

Translation from Lithuanian

# MINISTRY OF ENVIRONMENT OF THE REPUBLIC OF LITHUANIA

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To: SE Ignalina Nuclear Power Plant

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Н 2009-07-27	No	10S-3554(15.5)

## DECISION RE IGNALINA NUCLEAR POWER PLANT BUILDING 117/1 EQUIPMENT DISMANTLING AND DECONTAMINATION POSSIBILITY

**1. The planned economic activity Client** – SE Ignalina Nuclear Power Plant, Ignalina NPP, Drūkšinių village, LT-31500 Visaginas, tel. (8 386) 24266.

**2. Developer of Environmental Impact Assessment documents** – VT Nuclear Services Ltd, Olympus Plaza, Olympus Business Park, Quedgely, Gloucestershire, GL24NG, United Kingdom, tel. (+44 0) 1452 889248; Nuclear Engineering Problems Laboratory of Lithuanian Institute of Energy, Breslaujos st. 3, LT-44403 Kaunas, tel. (8 37) 401891.

**3. Name of the planned economic activity** – Ignalina Nuclear Power Plant Building 117/1 Equipment Dismantling and Decontamination.

**4. Location of the planned economic activity** – Utena district, Visaginas municipality, Ignalina Nuclear Power Plant territory.

#### 5. Description of the planned economic activity.

INPP reactor Unit 1 was shutdown 2004-12-31. After shutdown, high pressure part of the emergency core cooling system and the manifold of the helium tanks refuelling, being in building 117/1, are not needed. During realization of the planned economic activity these systems together with auxiliary installations will be decontaminated and dismantled.

It is planned, that the total mass of the dismantled installations will be about 957000 kg. It is planned, that about 98 % of the dismantled installations mass will be decontaminated up to free release levels and via Free Release Measurement Facility the waste will be taken out from INPP site for the further application. The remaining part, to a great degree consisting of small diameter pipelines and connection parts which internal surface cannot be decontaminated, will be transported to the buffer storage of the Landfill Facility for Short-lived Very Low Level Waste, the operation start of which is planned in 2010. When the sufficient for disposal operation amount of the short-lived very low level radioactive waste is collected in the buffer storage, it will be disposed in the repository intended for the waste of this type.

Dismantling works will be carried out by means of oxygen (oxygen-propane and oxygen-acethylene) cutting, with application of the cutting machine tool, hydraulic shears and other equipment. Decontamination will be performed using mainly a vacuum blasting method with steel sharp edge shot as blasting material.

# 6. Description of measures foreseen to avoid, reduce, compensate or eliminate the consequences of the negative environmental impact.

Building 117/1 ventilation system will be modernized by installation of a new fan, stream controlling gate valve and new HEPA (High Efficiency Particulate Air) filtration system.

Local mobile filtration units will be used in the areas where flame cutting or abrasive decontamination will be carried out with the purpose to reduce the increase of air contamination. Besides, vacuum blasting decontamination will be carried out in the leaktight cell, where the filtration unit with primary and HEPA filters will be operating.

The monitoring of radioactive releases to the working rooms and environment and of radiological situation during Building 117/1 equipment dismantling and decontamination will be

carried out.

Building 117/1 dismantled components will be transported in standard 20 feet half-height ISO containers for further treatment and temporary storage. All transportation operations with dismantled materials or other radioactive waste will be carried out only on INPP industrial site.

With the purpose to avoid radionuclides release to the environment, all sewage generating during the panned economic activity will be treated as potentially radioactive. The sewage will be pumped to the INPP liquid radioactive waste treatment facility. Liquid radioactive waste will not be discharged into the environment.

### 7. Provided conclusions of the subjects, who assessed the environmental impact:

The Administration of the Head of Utena district approved the Environmental Impact Assessment Report and planned economic activity with comments in letter No (1.50.)-6-40 dated 2009-01-13.

The Administration of Visaginas municipality approved the Environmental Impact Assessment Report in letter No (4.17)-1-4821 dated 2008-12-18.

State Nuclear Power Safety Inspectorate approved the Environmental Impact Assessment Report and planned economic activity in letter No (14.2.17)-22.1-133 dated 2009-02-17.

Utena territorial subdivision of the Department of Cultural Heritage under the Ministry of Culture approved the Environmental Impact Assessment Report in letter No 2U-726 dated 2008-12-06 and in letter No 2U-(13.3)-363 dated 2009-07-15.

The Fire and Rescue Department under the Ministry of the Interior approved the Environmental Impact Assessment Report and planned economic activity in letter No. 9.4-228(9.4.) dated the 29<sup>th</sup> January 2009 and in letter No. 9.4-1759(9.4.) dated the 26<sup>th</sup> June 2009.

The Ministry of Health approved the Environmental Impact Assessment Report and planned economic activity in letter No. 10-3026 dated the 25<sup>th</sup> May 2009.

#### 8. Provision of information to the public and public participation.

The public was informed about the possibility to get familiarized with the Environmental Impact Assessment Report and its public presentation through the newspapers: "Lietuvos rytas" dated 2008-10-23, "Sugardas" dated 2008-10-23, "Zarasų kraštas" dated 2008-10-24, "Nauja vaga" dated 2008-10-25. There was a possibility to get familiarized with the Environmental Impact Assessment Report at Visaginas Municipality, at Ignalina Nuclear Power Plant Information Centre and on Ignalina Nuclear Power Plant website. Familiarization of the public with the Environmental Impact Assessment Report took place at Visaginas Municipality on the 14<sup>th</sup> November 2008. Neither prior to the familiarization of the public, nor after it proposals of the public with regard to the assessment of environmental impact of the planned INPP Building 117/1 equipment dismantling and decontamination have been received.

#### 9. Conditions set out in the decision.

The Equipment Dismantling Basic Design shall provide for measures ensuring the full-scale labour safety during the dismantling and decontamination of INPP Building 117/1.

#### 10. Main motives used as a basis when making a decision.

In accordance with the National Energy Strategy adopted by the Seimas of the Republic of Lithuania INPP Reactor Unit 1 was shutdown on the 31<sup>st</sup> December 2004. It is planned to shutdown Reactor Unit 2 at the end of 2009. INPP Building 117/1 equipment dismantling and decontamination is one of the decommissioning projects which are implemented in accordance with the Final INPP Decommissioning Plan.

Due to INPP Building 117/1 equipment dismantling and decontamination including the impact of other nuclear facilities which operate in Ignalina Nuclear Power Plant sanitary protection area and which are to be built the population can be exposed to the maximum year effective dose which will not exceed the limited year effective dose for the population (0,2 mSv).

## 11. Nature of the decision.

It is permitted to dismantle and decontaminate INPP Building 117/1 equipment in accordance with the submitted Environmental Impact Assessment Report (2009-07-24, issue No.5).

Vice-Minister of the Environment

Dr. Aleksandras Spruogis