

6th ENSREG Conference Extraordinary Session Ukraine: nuclear safety in times of war



Oleh Korikov

Acting Chairman of the State Nuclear Regulatory Inspectorate of Ukraine, Acting Chief State Inspector on Nuclear and Radiation Safety



Current National Nuclear Programme





Current status (1/2)



SNRIU NOW

Current status (2/2)



SNRIU NOW

Regulatory Requirements

Laws

of Ukraine,

International obligations of Ukraine

Regulations issued by President and CMU

ND (NP)

which are registered by the Ministry of Justice, and subject is unconditional fulfillment for all participants in the field of nuclear energy (rules and regulations)

ND (RD)

which are advisory, are not registered by the Justice Ministry and used by all participants in the field of nuclear energy

ND, which are developed by OO and established by SNRIU



ND (NP) – Normative document (Regulations) ND (RD) – Regulatory Guide providing clarification and justification of the related requirements of NP

Zaporizhzhya NPP (1/2)

Zaporizhzhya NPP units are operated by the Ukrainian personel according to the design and operational documentation (as far, as it is possible).



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Zaporizhzhya NPP (2/2)

- Off-site emergency preparedness and response arrangements are not provided at the Zaporizhzhya NPP
- Currently only mobile phone and e-mails communication channels are available



SNRIU NOW

SNRIU activities

- State inspectors perform their functions, except for inspectors of the Zaporizhzhya NPP.
- Main activities regarding the Zaporizhzhya NPP – collection, analysis and review of the information.
- Validity of licenses are renewed until the end of martial law.



SNRIU staff issues

- Staff (partly) unable to get to the office (covid experience helped)
- Some personnel are at the army
- Some personnel in the occupied territoties
- High stress
- TSO support



NRIU NOW

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Core issues (conclusions)

- Authorisation: according to the legislation in case of martial law: the terms of consideration of application documents for licenses have been suspended; validity of licenses are extended until the end of martial law.
- Review and assessment: the function is performed;
- Inspections: significantly limited inspections (canceled scheduled inspections), inspections at the Zaporizhzhya NPP, are physically impossible.
- Emergency preparedness and response: the function is performed (except ZNPP).



Analysis IAEA Fundamental Safety Principles

Can not be fulfilled under military actions circumstance:

- 1.3, 2.1
- Principle 1, bullets 3.6, 3.7
- 3.10 (Principle 2 partly)
- Principle 3, bullets 3.12, 3.13
- Principle 7
- 3.30, 3.31, 3.32 (Principle 8 partly)
- 3.34, 3.36, 3.37 (Principle 9 partly)
- Principle 10, bullet 3.39



Analysis IAEA SSR-2/2 (Rev. 1)

Safety of Nuclear Power Plants: Commissioning and Operation The occupation of ZNPP made impossible to comply with requirements:

- Requirement 1 (3.2, c, d, e)
- Requirement 2 (3.5, 3.6, 3.7)
- Requirement 4 (3.12, 3.13)
- Requirement 6 (4.13)
- Requirement 7 (4.19, 4.20, 4.24)
- Requirement 9 (4.35)
- Requirement 11

- Requirement 14
- Requirement 17
- Requirement 18 (5.2, 5.7)
- Requirement 21 (5.20)
- Requirement 22 (5.21)
- Requirement 30 (7.28)



Analysis The Seven Pillars

The physical integrity of the facilities – whether it is the reactors, fuel ponds, or radioactive waste stores – must be maintained;

All safety and security systems and equipment must be fully functional at all times;

The operating staff must be able to fulfil their safety and security duties and have the capacity to make decisions free of undue pressure;

There must be secure off-site power supply from the grid for all nuclear sites;

There must be uninterrupted logistical supply chains and transportation to and from the sites;

There must be effective on-site and off-site radiation monitoring systems and emergency preparedness and response measures;

There must be reliable communications with the regulator and others.

Thank you! snriu.gov.ua

