

# Lithuania

## EPR Fact Sheet

### Decision making

In a case of state level nuclear or radiological emergency (hereafter – emergency), the Government Emergency Commission is authorized to make a decision on taking protective actions, informing the public and activating state and other levels emergency operation centers, if necessary, submits proposals to the Lithuanian Government for decision-making to their competence.

### Advice

RPC provides recommendations on urgent protective actions, early protective actions and recovery actions. RPC also organizes, coordinates and performs radiological measurements, organizes and performs radiological monitoring of the public and environment, assesses the results, forecasts consequences of the emergency.

VATESI provides urgent information to the state and municipality institutions about the radiological situation in the nuclear facilities, forecasts the development of the emergencies, issues recommendations and other information relevant to the event at the nuclear facility.

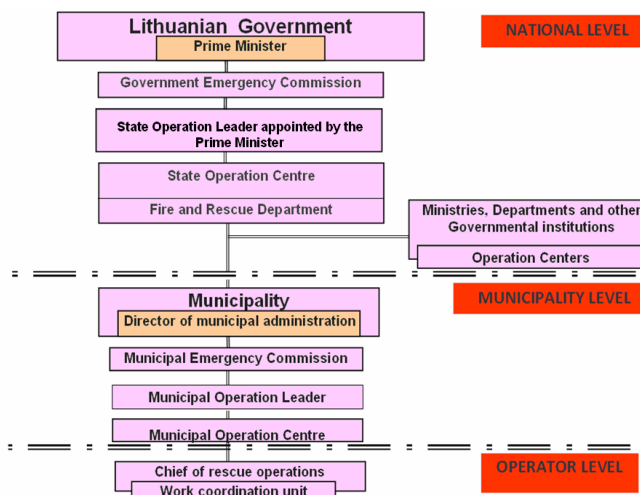
### Licensee

In order to protect the members of the public, in the event of an emergency, the licensee notifies the competent authority (licensee with authorized practice with sources of ionizing radiation notifies RPC and licensee in the nuclear energy area notifies VATESI) and other institutions specified in the emergency response plan also take all appropriate measures to mitigate the consequences of an emergency. Licensee makes an initial assessment of the circumstances and consequences of the emergency, takes mitigatory actions and if necessary, assist the competent authority with taking protective actions.

### Alarming

The Fire and Rescue Department is responsible for warning and informing the public. Public is warned by using public sirens and SMS messages, details and recommendations on protective actions are announced continually on national radio and TV.

### Organizational structure



### Country info

|                   |                        |
|-------------------|------------------------|
| Capital           | Vilnius                |
| Official language | Lithuanian             |
| Population        | 2.8 M                  |
| Area              | 65 000 km <sup>2</sup> |
| Currency          | Euro (€)               |
| Time zone         | UTC+2                  |
| Summer (DST)      | UTC+3                  |
| Calling code      | +370                   |
| Internet TLD      | .lt                    |
| NPPs /ele. share  | 0/0%                   |

### NWP and NCA\*

The State Nuclear Power Safety Inspectorate (VATESI)

### Regulatory bodies

Radiation Protection Centre (RPC)  
The State Nuclear Power Safety Inspectorate (VATESI)

### Emergency website

<https://www.lt72.lt>

### Online measurements

<http://oras.gamta.lt/files/index.html>

### Bilateral agreements

Denmark, Norway, Latvia, Poland and also exchange information under the cooperation agreements between VATESI and Swedish Radiation Safety Authority (SSM)

### RANET capabilities

None

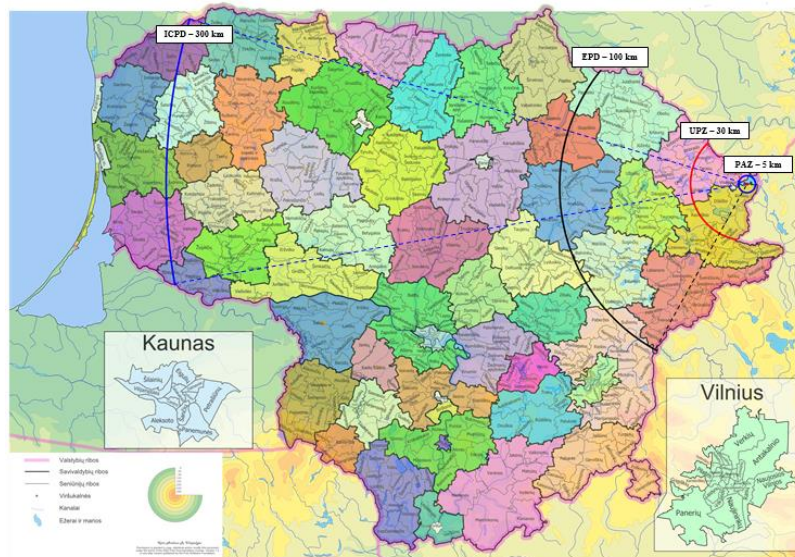
## Nuclear facilities\* and population

| Nuclear facility | Type    | MW <sub>e</sub> | GPS coordinates | 5 km pop.**              | 30 km pop.** | Comments |                       |
|------------------|---------|-----------------|-----------------|--------------------------|--------------|----------|-----------------------|
| Ignalina NPP     | 2 Units | RBMK            | 1500            | 55,3616° N<br>26,3336° E | ~ 0          | 52 000   | Under decommissioning |

\*The IAEA emergency preparedness category 1 and other relevant facilities

\*\* Population in Lithuania territory only.

## Emergency preparedness zones and emergency planning distances



### Emergency preparedness zones and emergency planning distances

- Precautionary urgent protective action zone (PAZ) – 5 km
- Urgent protective action planning zone (UPZ) – 30 km
- Extended planning distance (EPD) – 100 km
- Ingestion and commodities planning distance (ICPD) – 300 km

## Emergency classification

- **General emergency** – an emergency at facilities of emergency preparedness category I and II that requires prompt taking risk mitigation actions, precautionary urgent protective actions, urgent protective actions, and early protective actions and other response actions on the site and off the site (at the emergency planning zones and emergency planning distances).
- **Site area emergency** – an emergency at facilities in emergency preparedness category I or II that warrants taking protective actions and other response actions on the site.
- **Facility emergency** – an emergency at facilities in emergency preparedness category I, II and III, which requires the application of protective measures and emergency response measures at the facility and on the site.
- **Alert** – an event identified at facilities in emergency preparedness category I, II and III for which risk mitigation actions is required.
- **Other emergency** – an emergency in category IV that warrants taking protective actions and other response actions at any location.

## Criteria

| Generic criteria to avoid or to minimize severe deterministic effects   | Protective actions and other response actions  |
|---|--|
| Projected external acute exposure (<10 h)   |  |
| $AD_{\text{red marrow}}$ 1 Gy   | If the dose is expected: <ul style="list-style-type: none"> <li>▪ Sheltering, evacuation, iodine thyroid blocking (if radioactive iodine is expected to be released into the environment), decontamination shall be taken immediately;</li> <li>▪ Warning and informing the public.</li> </ul>   |
| $AD_{\text{fetus}}$ 0,1 Gy  |  |
| $AD_{\text{tissue}}$ 25 Gy to 100 cm <sup>2</sup> at depth 0,5 cm   |  |
| $AD_{\text{skin}}$ 10 Gy to 100 cm <sup>2</sup>   |  |
| Received internal exposure from acute intake ( $\Delta = 30$ d)   |  |
| $AD(\Delta)_{\text{red marrow}}$ 0,2 Gy for radionuclides with $Z \geq 90$<br>2 Gy for radionuclides with $Z \leq 89$ | If the dose were received: <ul style="list-style-type: none"> <li>▪ Medical examination, consultation and treatment;</li> <li>▪ Control of radioactive contamination;</li> <li>▪ Decorporation of radioactive materials from the body by medical means;</li> <li>▪ Registration for longer term health monitoring;</li> <li>▪ Psychological counseling.</li> </ul> |
| $AD(\Delta)_{\text{thyroid}}$ 2 Gy  |  |
| $AD(\Delta)_{\text{lung}}$ 30 Gy  |  |
| $AD(\Delta)_{\text{colon}}$ 20 Gy   |  |
| $AD(\Delta)_{\text{fetus}}$ 0,1 Gy  |  |

### Comments:

1. Generic Criteria for protective actions and other response actions in emergency exposure situations to reduce the risk of stochastic effects are consistent with the recommended generic criteria in IAEA General Safety Requirements No. GSR Part 7.
2. HERCA-WENRA Approach is implemented into the legal acts of Lithuania.