessed Aug. 2, 2025.
1246. "ZNPP applied for a license for the operation of a dry storage facility for nuclear fuel," TASS, Dec. 28, 2025, <https://tass.ru/ekonomika/23269897>, last accessed Aug. 2, 2025.
1247. Amnesty International, "Universal Jurisdiction: A Preliminary Survey of Legislation Around the World - 2012 Update," Oct. 2012, <https://www.amnesty.org/en/wp-content/uploads/2021/06/orf530192012en.pdf>, last accessed Aug. 2, 2025.
1248. Joe DelGrande, "Corporate Accountability: Prosecuting Corporations for the Commission of International Crimes of Atrocity," May 24, 2021, <https://nyujilp.org/corporate-accountability-prosecuting-corporations-for-the-commission-of-international-crimes-of-atrocity>, last accessed Aug. 2, 2025.
1249. CAT, Art. 5(2): "Each State Party shall likewise take such measures as may be necessary to establish its jurisdiction over such offences in cases where the alleged offender is present in any territory under its jurisdiction and it does not extradite him pursuant to article 8 to any of the States mentioned in paragraph 1 of this article."
1250. CAT, Art. 6(1): "Upon being satisfied, after an examination of information available to it,

- that the circumstances so warrant, any State Party in whose territory a person alleged to have committed any offence referred to in article 4 is present shall take him into custody or take other legal measures to ensure his presence."
1251. CAT, Art. 7(1): "The State Party in the territory under whose jurisdiction a person alleged to have committed any offence referred to in article 4 is found shall in the cases contemplated in article 5, if it does not extradite him, submit the case to its competent authorities for the purpose of prosecution."
 1252. Cassandra Garrison and Nicolás Misculin, "Ex-Ford Argentina executives convicted in torture case; victims may sue in the US," Reuters, Dec. 12, 2018, <https://www.reuters.com/article/us-argentina-rights-ford-motor-idUSKBN10A25H>, last accessed Aug. 2, 2025.
 1253. Cassandra Garrison and Nicolás Misculin, "Ex-Ford Argentina executives convicted in torture case; victims may sue in the US," Reuters, Dec. 12, 2018, <https://www.reuters.com/article/us-argentina-rights-ford-motor-idUSKBN10A25H>, last accessed Aug. 2, 2025.
 1254. Michael Waibel and Rebecca McMenamin, "Corporate Human Rights and International Law: Obstacle or Precursor to Human Rights Accountability?," EJIL: Talk!, Apr. 22, 2025, <https://www.ejiltalk.org/corporate-human-rights-and-international-law-obstacle-or-precursor-to-human-rights-accountability/>, last accessed Aug. 2, 2025.
 1255. Neil Hodge, "Crimes against humanity and corporate risk," International Bar Association, Aug. 24, 2022, <https://www.ibanet.org/crimes-against-humanity-and-corporate-risk>, last accessed Aug. 2, 2025.
 1256. "Case: LaFarge (Subject Matter)," Interlinks Database, Jun. 13, 2025, <https://interlinkagesdatabase.icct.nl/case/lafarge-subject-matter>, last accessed Aug. 2, 2025.
 1257. Institute for War & Peace Reporting, Interview with Mykola Pashkovsky, "Universal criminal jurisdiction in Ukraine," IWPR, Sep. 20, 2022, <https://iwpr.net/global-voices/universal-criminal-jurisdiction-ukraine>, last accessed Aug. 2, 2025.
 1258. House of Lords Library, "Magnitsky sanctions," Jun. 18, 2021, <https://lordslibrary.parliament.uk/magnitsky-sanctions/>, last accessed Aug. 2, 2025.
 1259. For examples of certain recently adopted sanctions measures imposed against the Russian Federation, see: "Russia's war of aggression against Ukraine: EU agrees 17th package of sanctions," Council of the EU, May 20, 2025, <https://www.consilium.europa.eu/en/press/press-releases/2025/05/20/russia-s-war-of-aggression-against-ukraine-eu-agrees-17th-package-of-sanctions/>, last accessed Aug. 3, 2025 ; Iryna Kuteliyeva, "Switzerland adopts 15th EU sanctions package against Russia in full," *Ukrainska Pravda*, Feb. 12, 2025, <https://www.pravda.com.ua/eng/news/2025/02/12/7497945/>, last accessed Aug. 2, 2025; Junko Suetomi, "Japan strengthens sanctions against Russia," *Baker McKenzie*, Jan. 19, 2025, <https://sanctionsnews.bakermckenzie.com/japan-strengthens-sanctions-against-russia/>, last accessed Aug. 2, 2025.
 1260. These are Sergey Kiriyenko; Larissa Brychyova; Sergey Korolev; Alexey Likhachev; Denis Manturov; Alexandr Novak; Maxim Oreshkin; and Yuriy Trutnev. Yuriy Ushakov has not been designated by OFAC or FCDO.
 1261. For example, Office of Financial Sanctions Implementation HM Treasury, "Consolidated List of Financial Sanctions Targets in the UK," Mar. 5, 2024, <https://web.archive.org/web/20240312224614/https://assets.publishing.service.gov.uk/media/65e6f20c3f69457ff103608e/Russia.pdf>, last accessed Aug. 2, 2025; Office of the Spokesperson, "Sanctions to Degrade Russia's Energy Sector," US State Department, Jan. 10, 2025, <https://2021-2025.state.gov/office-of-the-spokesperson/releases/2025/01/sanctions-to-degrade-russias-energy-sector/>, last accessed Aug. 2, 2025.
 1262. For example, Office of Financial Sanctions Implementation HM Treasury, "Consolidated List of Financial Sanctions Targets in the UK," Mar. 5, 2024, <https://web.archive.org/web/20240312224614/https://assets.publishing.service.gov.uk/media/65e6f20c3f69457ff103608e/Russia.pdf>, last accessed Aug. 2, 2025; Office of the Spokesperson, "Sanctions to Degrade Russia's Energy Sector," US State Department, Jan. 10, 2025, <https://2021-2025.state.gov/office-of-the-spokesperson/releases/2025/01/sanctions-to-degrade-russias-energy-sector/>, last accessed Aug. 2, 2025.
 1263. Moreover, the sanctions against Kiriyenko are in connection with the attempted poisoning of Alexei Navalny and not in connection with his role at Rosatom or activities in occupied areas of Ukraine. See: Eur-Lex, "Council Implementing Regulation (EU) 2020/1480 of 14 October 2020 implementing Regulation (EU) 2018/1542 concerning restrictive measures against the proliferation and use of chemical weapons," Oct. 15, 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2020.341.01.0001.01.ENG&toc=OJ.L_.2020:341:TOC, last accessed Aug. 2, 2025.
 1264. "Risks and Considerations for Doing Business in the Russian Federation and Russia-Occupied Territories of Ukraine," US Department of State—Bureau of European and Eurasian Affairs, Feb. 23, 2024, <https://www.state.gov/russia-business-advisory/>, last accessed Aug. 2, 2025.
 1265. "Meeting of the Prime Minister of the Russian Federation Mikhail Mishustin and the head of Rosatom Alexey Likhachev," Atomic Energy, Apr. 25, 2024, <https://www.atomic-energy.ru/interviews/2024/04/26/145342>, last accessed Aug. 2, 2025.



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This report offers an in-depth examination of the unprecedented Russian military occupation of the city of Enerhodar, where the largest European nuclear power plant, the Zaporizhzhia Nuclear Power Plant (ZNPP) is located, and its broader implications for nuclear safety, human rights, and the international legal order. Representing the first case in the history of a commercial nuclear power plant being seized and militarized during an armed conflict, it exposes a dangerous convergence of human rights abuses, breaches of international law, acute nuclear safety and security risks, and the complicity of Russian state-owned nuclear corporation Rosatom. Covering the period from March 2022 to June 2025, the report analyses the evolution of the occupation of Enerhodar and identifies at least 7 detention sites and 226 cases of unlawful detention of Enerhodar residents and ZNPP employees, the majority of which were followed by inhuman treatment and torture. The report offers an examination of the systematic nature of these practices and their qualification as war crimes and crimes against humanity.