

Actual Status of the Czech Nuclear Program

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Nuclear Facilities in Czech republic



- 2 NPPs – Dukovany
– Temelín
- 3 Low and Medium
Waste Repositories
- Dukovany
- Jachymov
- Litomerice
- 2 Interim Storages
-Dukovany
-Temelín
- 2 Research Reactors
- Rez by Prague
- 1 School Reactor
- Prague

Update of the State Energy Policy (USEP)

- ➔ Key national strategic document in the field of energy. Approved by Government - May 19, 2015
- ➔ The document gives a strategic task for the development of Czech energy for next 25 years.
- ➔ The USEP also identifies the mechanisms that ensure the national security in energy supply, and especially proposes a wider diversification of resources and interest in maintaining the existing full independence in the field of heat and electricity supply without significant exports of energy produced. It can be achieved only by further development of nuclear energy in the Czech Republic. This issue is detailed in the National Action Plan on Nuclear Energy (NAP), which follow the approved USEP.

<http://www.mpo.cz/zprava160154.html>

Update of the State Energy Policy (2)

Ratio of annual electricity production from domestic primary sources to the total gross amount of electricity generated in the Czech Republic of at least 80 % (RES, secondary sources and waste, brown and black coal and nuclear fuel, assuming adequate supplies) with the target electricity generation structure (in proportion to the total gross annual amount of electricity generated) in corridors:

1. Nuclear fuel 46 – 58 %
2. Renewable and secondary sources 18 – 25 %
3. Natural gas 5 – 15 %
4. Brown and black coal 11 – 21 %

Update of the State Energy Policy (3)

- ➔ Enhance the role of nuclear sources in electricity generation and maximise the use of waste heat from nuclear energy (construction of 1-2 new nuclear power units depending on the forecast balance of production and consumption, long-term extension of the lifetimes of the current four units in the Dukovany nuclear power plant and the possible construction of an additional unit for when the Dukovany nuclear power plant is decommissioned, territorial delimitation of localities for the potential further development of nuclear power after 2040).

The National Action Plan for the Development of Nuclear Energy in the Czech Republic

- ➔ Approved by Government June 3, 2015.
- ➔ The document “National Action Plan for the Development of the Nuclear Energy Sector in the Czech Republic (NAP NE)” follows, in the field of nuclear energy, the updated State Energy Policy (SEC), which defines the corridors for the intended share of individual primary energy sources in the total consumption as well as in electricity generation.
- ➔ Within the limits of such corridors and specific strategic visions and goals to achieve them under SEC, for which the Ministry of Industry and Trade (MIT) received a final opinion of the Ministry of the Environment (ME) from the strategic environmental assessment (SEA) process and in line with the individual strategic objectives contained in SEC, NAP NE develops, inter alia, the following:
 - Safe operation of existing and new units of nuclear power plants (NPP),
 - Ensuring the entire fuel cycle, including spent nuclear fuel management,
 - Sufficiency and appropriate educational structure of human capital,
 - Science, research and the application thereof in practice,
 - Industrial base of the Czech Republic for the needs of nuclear energy, etc.

The National Action Plan for the Development of Nuclear Energy in the Czech Republic (2)

National plan develops the way of meeting objectives for the field of nuclear energy, i.e.:

- ➔ Support the development of the nuclear energy sector as one of the pillars of electricity generation. With the target share of nuclear energy in electricity generation ranging around 50% and with the maximization of heat supplies from nuclear power plants.
- ➔ Support and speed up the process of negotiation, preparation and implementation of new nuclear units at the existing sites of nuclear power plants with the total capacity of up to 2,500 MW or the annual generation in the amount of approximately 20 TWh over the years 2030 – 2035 including the necessary steps within the international negotiation.
- ➔ Create the conditions for Dukovany NPP life extension to 50 years and, if possible, up to 60 years (having regard to technologies, safety, economy and EU rules).
- ➔ Target the potential construction of another new unit at the existing sites of nuclear power plants around the possible shutdown of Dukovany NPP, i.e. after 2035, depending on the prediction of the generation and consumption balance.
- ➔ Ensure the legislative, administrative and social conditions for construction, and the safe and long-term operation of radioactive waste repositories and the rules for the management of spent fuel as a potentially valuable secondary raw material.
- ➔ Finding and safeguarding the territorial defense of another suitable site for the development of the nuclear energy sector.
- ➔ Deciding on the nuclear waste repository by 2025.

New Atomic Act

- ➔ Czech Government approved on July 14, 2015 the draft of the new Atomic Act and amending certain laws in connection with its adoption.
- ➔ Both laws will be passed on behalf of the government for discussion in the Chamber of Deputies of the Czech Parliament.
- ➔ The new Nuclear Act would replace the current legal regulation of the use of nuclear energy and ionizing radiation in the Czech Republic.
- ➔ The existing Atomic Act (no. 18/1997 Coll., On peaceful utilization of nuclear energy and ionizing radiation and on amendments to certain laws) will be kept in force only partially, namely in the area of liability for nuclear damage.
- ➔ Other parts will be fully abolished and replaced with a new Atomic Act.
- ➔ The new Atomic Act should formally improve the existing legislation and bring many new features that provide a higher level of protection against the adverse effects of the use of nuclear energy and ionizing radiation.

Update of the Concept of Radioactive Waste and Spent Nuclear Fuel

Update of the Concept has taken note of the government on December 14, 2014.

The government ordered him to undergo the process of assessing the impact of policies on the environment (SEA process) pursuant to the Act no. 100/2001 Coll., On assessment of impacts on the environment. This process is underway now.

The aims of the Concept are as follows:

- ➔ to determine and refine strategically justified and scientifically, technologically, ecologically, financially and socially acceptable principles and aims concerning RAW and SNF management in the Czech Republic;
- ➔ to maintain a system framework to aid the decision-making process at institutions and organisations responsible for RAW and SNF management in the Czech Republic;
- ➔ to communicate in an understandable manner information on the long-term solution of RAW and SNF management to all the stakeholders concerned and the general public and to allow them to fully participate in the fulfilment of the aims of the Concept;
- ➔ to create a framework for the assessment of progress achieved in the field of RAW and SNF management and for the preparation of relevant reports as required by the IAEA Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management and by Council Directive 2011/70/Euratom establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste.

Conclusions

→ Key Tasks for the Recent Period

- Discuss with ČEZ any possibility of establishing a special purpose vehicle (SPV) for bringing all the relevant assets to complete nuclear units at the Dukovany and Temelin sites.
- Discuss with ČEZ, a.s., from the position of the administrator of property rights, implementation of the NAP NE document in the field of construction of NNF, with regard to the preferred option from the perspective of the state.
- Present to the government a study on a specific method of construction of new nuclear units in the Czech Republic with the selected business-investment model and other necessary actions to ensure construction.
- Ensure the identification and contacting of strategic partners for the construction of a new nuclear facility in the Czech Republic.
- Open negotiations with the European Commission on the method of supplier selection, financing, rate of return guarantee and state support.

Thank you for your attention
Questions ?



MINISTRY OF
INDUSTRY AND TRADE

Zdenek Hubacek
Electro Energy Department