



Workshop

**Energy infrastructure
resilience in response
to war and other hazards**

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Protecting Personnel: A Key Aspect of Critical Infrastructure Security in the Face of Modern Threats

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Protecting Personnel: A Key Aspect of Critical Infrastructure Security in the Face of Modern Threats

Ensuring the safety of personnel is a critical aspect of protecting Ukraine's critical infrastructure from the growing threats of modern warfare. This presentation will explore the key threats, security strategies, and advanced technologies needed to safeguard the people who maintain the vital systems that power the country.

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Relevance of the Topic

1

Modern Threats to Ukraine's Critical Infrastructure

Constant attacks on the energy sector during the war with Russia, including missile strikes on power plants and substations, as well as cyberattacks on energy grids.

2

Importance of Physical and Cyber Security

The safety of personnel is critically important due to the growing risks they face, both physically and through cyber threats.

3

Recent Attacks on Ukraine's Energy System

Missile strikes on power plants, substations, and cyberattacks on energy grids have disrupted the uninterrupted operation of critical infrastructure.



Key Threats to Personnel

Physical Threats

Missile strikes, shelling, and terrorist acts at critical infrastructure sites.

Cyber Threats

Hacking attacks targeting energy companies, aimed at disrupting management systems.

Technological Risks

Outdated security systems, old equipment, and insufficient automation.



Security in Ukraine's Energy Sector

Scale of Threats

Regular attacks on thermal, hydro, and nuclear power stations.

Importance of Protecting Personnel

People are the most vulnerable element of the energy system.

Challenges to Uninterrupted Operation

Staff working under active military conditions.



Personnel Protection Strategies

1

Physical Protection

Shelters, secure workspaces, emergency alert systems, and evacuation plans.

2

Cybersecurity

Strengthening information security systems, training personnel, and using modern encryption and data backup technologies.

3

Psychological Support

Assistance programs and preparation for working in extreme situations.



Advanced Technologies for Protection



Monitoring and Automation

Real-time threat detection and response, use of drones for area monitoring.



Digital Technologies

AI for cyber threat analysis, IoT for monitoring critical systems.



Robotic Systems

Performing dangerous tasks at infrastructure sites.

Best Practices for Protection



Comprehensive Approach

Physical, cyber, and psychological security.



Personnel Training

On crisis response and emergency protocols.



International Collaboration

Acquiring new protection technologies and methods.



Regular Drills

Testing staff readiness for emergencies.





Recommendations

- 1** **Coordination and Collaboration**
Improve coordination between government agencies and private energy companies for infrastructure protection.
- 2** **Investing in Protection Systems**
Invest in advanced protection systems and equipment modernization.
- 3** **Strengthening Cybersecurity**
Strengthen cybersecurity at both the state and company levels.
- 4** **Updating Safety Protocols**
Regularly update evacuation plans and personnel safety protocols.

Conclusions

Crucial Element of Resilience

Personnel protection is a crucial element of the resilience of Ukraine's critical infrastructure.

Comprehensive Approach

A comprehensive approach to security is essential in the face of modern threats, especially during military conflicts.

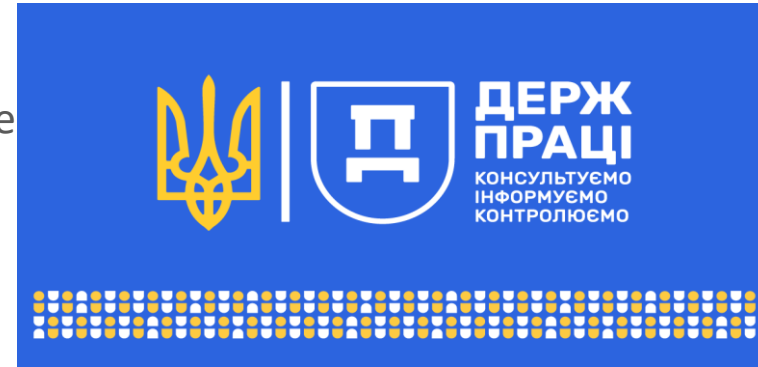
Investing in Protection

Investing in advanced technologies and staff training will ensure the continuous operation of critical facilities and minimize risks to personnel.

State Labor Service of Ukraine

Role: The State Labor Service of Ukraine ensures compliance with labor laws, particularly related to worker safety, health, and the rights of employees.

Mission: Safeguarding the welfare of employees in critical industries and ensuring that employers follow national regulations regarding occupational safety.



Educational Initiatives:

- **Informing Employers:** Through seminars, guidelines, and consultations, the State Labor Service educates employers on legal responsibilities and best practices for workplace safety.
- **Raising Awareness Among Employees:** Workers are informed about their rights and safety protocols through public awareness campaigns and accessible training programs.
- **Demining Training:** In collaboration with programs approved by the State Labor Service, demining safety training is conducted to ensure the protection of personnel, especially in post-conflict areas. These programs teach how to detect and avoid mine hazards, saving lives and preventing injuries at workplaces.

Thank you for your attention!