

LIETUVOS RESPUBLIKOS APLINKOS MINISTERIJA THE MINISTRY OF ENVIRONMENT OF THE REPUBLIC OF LITHUANIA

A. Jakšto St 4, LT-01105 Vilnius, tel: (+370 5) 266 35 39, fax: (+370 5) 266 36 63, e-mail: info@am.lt http://am.lrv.lt

Environment State Bureau of the Republic of Latvia pasts@vpvb.gov.lv

MINUTES OF THE PUBLIC PRESENTATION OF THE EIA REPORT (TRANSBOUNDARY CONSULTATIONS ON RECONSTRUCTION AND TRANSFORMATION OF THE IGNALINA NPP STORAGE FACILITY OF BITUMINIZED RADIOACTIVE WASTE INTO A REPOSITORY)

Continuing the procedures of transboundary environmental impact assessment consultations for a proposed project - reconstruction and transformation of the Ignalina NPP storage facility of bituminized radioactive waste into a repository, we hereby send the minutes of the public consultation which took place on 6 December 2023.

If you have any comments or proposals for the minutes, please send them till 2 February 2024.

The Ministry of Environment would like to thank the Environment State Bureau of the Republic of Latvia for constructive bilateral cooperation in the field of the EIA in the transboundary context.

ENCLOSED: Minutes of public transboundary consultation (in English), 6 pages.

Yours sincerely,

Vice-minister Raminta Radavičienė

B. Vilimaitė Šilobritienė, +370 645 89487, e-mail: beata.silobritiene@am.lt

ENVIRONMENTAL IMPACT ASSESSMENT OF RECONSTRUCTION AND TRANSFORMATION OF THE IGNALINA NPP STORAGE FACILITY OF BITUMINIZED RADIOACTIVE WASTE INTO A REPOSITORY

MINUTES OF TRANSBOUNDARY PUBLIC CONSULTATION

December 6, 2023 / Time: 14:00–15:03 Remote online meeting via Zoom Meetings Language of the meeting: English (with simultaneous translation into Latvian)

Agenda

14:00 - 14:04	Opening of the meeting
14:04 - 14:25	Presentation of the proposed economic activity and its Environmental Impact Assessment (further referred to as EIA) Report.
14:25 - 15:00	Session of questions and answers
15:00	Closing of the meeting

Participants (total number of connections to Zoom: 52)

From the **Latvian** side: representatives of the Environmental State Bureau, Radiation Safety Centre, Health Inspectorate, State Fire and Rescue Service; the Ministry of the Environment Protection and Regional Development; Latgale Regional Administration Sector of Permits and Assessments of the Nature Conservation Section, Augšdaugava Municipality, other institutions and the interested public.

From the **Lithuanian** side: representatives of the Ministry of the Environment, the Ministry of Energy, the State Nuclear Power Safety Inspectorate, Environmental Protection Agency, Radiation Protection Centre, the Ministry of Foreign Affairs, the Organizer of Proposed Economic Activity, Developer of EIA Report, Contractor of the Project; and representatives of the press.

Proceedings of the meeting

1. Technical information and opening of the meeting

The remote online meeting of transboundary consultations (further referred to as a Meeting) was officially opened by the representative of the Lithuanian Ministry of Environment. The representatives of the Lithuanian side are introduced, and the purpose of the meeting is

briefly described. A Latvian representative from The Environment State Bureau provides the opening speech.

The floor is given to the developer of the Environmental Impact Assessment (EIA) Report to present the proposed economic activity and its environmental impact assessment report.

2. Presentation of the proposed economic activity and its EIA

The developer of the EIA Report (a representative of the Lithuanian Energy Institute) gives a presentation on the objectives and procedures of the EIA process, the stages of EIA documents preparation, which institutions are involved in reviewing and approving EIA documents, and how the public and foreign parties are involved in the EIA process. The organizer of the proposed economic activity, the developer of the EIA Report, and the project contractor are introduced, and the proposed economic activity and its stages that will be implemented while transforming the current storage of bituminized radioactive waste at the Ignalina NPP site into a near-surface repository are described.

The content of the EIA Report and the information contained in the individual chapters of the report are reviewed. The assessment of potential environmental impacts is presented: what are the possible releases of radionuclides from the repository to the environment, what repository scenarios have been assessed, what are the possible accidents, what numerical assessment models have been developed, and what computer codes have been used to assess radionuclide migration and the resulting human exposure. The calculated exposure doses for the different scenarios of repository evolution and possible accidents were compared with the criteria established in Lithuanian legislation. The potential impacts on neighboring countries are described, and the conclusions of the environmental impact assessment are presented.

3. Session of questions and answers (Q&A)

The Q&A session started after presenting the proposed economic activity and EIA Report. The questions (from the Latvian side) and answers (from the Lithuanian side) are presented below.

Q: The representative of the Radiation Protection Centre (Latvia) inquiries about the classification of radioactive waste. It was mentioned in the presentation that bituminous radioactive waste is class B and C (short-lived low and intermediate level) waste, but how is this waste classified according to the IAEA classification? According to the IAEA classification, intermediate-level waste should not be disposed in near-surface repositories.

A: The representative of the EIA Report developer (Lithuanian Energy Institute) responds that the classification of radioactive waste used in Lithuania was developed following international requirements and considering the specificities of radioactive waste management in Lithuania. The representative of the State Nuclear Power Safety Inspectorate (Lithuania) complements the answer by pointing out that according to the IAEA classification, bituminous radioactive waste would be classified as low-level radioactive waste. According to national nuclear safety requirements, this waste must be disposed in a near-surface repository.

Q: The representative of the Radiation Protection Centre (Latvia) asks for clarification on whether this means that, according to the IAEA classification, intermediate-level waste will not be placed in this repository.

A: The representative of the State Nuclear Power Safety Inspectorate (Lithuania) confirms that intermediate-level waste (according to IAEA classification) will not be disposed in this repository. The concentrations of long-lived radionuclides in bituminized radioactive waste are very low and do not exceed the waste acceptance criteria. Moreover, according to national regulations, bituminized radioactive waste must be disposed of in a near-surface repository. Radioactive waste of Class D, E, and F will be disposed in a deep geological repository.

Q: The representative of the Radiation Protection Centre (Latvia) points out that bituminized radioactive waste is stored in the canyons of the building in bulk. Why was the decision made to leave the waste in the building instead of removing it, as the building itself was designed as a storage facility and not as a repository?

A: The representative of the EIA Report developer (Lithuanian Energy Institute) confirms that the bituminized radioactive waste is placed into the building's canyons in bulk, without packaging. It is mentioned that the possibility of transforming the storage facility into a repository has been considered for a long time. There is no global experience in retrieving such type of waste. The retrieval poses many additional challenges. Therefore, the best solution is to leave the bituminized radioactive waste in the storage facility and transform it into a near-surface repository by installing additional engineered barriers.

Q: The representative of the Ministry of Environmental Protection and Regional Development (Latvia) asks if there have been such cases of transforming a storage facility into a repository in global practice.

A: The representative of the EIA Report developer (Lithuanian Energy Institute) answers that there are examples of such transformation in France and Great Britain, but a different type of radioactive waste (not bituminized) was stored there.

Q: The representative of the Ministry of Environmental Protection and Regional Development (Latvia) asks a general question about the Ignalina NPP decommissioning projects and when they will end.

A: The representative of the organizer of the proposed economic activity (Ignalina NPP, Lithuania) replies that according to the final decommissioning plan of the Ignalina NPP, the decommissioning projects have to be completed in 2038. However, these projects do not include repository development projects, which are separate and will last longer than the decommissioning of Ignalina NPP.

Q: The representative of the Ministry of Environmental Protection and Regional Development (Latvia) asks what the subsequent activities will be after transforming the bituminized radioactive waste storage facility into a repository.

A: The representative of the organizer of the proposed economic activity (Ignalina NPP, Lithuania) answers that after the bituminized radioactive waste repository is installed, monitoring will be carried out for 100 years, technical maintenance and, if necessary, repair works will be performed. Activities will be limited in the surroundings of the repository site, there will be no residents.

Q: The representative of the Ministry of Environmental Protection and Regional Development (Latvia) inquires whether other projects will be implemented at the Ignalina NPP site in parallel with the transformation of the bituminized radioactive waste storage facility into the repository.

A: The representative of the organizer of the proposed economic activity (Ignalina NPP, Lithuania) responds that the buildings adjacent to the storage facility do not currently allow for the installation of an engineering barrier. Therefore, they will be demolished and only then will it be possible to construct an engineered barrier for the repository. The representative of the Lithuanian Ministry of Environment adds that a notification has been sent to Latvia about the environmental impact assessments of the Ignalina NPP decommissioning projects, while the transformation of the bituminized radioactive waste storage facility into a repository is being assessed separately as the operation of the repository and the potential impacts last for hundreds of years. After demolishing all the Ignalina NPP buildings, the radioactive waste repositories will remain for about 300 years. It is also reminded that previously transboundary EIA procedures

have been carried out for other nuclear facilities at the Ignalina NPP site, such as the spent nuclear fuel storage facility where the spent fuel will be stored for 50 years, the near-surface repository for low and intermediate level radioactive waste and other facilities that are necessary for waste management and decommissioning activities at the Ignalina NPP. Preparatory works for a deep geological repository for spent nuclear fuel and high-level waste are ongoing, and neighboring countries are informed about the activities.

Q: The representative of the Radiation Protection Centre (Latvia) asks about the durability of the building canyons and the structures underneath the engineering barrier of the repository, when the institutional control for 300 years will take place, and whether additional safety measures will be required.

A: The representative of the EIA Report developer (Lithuanian Energy Institute) responds that the condition of the storage facility's structures is continuously monitored and conservation works will be carried out during the project. The representative of the organizer of the proposed economic activity (Ignalina NPP, Lithuania) adds that before this project, various studies and investigations of the condition of the building structures were carried out, the design documentation of the storage facility was evaluated, the installation of the foundations was assessed, and samples of the building walls and concrete slab were taken to assess their condition.

Q: The representative of the Radiation Protection Centre (Latvia) wonders when an engineering barrier is installed above the storage building, whether the foundations of the building will withstand the resulting additional load that will affect the building during the entire 300 years of institutional control, whether safety will be ensured.

A: The representative of the organizer of the proposed economic activity (Ignalina NPP, Lithuania) explains that the multi-barrier concept ensures safety. The first barrier is the matrix of bituminized radioactive waste, followed by the building structures and the natural environmental layers that jointly prevent the release of radionuclides into the environment. The representative of the Contractor of the Project (JSC "Svertas Group", Lithuania) adds that the engineering barrier loads on the building's foundation and walls have been evaluated using numerical methods and that an additional structure has been foreseen for the reinforcement of the existing roof to accommodate the loading of the engineering barrier.

Q: The representative of the Environment State Bureau (Latvia) asks whether there is a review and monitoring of the project after the environmental impact assessment is done and what the actual impacts are after the implementation of the project.

A: The representative of the Lithuanian Ministry of Environment checks whether "post-project analysis" is meant and replies that after the installation of a facility, monitoring is carried out during which various environmental parameters are measured and can be compared with the predicted ones. Usually, annual monitoring reports are prepared that can be submitted to foreign countries under agreements as well. Such information is sent to Latvia in the framework of other projects, and the monitoring data of this project can also be provided upon request.

Q: Zoom Chat "Is it planned to make a continuous and regular monitoring of various environmental parameters to detect any potential release of radioactive materials and assess the overall environmental impact in order to minimize the risks of radioactive waste impact on the environment."

A: The representative of the organizer of the proposed economic activity (Ignalina NPP, Lithuania) responds that Ignalina NPP has prepared a separate groundwater monitoring program for the bituminized radioactive waste storage facility in 2020, and together with the monitoring of the groundwater and soil of the entire Ignalina NPP site, annual reports are being prepared, which are being sent to the Lithuanian Geological Survey. The representative of the EIA Report developer (Lithuanian Energy Institute) complements the answer by showing a picture in the EIA report indicating the locations and environmental parameters to be monitored after the installation of the bituminized radioactive waste repository. The EIA report also contains a summary table of the environmental monitoring of the repository, where it is indicated what parameters and samples will be measured.

4. Closing of the meeting

Whereas no more questions were raised, it is reminded that the representatives of the Latvian public, until a certain deadline, can still submit comments to the Environment State Bureau (Latvia), which will be forwarded to the Lithuanian institution.

The representative of the Lithuanian Ministry of Environment informs that the record of the meeting will be forwarded to the Latvian institutions.

The meeting is closed.

DETALŪS METADUOMENYS		
Dokumento sudarytojas (-ai)	Lietuvos Respublikos aplinkos ministerija 188602370, A. Jakšto g. 4, LT-01105 Vilnius	
Dokumento pavadinimas (antraštė)	MINUTES OF THE PUBLIC PRESENTATION OF THE EIA REPORT (TRANSBOUNDARY CONSULTATIONS ON RECONSTRUCTION AND TRANSFORMATION OF THE IGNALINA NPP STORAGE FACILITY OF BITUMINIZED RADIOACTIVE WASTE INTO A REPOSITORY)	
Dokumento registracijos data ir numeris	2024-01-16 Nr. D8(E)-382	
Dokumento gavimo data ir dokumento gavimo registracijos numeris	_	
Dokumento specifikacijos identifikavimo žymuo	ADOC-V1.0	
Parašo paskirtis	Pasirašymas	
Parašą sukūrusio asmens vardas, pavardė ir pareigos	Raminta Radavičienė, Viceministras	
Sertifikatas išduotas	RAMINTA RADAVIČIENĖ, Lietuvos Respublikos aplinkos ministerija LT	
Parašo sukūrimo data ir laikas	2024-01-16 10:16:45 (GMT+02:00)	
Parašo formatas	XAdES-T	
Laiko žymoje nurodytas laikas	2024-01-16 10:16:53 (GMT+02:00)	
Informacija apie sertifikavimo paslaugų teikėją	ADIC CA-B, Asmens dokumentu israsymo centras prie LR VRM LT	
Sertifikato galiojimo laikas	2023-05-12 09:34:45 - 2026-05-11 09:34:45	
Informacija apie būdus, naudotus metaduomenų vientisumui užtikrinti	"Registravimas" paskirties metaduomenų vientisumas užtikrintas naudojant "RCSC IssuingCA, VI Registru centras - i.k. 124110246 LT" išduotą sertifikatą "DBSIS, Informatikos ir ryšių departamentas prie Lietuvos Respublikos vidaus reikalų ministerijos, į.k.188774822 LT", sertifikatas galioja nuo 2022-05- 19 16:48:06 iki 2025-05-18 16:48:06	
Pagrindinio dokumento priedų skaičius	1	
Pagrindinio dokumento pridedamų dokumentų skaičius	_	
Pridedamo dokumento sudarytojas (-ai)	-	
Pridedamo dokumento pavadinimas (antraštė)	-	
Pridedamo dokumento registracijos data ir numeris	_	
Programinės įrangos, kuria naudojantis sudarytas elektroninis dokumentas, pavadinimas	DBSIS, versija 3.5.75.4	
Informacija apie elektroninio dokumento ir elektroninio (-ių) parašo (-ų) tikrinimą (tikrinimo data)	Atitinka specifikacijos keliamus reikalavimus. Visi dokumente esantys elektroniniai parašai galioja (2024-01-16 10:22:15)	
Paieškos nuoroda	_	
Papildomi metaduomenys	Nuorašą suformavo 2024-01-16 10:22:16 DBSIS	