

EXPOSURE MANAGEMENT IN EMERGENCY PREPAREDNESS AND PLANNING AT MOCHOVCE NPP (poster)

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The legal requirements on emergency preparedness come from Acts of Slovakia republic as the Act on State Safety Supervision of Nuclear Facilities, The Act on Civil Protection of population and the Act on Protection of Public Health.

The operating organization, regulatory bodies and public authorities shall cooperate to prepare emergency plans according to these Acts in which the contents and conditions of the emergency planning are specified, exercises and reviews are demanded.

On-site emergency plan with Emergency Plan Implementing procedures are the basic documents for emergency planning on NPP

Management of response to emergency including exposure management shall be handled by Emergency Response Organization.

There are the centers at which management is present during the emergency at NPP Mochovce :

- Main Control Room
- Emergency Control Room
- Emergency Control Center
- Operational Support Center
- Technical Support Center
- Information Center
- Off-site Assessment Centre

NPP Mochovce owns facilities and equipment for the permanent environment monitoring at site and within the 20 km emergency planning zones.

The major tasks of the Emergency Response Organization, which are carried out in compliance with defined procedures after an extraordinary event, are as follows :

- assesment of extraordinary events
- warning and notification of the plant personal and population in the surroundings
- analysis and evaluation of on-site radiation situation
- **exposure management** :
 - taking measures for protection of the workforce (turn-back dose)
 - coordination of the activities of monitoring teams in environment
 - coordination of the rescue teams (turn-back dose)
 - recommendations for public protection
- implementation of activities to remove the extraordinary event and to return to a safe state

Events are ranked in the Emergency Plan in compliance with their radiological consequences as follows:

- 1.Degree – „the alert state“
- 2.Degree - „ On-site Emergency“
- 3. Degree – „ Off-site Emergency“

Accident phases relevant for emergency planning :

- a pre-release phase
- a release phase
- a post- release phase

The following emergency (urgent) countermeasures for the pre-release and release phases are available to protect from radiological hazards in case of extraordinary event:

- Sheltering
- Evacuation
- Administration of stable iodine
- Personal protective measures

In the emergency plan are established intervention levels for timely and effective implementation of protective measures.

Intervention level is a level of avertable equivalent dose at which intervention measures should be considered.

Intervention Levels in terms of avertable individual dose for following protective measures:

PROTECTIVE MEASURES	INTERVENTION LEVELS (mSv)
Sheltering	10 mSv (averted dose in 48 hours)
Evacuation	50 mSv (averted dose in 7 days)
Iodine prophylaxis	100 mSv (averted dose in thyroid)

EMERGENCY PREPAREDNESS

The frequency of education courses is specified for personal involved in the emergency preparedness by Emergency plan. Education courses are arranged for different groups with regard to their functions. Special emphasis is given to the courses to train the complete plant shift crew.

Shift emergency drills and emergency exercises are organized for special groups and for others personal.

All emergency facilities, equipments and tools are available during the life-time of the operation NPP. They are permanently checked and tested

In the the emergency planning and preparedness NPP Mochovce cooperates very closely with NPP Jaslovske Bohunice, NPP Dukovany and NPP Temelin.