Title of Services Procurement: Engineering Services for R3 Optioneering, Conceptual Design and EIAR development of D&D of Unit 1 and Unit 2 reactor Zone R3 equipment and RWS storage

Reference No: R3D.01 (2103.026S)

Number and full name of project: 2103 UNIT 1 AND 2 REACTOR’S FACILITIES DISMANTLING IN ZONE R3, INCLUDING TEMPORARY REACTOR’S WASTE STORAGE FACILITY DEVELOPMENT FOR BOTH UNITS (UP01 / R3 + RWS)

PART 1. GENERAL INFORMATION


2. Decommissioning Strategy: Immediate Dismantling


6. Purposes of this information: INPP wishes to contract with a suitably qualified and experienced engineering consultant (the Consultant) to provide the Engineering Services and in the first instance wishes to collect information about the companies or Joint Venture Consortia (JVC) interested in this contract assignment (the firms).

As result of this request, INPP wishes to receive the firm’s profile (PART 3 refers) in September 2018.

☒ - information ☒ - market inquiry ☒ - expression of interests ☐ - consultations ☐ - negotiations ☐ - contracting
7. Funding source: Funding from the European Union - The Ignalina Programme (hereinafter - IP) funds (the administrator – the Central Projects Management Agency under the Ministry of Finance of the Republic of Lithuania, [https://www.cpva.lt/en](https://www.cpva.lt/en)).


**PART 2. PROJECT AND ACTIVITIES DESCRIPTION**

1. Project objectives:
The project involves the set of activities:
   - For dismantling of the reactor structures, systems and components together with graphite stacks (denoted Zone R3) from the reactor shafts of the RBMK-1500 reactors of INPP Unit 1 and Unit 2 (hereinafter – U1R3 and U2R3);
   - For handling and packaging of generated short-lived radioactive waste in disposal containers;
   - For handling, packaging and storage of generated long-lived radioactive waste in storage containers/facilities (Reactor Waste Storage, denoted RWS).

2. Engineering Services purposes:
The specific purposes of these Engineering Services are:
   - to establish optimized technical solutions for dismantling and, as appropriate, decontamination (D&D) of Zone R3 components of both INPP Units (hereinafter – U1R3 and U2R3);
   - on the basis of the well-established option selection process and optimized technical solutions (hereinafter – Optioneering) to propose Conceptual Design for dismantling of the reactor structures together with graphite stacks (denoted Zone R3) from the reactor shafts of the RBMK-1500 reactors of INPP, for the management of generated radioactive wastes, in particular irradiated graphite, steel, structure’s fillings, sand filling, water filling for this Zone of both reactor units.
   - on the basis of the well-established option selection process and optimized technical solutions to propose Conceptual Design for temporary Reactor Waste storage in existing cemented waste storage building or/and separate Reactor Waste Storage for waste which cannot be stored and disposed as short-lived waste or other appropriate Reactor Waste Storage solutions;
   - to ensure that the proposed documentation meets the safety requirements of the nuclear regulator VATESI and economic justification requirements of the financial stakeholders for INPP decommissioning;
   - to make use of the relevant parts of developed concept documentation, in the development of an Environmental Impact Assessment Report (hereinafter - EIAR) and ensure that this is approved according to the relevant national and international legislation.

For these purposes, INPP will procure under commercial contract the services of expert consultants (firms).
The development of the future designs and documentation based on preferred option of completed Conceptual Design and EIAR (such as D&D Technological Design and D&D Safety Analysis Report (hereinafter – SAR), Basic Design and SARs of long-lived Reactor Waste Containers and Storage, Designs for Construction under Law of Construction; any complex tools designing and fabrication; any new containers designing and fabrication (hereinafter – Designs and
SARs)) will be performed as a follow-on work packages. The physical D&D implementation together with associated radioactive waste management will be performed by INPP.

3. The nearest activities:

- Engineering Inventory
- Interface review
- Nuclide vector for U1R3
- Technical Specification for Optioneering, Conceptual Design and EIAR Services
- Decision Based on EIAR
- Contract for Optioneering, Conceptual Design and EIAR Services R3D.01
- Development of Optioneering, Conceptual Design and EIAR Services R3D.01
- Technical Specification( s) for Designs and SARs Services
- Development of Designs and SARs Services
- General Data Set Development
- Decision based on U1R3 licensing
- Dismantling of U1R3

LEGEND:
- INPP
- Consultant
- Scope beyond these Services
4. General description of facility:

INPP comprises two RBMK-type, water-cooled, graphite-moderated, pressure-tube reactors each of 1500 MW (electrical) and 4800 MW (thermal) design capacity.

As a result of the mutual dialogue leading up to EU\(^1\) enlargement, Lithuania agreed to the early decommissioning of its reactors: Unit 1 was shut down in 2004 and Unit 2 was shut down in 2009. Respectively, Unit 1 reactor core was defueled in 2009 and Unit 2 reactor core will be defueled in 2018. All spent fuels will be removed from both Units from 2021 to 2022.

At national level, dismantling of Unit 1 and Unit 2 reactor facilities and associated radioactive waste management are foreseen as projects within the INPP Final Decommissioning Plan according to the “immediate dismantling” strategy.

The reactor is housed in a 25 m deep, 21 m cross-section concrete shaft. In each unit, RBMK-1500 reactor consists of graphite stack mounted into metal structures of Zone R3.

\(^{1}\) EU – European Union
The graphite stack is about 14 m in diameter with a height of 8 m. It has cylindrical form, consists of 2488 columns with axial holes. The columns are assembled from graphite bricks of three variations: rectangular, with direct and axial cant of one edge. The overall dimensions of each bricks in horizontal section are 250x250. The columns are mainly assembled from bricks 600 mm in height, but end units of columns are shortened (200, 300, 500 mm) as required to provide a staggered fit to neighboring columns. Graphite rods are installed into the holes of reflector columns and they are assembled basing on the same principle from separate units 600, 500 and 280 mm in height. All 2052 channels, 1661 of which are Fuel Channels for fuel assemblies, together with communication pipelines and cables beyond metal structures will be dismantled before the start of Zone R3 dismantling.

Metal structures at the top (scheme E) and bottom (scheme OR) and a lateral cylindrical casing (scheme KZh) seal the reactor cavity. The bottom support slabs and the top protective slabs of graphite stack and the serpentinite filling in the schemes E and OR, together with the water-filled cylindrical side tank (schemes L and D) serve as the radiation protection. Additional metal structure (scheme 3) serves as the radiation protection in the gap between scheme L and walls of reactor shaft.

The main reactor components of Zone R3 which irradiated during reactor operation are the components of graphite stack together with fixing steel components (such as protection and support plates, fixing tubes) and the components of the surrounding metal structures facing the core. INPP has assessed expected irradiation area during radiological intrusive sampling and measurements campaigns.

All of the structures contribute to some extent to biological shielding. The principal structures serving the shielding function include the graphite reflectors, the internal spaces of the metal structures, the gap between the concrete walls and the outer surface of the support metal structures. With respect to the center of the graphite stack with reactor core, under operation the biological shields can be divided into three parts: top shield (in the direction of the Central Hall), bottom shield (in the direction of the lower coolant guides and communications), and radial shielding (in the direction of neighbouring equipment compartments).

Biological shielding in the direction of the Central Hall encompasses the 0.5 m thick upper graphite reflector, 0.25 m steel upper protective slabs, the upper metal structure (3 m thick scheme E) which is filled with a mixture of crushed serpentinite stone and pebbles (weight ratio of 3:2, the density of the main filling material is about 1700 kg/m³). The thickness of the steel foundation plates of the structure is 40 mm. The top shield cover (scheme G) is filled with a mixture of serpentinite pebbles and cast-iron/steel shot (weight ratio about 1:6, density of the filling material is about 3800 kg/m³).

The radial shield consists of the radial graphite reflector (average thickness 0.88 m), the lateral cylindrical casing (scheme KZh), the annular water-filled steel tank, sand filling between the tank (schemes L and D) and the 2 m thick concrete walls of the reactor vault. The walls of the reactor shafts are made from high-density concrete with a density of 2400 kg/m³. Design criteria for shielding below the core included the requirement to reduce gamma radiation during shutdown in order to allow personnel access for maintenance, and the necessity to minimize activation of the metal structures and coolant and gas feeder pipelines/communications.

The bottom shield consists of the 0.5 m thick graphite reflector, 0.2 m of bottom support plates, and the bottom biological shield (2 m thick scheme OR), with a mixture of crushed serpentinite stone and pebbles (weight ratio of 3:2, the density of the main filling material is about 1700 kg/m³). The thickness of the steel foundation plates of the structure is 40 mm. There are 0.1 m thick steel screens (scheme 3) under the annular water tank (above the bottom water piping) and between the reactor shaft.

INPP developed a set of intrusive sampling technologies and measurements for Zone R3 redundant structures and components to sample steel, graphite by means of drilling devices, to sample bulk fillings by means of the suction unit, to sample concrete and sand filling through shaft walls penetrations from Zone R3 of Unit 1. Additional sampling and measurements campaigns of Unit 2 Zone R3 will be performed in 2018 – 2019. Unit 1 data will be used for project identification before the completion of the Unit 2 radiological surveys and measurements. Prior the Unit 2 Zone R3 radiological characterization completion (in 2020) or other updated information INPP can not expect any significant differences between radioactive waste inventory of both Units. INPP contracted external company to perform visual inspection of
Unit 1 graphite stack through 10 graphite columns without channels in 2015. The one of the main findings is that there are not cracks like in other RBMK-1000 and Industrial Uranium-Graphite reactors (in Russia). So INPP expects that the graphite extraction will be planned to handle mainly unbroken graphite bricks using “brick by brick, layer by layer, in air“ retrieval/extraction approach. Next visual inspections of graphite stack will be performed in course of planned channels dismantling in 2019-2020. Relevant information will be included to the Technical Specification.

It is planned that reactor channels and some equipment from neighboring compartments shall be extracted under separate predecessors projects ([https://www.iae.lt/static/veikla/sprendimas_2203 Ig-6007_2016-07-14.pdf](https://www.iae.lt/static/veikla/sprendimas_2203_Ig-6007_2016-07-14.pdf), [https://www.iae.lt/static/veikla/sprendimas_up01_Ig-6008_2016-07-14.pdf](https://www.iae.lt/static/veikla/sprendimas_up01_Ig-6008_2016-07-14.pdf)), but the processing of the most activated components remains for Zone R3 dismantling and waste management scope.

**The physical scope of Zone R3 of both Units for the purposes of this Engineering Services** includes following main components and materials:

- metal structure “scheme Е” with components which are welded into structure lattices.
- graphite stack with following main parts:
  - steel protective slabs with screens, flanges, guide branch pipes in top part, in direction to metal structure “scheme Е”.
  - graphite stack’s columns of bricks in central part.
  - graphite stack’s columns of bricks, rods, bearing bars in side radial periphery part, in direction to metal structure “scheme KZh”.
  - steel support slabs and other support installations in bottom part, in direction to metal structure “scheme OR”.
  - “scheme Е” filling which is the bioshield material.
- 16 roller supports. Loads from “scheme Е” are taken through these roller supports by “scheme L” metal structure.
- metal structure “scheme L” with components which are welded into structure lattices.
- metal structure “scheme D” with components which are welded into structure lattices.
- structure’s schemes “L and D” water filling which is the bioshield material.
- metal structure “scheme KZh” with welded components.
- metal structure “scheme OR” with components which are welded into structure lattices.
- structure OR filling which is the bioshield material.
- metal structure G with welded components and embedded components.
- structure G filling which is the bioshield material.
- sand filling between structures L, D, Е with embedded components.
- metal structure “scheme Е”.
- metal structure “scheme C”.
- any D&D tools, engineering barriers, containers, infrastructure, etc. which have not already installed or procured at INPP specified by this project in order to perform the Zone R3 D&D and related activities.
- any ensuing secondary contamination and secondary wastes.
(154 items per Unit) from irradiated stainless steels, temperature channels with irradiated steel and graphite waste (14 items from Unit 1, 16 items from Unit 2), 2 gas sampling channels from steel-graphite assemblies (1 item per Unit) which will be retrieved during predecessor projects and placed for temporary decay under water in available Spent Fuels Pools awaiting for suitable processing, packaging under Zone R3 works scope.

The exemptions from the physical scope of Zone R3 of both Units are:

- FChs\(^3\) (1661 items per Unit), with associated graphite rings and sleeves, CPPSChs\(^4\) (235 items per Unit) with associated graphite rings and sleeves, other components with available retrieval technologies and tools will be removed from reactor core, to be cut into pieces and placed to storage/disposal facilities under predecessor projects implementation.
- coolant and gas feeder pipelines/communications/guides/cables of top and bottom part outside Zone R3 will be dismantled, cut into pieces and placed to disposal facilities under predecessor projects implementation.
- Main circulation circuit components such as Separators-Drums and Group Distribution Headers will be dismantled, cut into pieces, decontaminated and placed to disposal facilities or released from radiation control under predecessor projects implementation.
- Spent fuel machinery such as Refueling Machine of Central Hall, Fuel Bundles Handling Machine of Spent Fuel Hall will be dismantled, cut into pieces, decontaminated and placed to disposal facilities or released from radiation control under predecessor projects implementation.
- Several Spent Fuels Pools will be available for underwater operations, in particular, for processing, waste accumulation and packaging of high dose rates radioactive waste.
- All openings of reactor space after channels, coolant and gas feeder pipelines/communications/guides will be isolated under predecessor projects implementation.
- concrete walls which bound the reactor shaft, excluding the material which may arise during access, engineering barriers and infrastructure arrangements.
- any existing linings of building structures.
- INPP will isolate and drain down the redundant systems and equipment.

The estimated masses to be processed are about 11600-11700 tonnes per Zone R3 of each Unit.

The primary radioactive waste inventory estimate for Zone R3 of Unit 1 will be presented to the interested firms in Q4 2018.

Additional sampling and measurements campaigns of Unit 2 Zone R3 will be performed in 2018 – 2019. Unit 1 data will be used for project identification before the completion of the Unit 2 radiological surveys and measurements. Prior the Unit 2 Zone R3 radiological characterization completion in the middle of 2020 INPP does not expect any significant differences between radioactive waste inventory of both Units, but, in case of differences, INPP will provide all available information for the assigned Services’s purposes.

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\(^2\) Reflector Cooling Channels  
\(^3\) Fuel Channels  
\(^4\) Control Power and Protection Systems Channels
To implement decommissioning the some new waste management infrastructure\textsuperscript{5} was constructed or planned, excluding RWS, taking into account waste management regulations (BSR-3.1.2-2017, Pre-disposal Management of Radioactive Waste at the Nuclear Facilities, [https://www.e-tar.lt/portal/lt/legalAct/TAR.664E893AAD11/pIEKSBQXmM](https://www.e-tar.lt/portal/lt/legalAct/TAR.664E893AAD11/pIEKSBQXmM)).

6. Preliminary Tasks requirements

Preliminary, all activities to be contracted are subdivided into the following tasks:

\textbf{Task 1: Development and submittal of methodology.} The main topics to be resolved by the consultant: to define the detailed activities required to fulfil the contract; to sequence the detailed activities and develop a schedule including key dates to ensure timely completion; to assign human, technical and financial resources to the activities; to designate responsible persons from the consultant’s team, showing their responsibilities, relevant reactor D&D and waste management experience and organizational interfaces; to identify potential risks that may affect completion by the end date and set out measures to mitigate them; to provide list of preliminary design documentation, which have been developed under Contract; to provide methodology of further development; to develop a Quality Assurance Plan.

\textbf{Task 2: Gap analysis/ collection of information.} The consultant shall identify the additional data or other information required to fulfill the contract activities that has not already provided in the frame of contract tendering. The consultant shall present these requirements in the form of a “Gap Analysis Report” explaining, and providing safety, engineering, economic justifications and environmental impact assessment for the need of additional data/information according

\textsuperscript{5} VLLRW-SL – very low level radioactive waste, short-lived. The decontamination of surface deposit or/and disposal in Landfill facility should be assessed.
LILRW-SL – low- and intermediate level radioactive waste, short-lived. The decontamination of surface deposit or/and disposal in near-surface repository should be assessed.
ILRW-LL - intermediate level radioactive waste, long-lived, only storage option should be assessed.
to the terms of reference of the contract and/or approved contract Methodology. Amongst others, This Gap Analysis report will provide the identification, purpose, expected technical characteristics, requirements (gap attributes) to support Zone R3 D&D and waste management.

**Task 3: Optieering and development of conceptual design.** In order to demonstrate the optimization of options the consultant shall split overall Zone R3 D&D and waste management option to the following sub-tasks with associated implementation possibilities and operations, as minimum:

1. access.
2. dismantling/extraction.
3. processing/packaging.
4. dispatch.
5. storage (only for class D and E LILRW-LL waste).
6. completion – clean-up and decommissioning.

There are some internationally recognized techniques to qualify and quantify selected attributes like IEC/ISO 31010:2009 (LST EN 31010); “Methodology for safety assessment applied to predisposal waste management”, TECDOC-1777, IAEA; “Selection of Technical Solutions for the management of Radioactive Waste” IAEA-TECDOC-1817, 2017, IAEA, etc. for optioneering purposes including nuclear power facility’s D&D and waste management safety.

INPP informs, based on the agreed optimal engineering solution, the consultant will develop the Conceptual Design which will comprise several topics/chapters/subchapters:

- **Conceptual Design for Zone R3 D&D implementation and RWS storage development front sheets** shall identify a consultant representatives who were responsible for preparation, checking of technical acceptability and record keeping, agreement and approval this document, identification of revisions, issue date, amendment records, etc.
- **Summary** shall provide a short description of objectives, purposes, outcomes, conclusions and recommendations.
- **Objective and purpose** shall shortly describe a need of proposed activities and modifications, references to other applicable inputs, focusing on the expected results.
- **List of standards, requirements and relevant documentation** shall identify all available and required standards, requirements and other relevant documentation on the basis of which developed the Conceptual Design.
- **Boundary conditions and assumptions** shall result the boundary conditions and assumptions on the basis of which developed the Conceptual Design. The consultant shall demonstrate a compliance with Technical Specification. The consultant shall describe detailed physical scope under this Conceptual Design.
- **Options and proposals for Zone R3 D&D implementation and RWS storage development** explanatory note describes in text form and demonstrate in graph form, as appropriate:
  
  - **Principles and selection and justification of requirements/criteria** on the basis of Lithuanian codes and standards, IEC/ISO, IAEA recommendations; selection of HAZOP, CBA, MCDA methods or their combination and associated algorithm for scoring, weighting, reliability considerations (i.e. strengths and limitations, relevance analysis, sensitivity analysis, etc.) for qualitative and quantitative evaluation, comparison of solutions against justified requirements/criteria shall be provided in associated Appendix of Conceptual Design. The consultant shall provide a list of software and information tools for automated systems used in the development of a conceptual design. If the design documentation is prepared according to international standards or standards of other countries, a comparative analysis of such standards and of the legal acts of the Republic of Lithuania shall be performed demonstrating that the used
requirements provided in the standards comply with the requirements set by the legal acts of the Republic of Lithuania or is stricter. The results of comparative analysis of such standards and of the legal acts of the Republic of Lithuania shall be presented in Appendix or separate documentation.

- **Review of radiological conditions and inventory.** The consultant shall provide a review of assumed radiological conditions anticipated for Options and proposals for Zone R3 D&D implementation and RWS storage development. When measured data are not available, the consultant shall generate own dose estimates, shielding calculations, radioactive releases estimates.
- **Identification of Zone R3 D&D options and proposals.**
- **Identification of RWS storage options together with containers proposals.**
- **Aggregation and Integration of Zone R3 D&D implementation and RWS storage development.** The consultant shall demonstrate that all options are assessed for optimal engineering solution. Optimal engineering solution is the least cost solution that satisfies all regulatory requirements. As minimum, the least duration option, the least cost option, the least collective doses option shall be described providing estimated data for each D&D and storage operations, as applicable: qualitative and quantitative technical characteristics; functional characteristics; preliminary hazard assessment and safety justification. When designing new buildings, structures, systems and significantly modifying existing buildings, structures, systems on the INPP site, the consultant shall take into account the modern standards and requirements with regards to external and internal hazards. The consultant shall provide how the option(s) with expected operations with the proposed systems, D&D tools, equipment, etc. shall function during postulated incidents and deviations and post-incident conditions. In this context the consultant will establish modifications category, taking into account and assuming any effects on the chemical regime and the environment, effects on radiation safety and its compliance with the principles of ALARA, effects on parallel operations and structures, systems and components performance and layout, possible influence of option on fire safety and explosion safety, possible influence on industrial safety and health of employees. These activities will include doses calculations during normal performance, doses assessment during postulated incidents and deviations and post-incident conditions; estimated cost of the necessary resources and the timing of the implementation of the proposed options. The consultant shall estimate capital costs of D&D and auxiliary equipment, costs of consumables, costs of modifications of existing infrastructure to implement RWS storage, labour costs, waste processing costs, composition and substance of the implementation under proposed options, preliminary time schedules, and demonstration of appropriate accuracy of cost estimates.

- **Physical security.** The consultant shall preliminary describe physical security requirements.
- **Training and recruitment of employees.** The consultant shall preliminary describe requirements for training and recruitment.
- **Further Zone R3 clean-up.** The consultant shall preliminary describe requirements for Zone R3 D&D end state and further decommissioning.
- **RWS storage decommissioning.** The consultant shall preliminary describe requirements for RWS storage decommissioning, including possible issues of waste retrieval for disposal and the handling of redundant containers.
- **List of future development activities.**
- **Appendices.** The consultant shall provide all relevant data to demonstrate that this Conceptual Design is based on well-established option selection process. When the consultant will use or/and refer to electronic/digital models, the consultant shall provide reference data and documents.

**Task 4:** **Support of INPP during coordinating Task 3 outputs with VATESI (the regulatory body), CPMA** and **Ministry of Energy (the owner).** The consultant is required to assist INPP in responding to, and resolving, questions raised on the safety of the conceptual design by VATESI. This assistance may take

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6 CPMA - Central Project Management Agency is a public institution established by the Ministry of Finance.
the form of providing, in writing or in meetings, additional clarifications and justifications, and amending the Task 3 documentation. The consultant shall prepare Presentations material and presentation session for involved institutions.


**Task 6:** Support of INPP during **EIAR approval under Law on environmental impact assessment and Espoo convention** (15 August 1996 No I-1495, as last amended on 27 June 2013 – No XII-418, [https://e-seimas.lrs.lt](https://e-seimas.lrs.lt), [https://www.unece.org](https://www.unece.org)). The consultant is required to assist INPP in responding to, and resolving, questions raised by institutions of the State and public for approval of the EIAR and, in particular, in the transboundary context of Espoo Convention. This assistance may take the form of providing, in writing or in meetings, additional clarifications and justifications, and amending the EIAR. The consultant shall provide presentations about the EIA Report preparation and results in the course of presenting the proposed economic activity to the public.

The Consultant shall provide all technical notes, drawings, documentation and calculations or any additional services or deliverables supporting the above mentioned documents/services as may be required to enable and ensure a satisfactory and complete execution of the project.

Ignalina NPP will present detailed technical and quality requirements in Technical Specification.

8. **Main risks:**

− Required data and associated data quality. RBMK-1500 reactors design doesn't envisage any decommissioning issues due to the absence of such requirements in 1970-ies. A part of numerical estimates (substantiating technical solutions implemented in INPP design) was not provided to INPP by the INPP Designer in early 1980-ies. The significant part of operational/manufacturing documents was lost. Over the operation in 1980-1990-ies the issues of change in material properties under irradiation and contamination, changes in waste treatment system (including final disposal) issues were not taken into account. In these cases there are uncertainties with respect to the required data and associated quality which may be required for Zone R3 D&D and RWS conceptual design and environmental assessment under modern standards and requirements. It also means that the INPP must provide, or give access, for the consultant to all available relevant documents and drawings in "as is" conditions. INPP must provide, or give access, for the consultant walkthroughs to accessible site, building and compartments when the consultant obtain associated permissions according INPP radiation, health and safety, physical security requirements. When performing the services the consultant shall inform the INPP of discrepancies or apparent errors or omissions he would notice, in order to resolve those issues in the best possible way. It is the responsibility of the consultant to collect, translate, analyze and use the available and applicable INPP documentation for the services purposes. INPP shall not be obliged to guarantee the accuracy of former USSR as-built documentation (in Russian).

− **Boundary conditions and limitations.** Findings on Task 2 “Gap analysis/Collection of information” and Task 3 “Optioneering and development of conceptual design”, update or issue of new legislation may result in modification of previously expected boundary conditions and limitations. The INPP and the consultant shall be ready, as far as reasonable, to consider different options.

− **Delays.** At the moment of this information preparation the some predecessors projects are not completed and delayed or some contract actions may delay (for example, under coordinating Task 3 outputs with VATESI (the regulatory body), CPMA (the supervision) and Ministry of Energy (the owner), and support to INPP during EIAR approval).

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7 EIAR - Environmental Impact Assessment Report.
Poor involvement or lack of experienced contractor will lead to tender/engineering services failure. RBMK reactor Zone R3 D&D engineering services have first-of-a-kind activity attributes. Taking into account the increase of decommissioning projects in Western Europe INPP concerns that experienced applicants for this contract will be busy for other contracts or contract price will exceed estimated one.

9. Address
Elektrinės str. 4, K 47, Drūkšinių vil., 31152 Visagino mun. Lithuania
State Enterprise Ignalina Nuclear Power Plant
Fax +370 386 24396
E-mail iae@iae.lt, info@iae.lt
PART 3. FIRMS PROFILE (TO BE PREPARED BY INTERESTED FIRMS IN ENGLISH)

(A) Company/Joint Venture profile. Firms shall shortly describe the current company/joint venture structure. Involvement of local support shall be indicated. INPP stresses importance that the interested firms activities may be verified, by competent authority, with regard to their conformity to national security interests under Republic of Lithuania Law on the Protection of Objects of Importance to Ensuring National Security, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/a7ba7f40211411e88a05839ea3846d8e?jfwid=fhhu5np5n.

(B) Relevant project experience. Firms shall provide information about their experience within the last 10 years, in successfully completed assignments (or parts of) similar with the present project, i.e. development of engineering and licensing documentation for dismantling and decontamination of systems and equipment pertaining to the controlled area of nuclear facilities/reactors/radioactive waste storage. Nevertheless, the reasonable involvement of the oil/gas/chemical hazardous area industry’s partners will be possible. Referenced projects which include activities not related to the assignment (e.g. turnkey projects, where supply and construction activities or management of firm’s own personnel or its sub-contractors, sub-consultants or suppliers have been an integral part of the contract) will be considered only in respect of those activities which directly relate to the functions and tasks of this consultancy assignment. The information submitted shall provide sufficient details to justify and assess the extent of activities and shall be provided in the following format.

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i Consultant / sub-consultant / contractor / sub-contractor / supplier / sub-supplier
ii In case of JVC only lead member’s experience shall be considered.

(C) Quality Assurance. The Supplier’s Quality Management System shall be certified for the applicable scope of supply in accordance with ISO 9001:2015 or other equivalent management system standard. Equivalent means “generally recognized as compliant with or exceeding the ISO 9001 requirements”.

(D) Bid abstract. INPP wishes that the interested firms are capable to prepare ex-ante bid abstract on the basis of own experience, respective roles of the project team, margins and conditions which shall be taken into account for successful contract. Please indicate preliminary budget range (in kEuro), for PART 2 scope.