ROMANIA

MINISTRY OF ENVIRONMENT AND WATER MANAGEMENT
SECRETARY OF STAT CABINET
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To: National Society "NUCLEARELECTRICA" SA
65, Polona Street, sector 1, Bucharest

Regarding the environmental impact assessment procedure and the issuing of environmental agreement for "**The Follow up and Completion of the Construction Activities at UNITS 3 and 4 from Cernavoda NPP, Constanta county"**

Further to the analysis of the documentation that is subject of the environmental agreement for the project "**The Follow up and Completion of the Construction Activities at UNITS 3 and 4 from Cernavoda NPP, Constanta county" the** Ministry of Environment and Water Management through the General Direction for Impact Assessment and Pollution Control has decided that the proposed project is identified as listed in Annex no I.1 of the Ministerial Order No 860/2002 for approval of the environmental impact assessment and the issuance of environmental agreement procedures, *with further modifications and completions - List of activities with significant impact on environment which are submitted to environmental impact assessment, at point 3.6 " Nuclear power stations and other nuclear reactors, including the dismantling or decommissioning of such power stations or reactors (excluding research installations for the production and conversion of fissionable and radioactive materials, whose maximum power does not exceed 1 kW continuously thermal load).*

Based on article 13, letter a) from the Ministerial Order no 860/2002, the project is mandatory subject to the EIA (environmental impact assessment) and it is necessary that the environmental impact assessment to be finalised with an EIA report. The frame content of the EIA report is that recommended in the methodological guidance on the scoping stage and on the achievement of the EIA report, approved by the *Ministerial Order no 863/2002 for the approval of the methodological guidelines to be applied to the stages of environmental impact assessment framework procedure.* The environmental impact assessment report shall be elaborated by an independent natural or legal person certified according to the law.

According to the Law no 22/2001 ratifying the Convention on the Environmental Impact Assessment in a Transboundary Context, the investment project for which the environmental agreement is required is listed on Annex 1, point 2. The notification of the potential affected states was done, and the following states expressed their willingness to participate at the transboundary environmental impact assessment procedure: Bulgaria, Ukraine, Republic of Moldova and Austria.

The present guidelines will be sent to the states mentioned above and the received points of view concerning its content will be transmitted to the developer to be taken in consideration when the environmental impact assessment report will be prepared.

Having in view the obligations raised up from application of the Espoo Convention's provisions, the EIA report must be submitted both in electronic and hard format in English.

Beyond the EIA report framework requirements précised by the Ministerial Order no 863/2002 , the following aspects have to be detailed and treated in the EIA report:

1. Description of the location, taking into consideration the natural existent conditions by:
    a. the characteristic of geological layers;
    b. the characterisation of ground-water layer and surface waters;
    c. the distances from the surface waters;
    d. the distances from the protected areas;
    e. the zone characterisation from seismic perspective;
    f. the dominant wind direction.

2. Presentation of project characteristics, description of the developed structures as part of the project, the auxiliary plans, operation time, the provided utilities (sources of water, necessary debits, electricity, etc), raw and auxiliary materials, transportation means, additional services.

The EIA report will present other utilities that supply in common all four units of the NPP and the way in which their capacity will ensure all is necessary in case of simultaneously operation.

3. Description of activities involved in construction (dates about construction management), operation, closing of the project, length of each construction stage.

4. Characteristics of emission sources, both for the project period and the operation al period. For the operational period it will be taken into consideration and estimated both the sources with radiological potential as well as those inactive from the radiological point of view.
The treatment systems for pollutants emission will be characterized, as well; the inventories of pollutants have to respect the template stipulated in the Ministerial Order no. 863/2002. At the same time it is necessary to present a risk analysis of the accumulation of pollutants in the environment.

5. Description of both emission monitoring system and environmental quality factors for the zone of influence. There will be presented the environment elements which have to be monitorised, indicators which are specific for the type of the proposed project as necessary to be monitorised, monitoring frequency, emission limit values (ELV) set up according to legal requirements, the way by which the dates are stored.
The monitoring plan for the operation of the units will be presented as a distinctive part of EIA report both on radiological active elements and on the inactive radiological ones.

6. Description of the impact from the proposed activity on biodiversity and people's health which has to be corroborated with the possibility of accumulation of the effects from the proposed project with the effects of existing activities on the site,

considering, on a case by case situation, the community sites (SCI and SPA) from Danube area at Cernavoda (at the confluence with evacuation tunnel for cooling waters).
It came up as necessary to analyze in a special chapter, the thermal impact on the Danube ecosystem which is determined from simultaneously operation of these four units for energy production.

7. The assessment of risk situations associated to the project (natural catastrophe, major technical accidents, abnormal situations during operating – dryness with lowing of rate of flow for Danube) and measures which will be adopted for every situation in order to prevent and reduce the consequents

8. Quantity and quality characterization of wastes which are generated and solutions/equipments necessary for treatment/disposal, varying with waste type and specific radioactivity level; non radioactive waste, low radioactive waste, radioactive waste with specification of the mode for the intermediary and final storage.

9. Toxic and dangerous substances which are used, the management of these in all three stages: building, operating and dismanteling.

Within a maximum of 10 working days from the receiving of the present guidelines you have the obligation to inform the public about the screening decision, as stated by art 16 and art.37 of Order no. 860/2002 provisions, and the public has the open right to present within 5 working days the justified proposals in order to reconsider the decision. The content of the public announcement is set up in annex II of Order no. 860/2002, with its further modifications and completions.

Annex no. 1 of the present guidelines is an integrant part of the guidelines itself and represents the " Check list for scoping stage" , elaborated according to the provisions of the methodological guidelines on scoping stage and for drawing up of EIA report , approved by Order no. 863/2002 for the approval of methodologic guidelines to be applied to the stages of framework procedure for environmental impact assessment.

The present document represents the Guidelines containing the issues resulted during the screening stage in the procedure for the environmental impact assessment and scoping stage, which is set up in Order no. 860/2002 for the approval of the environmental impact assessment procedure and issuing the environmental agreement, with further modifications and completions.

Note: this material represents a translation of the Romanian document, including the check list that follows.

Annex 1

The check list for the scoping stage, drawn up according to the provisions of the methodological guidelines on the scoping stage and for the drawing –up of the EIA report, approved by Ministerial Order no. 863/2002 for the approval of the methodological guidelines to be applied to the stages of EIA framework procedure

Questions to be considered		Yes/No/? / NA	Is it likely that the effect be significant? Why?	Which environmental components are likely to be affected?	Is the effect likely to be significant on the components? Why?
1		2	3	4	5
Question – Will the project involve any of the following actions, which would create changes in the locality, as a result of the nature, scale, form or purpose of the new investment?					
1.	Permanent or temporary change in land use, way of coverage, topography, including increases in intensity of land use?	No	No		
2.	Clearing of existent land, vegetation and buildings?	No	No		
3.	Creation new land uses?	No	No		
4.	Preconstruction investigations (e.g. soil testing, drillings?)	No			
5.	Construction works?	Yes	No		
6.	Demolition works?	No	No		
7.	Temporary sites used for construction works or houses for constructors?	Yes	No		Organization of building site
8.	Surface constructions structures or earthworks, including linear structures, cut and fill, or excavations?	Yes	No		
9.	Underground works, including mining or tunnelling?	No	No		
10.	Land improvement works?	No	No		
11	Dredging?	No	No		
12	Coastal structures (e.g. sea dams)?	No	No		
13	Sea structures?	No	No		
14	Production and manufacturing processes?	No	No		
15	Facilities for storage of goods and materials?	No	No		
16	Facilities for treatment or disposal of solid waste and liquid	Yes	Yes	Air	YES; In this moment, combusted fuel is deposited in D.I.C.A. following that to be

	effluents?				realized depositing in a final landfill after what Depositing National Strategy of those waste will be approved; YES; In this moment small and medium radioactive waste are depositing in highest conditions of security in DIDR until realization a final landfill for small and medium radioactive waste. We do not have application from Radioactive Waste National Agency in order to be realized this landfill if this landfill will be realized also in Constanta District.
17.	Facilities for long term housing of workers?	No	No		
18.	New roads, railways or sea traffic during the construction or functioning?	Yes	Yes	Air	Organization of building site; Transporting of waste during working those two units. Transporting of consumables; Transporting raw materials;
19.	New or modified routes for roads, railways, airlines, waterways or other infrastructures, including stations, ports, seaports, airports?	No	No		It is achieving from U1 and U2;
20.	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	No		
21.	Electrical power lines or pipelines, new or modified?	No	No		It is achieving lines in order to be taken over and distributed electrical power.
22.	Embanking, damming, realignment, culverting or other changes in water course or aquifer hydrology?	No	No		
23.	River crossings?	No	No		
24.	Abstractions or transfers of water from underground or surface waters	No	No		
25.	Water courses or land modifications, affecting water dredging or draining/	No	No		

26.	Transport of people or necessary materials during the stages of construction, functioning or decommissioning of use?	Yes.	Yes	Air	Organization of building site; Transporting of waste, raw materials, and consumable materials.
27.	Dismantling or putting out of use for longer periods, or restoration works.	No	No		After finishing life duration of one unit; It is not case in this stage.
28.	Activities which will continue during the putting out of use and likely to have an impact on the environment?	No	No		
29.	Permanent or temporary population flow?	No	No		
30.	Introducing non native species?	No	No		
31.	Loss of certain native species or genetic diversity?	No	No		
32.	Any other actions?	No	No		
Question: Will the Project use one of the following natural resources or any other non-regenerating or limited resources?					
33.	Land, particularly virgin (natural) land or agricultural land?	No	No		
34.	Water?	Yes	Yes		Water from Danube Black See Channel for cooling circuits
35.	Minerals?	Yes	No		
36.	Aggregates / compounds?	No	No		
37.	Forests and wooden material?	No	No.		
38.	Energy, including electricity and fuels?	Yes	No		Those two units are generating electrically energy
39.	Any other resources?	No	No		
Question: Does the Project imply use, disposal, transport, dealing with or production of substances or materials which may damage the health of the population or the environment, or increased fears that the project would represent a risk for the health of the population?					
40.	Does the project imply the use of substances or materials which may be risky or toxic for the health of the population	Yes	Yes	Air, Water,	Two units for generating nuclear – electrically energy

	or the environment (flora, fauna, water supply)?			Soil, Biodiversity, Human Steattelments	
41.	Will the project lead to modifications in diseases incidence? (e.g., disease generated by insects or by contaminated or polluted water)	Yes	Yes	Air, Water, Soil, Biodiversity	In the case of accidents which are not caused by working in security of reactors U3 and U4; Earthquakes Land slide Attacks
42.	Will the project affect the welfare of the population (e.g. by changing the life conditions?)	Yes	No		Positive impact Lowest price for one Giga calorie; One of greatest income on inhabitant head of Cernavoda town; Social program in unrolling including a waste domestic and industrially water treatment facility;.
43.	Are population groups particularly vulnerable, which are likely to be affected by the project (e.g. hospitalized patients, old people)?	Possible	Possible	All environmental components	In the case of accident;
44.	Any other causes?	No	No		.
Question: Will the project produce solid waste during the construction, functioning or ceasing the activity?					
45.	Excavated materials, sterile or mining waste?	No	No		Outside works which have necessitated excavations have been realized;
46.	Urban waste (domestic and/ or commercial)?	Yes	No		
47.	Hazardous or toxic waste (including radioactive waste)?	Yes	Yes	Air, Water, Soil	Idem, identically point 16
48.	Other waste resulted from industrial processes?	Yes	No		
49.	A surplus of products?	Yes	Yes		Electrically energy and supplementary thermic

					energy
50.	Sewerage sludge or from waste water treatment plant (WWTP)?	Yes	Yes	Water	From facility of waste domestic and industrially water treatment It is in course of finalization SE SEIMENI which will disservice Cernavoda town and CNE PROD CERNAVODA; From cleaning water retention tank which is possibly to be contaminated Rain water evacuated from site;
51.	Waste resulted from constructions or demolitions?	Yes	No		
52.	Machines or equipments in excess or which are no longer used?	No	No		
53.	Contaminated soils or other materials?	No	No		
54.	Agricultural wastes?	No	No		
55.	Any other wastes?	No	No		
Question: Will the Project release pollutants or any other hazardous, toxic or noxious substances to air?					
56.	Emissions resulted from burning fossil fuels from stationary or mobile sources?	Yes.	Yes	Air	lin the case of activating steam generating station of starting
57.	Emissions resulting from production processes?	Yes	Yes	Air	Tritium, noble gases; oxides carbon, nitrogen, sulphur, particles
58.	Emissions resulted from maneuvering materials, including disposal or transport?	Yes.	Yes	Air	Transportation of raw materials ; Transporting hard water
59.	Emissions resulted from the construction activities, including technical installations and equipments?	Yes.	Yes	Air	Utilization of surface treatment techniques which can have contact with hard water and/or other radioactive components in the case of damage.
60.	Dust or odors resulted from maneuvering materials, including construction materials, waste water and waste material?	No	No		
61.	Emissions resulted from waste incineration?	No	No		
62.	Emissions resulted	No	No		

	from open air waste burning (scraps from cutting or construction works)?				
63.	Emissions resulted from any other source?	No	No		
Question: Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?					
64.	From exploitation of the equipments, such as engines, airing technical installations, crushing mills?	Yes.	Yes	Air	In the case which are damage in the system.
65.	From industrial processes or similar to those?	Yes.	Yes	Air	Thermic radiations Electromagnetically radiation
66.	From demolitions or constructions?	No	No		
67.	From explosions or electric accumulators use?	No	No		
68.	From construction or operational traffic?	No	No		
69.	From illumination or cooling systems?	Yes.	Yes	Water, Air, Soil	In the time of accident
70.	From sources of electromagnetic radiations (considering the effects on the population or on the eventual sensitive equipments nearby)?	Yes	Yes	Water, Air, Soil, Biodiversity	In the time of produced electrically energy transference LEA
71.	From any other sources?	No	No		
Questions: Will the Project lead to risks of contamination of land or water from releases of pollutants on the ground or into sewers, surface waters, groundwater, costal waters or the sea?					
72.	From handling, storage, use or spillage of hazardous or toxic materials?	Yes	Yes	Water- Danube Black See Channel	Passivation process of cooling systems;
73.	From discharges of sewage or other effluents (either treated or not) to water or the land?	No	No		
74.	By deposition of pollutants emitted to air, onto the land or into water?	No	No		
75.	In there a long term risk for the pollutants resulted from these sources to be accumulated in the	Yes	Yes	Water, Air, Soil	Tritium the case which it is not use detritification facility

	environment?				
Question: Is there a risk of accidents during construction or operation of the project which could affect human health or the environment?					
76.	From explosions, spillages, fires, etc., from storage, handling, use or production of hazardous or toxic substances?	Yes	Yes		Intervention Plan in the case of accidentally production or broking of automatically operation facilities of reactors
77.	From events beyond the limits of normal environmental protection (e.g. failures of the pollution control systems)?	Yes	Yes		Automatize; Breaking of energy production process in the case of damaging systems/environment protection facilities
78.	Could the project be affected by natural disasters which lead to the damage of the environment (e.g. floods, earthquakes, land sliding, etc.)?	Yes	Yes	Air, Water, Soil, Biodiversity, Human Steattelments	It will be elaborated all the studies which are necessary in order to function in security the reactors U3 and U4
Question: Will the Project result in social changes?					
79.	Changes in population size, age, structure, social groups, etc.?	Yes.	No		Positive impact
80.	By resettlement of people or demolition or homes or communities or community facilities? (e.g. schools, social facilities, hospitals)	No	No		
81.	Through in-migration of certain inhabitants who have come from other locations or creation of new communities?	No	No		
82.	By placing increased demands on local facilities or services, such as: housing, education, and health?	Yes	No		Positive impact; It is sufficiently resources
83.	By creating jobs during construction or operation or, causing the loss of jobs with effects on unemployment and the economy?	Yes	No		Positive impact
84.	Any other causes?	No	No		
Question: Are there any other factors which should be considered?					
85.	Will the project lead to pressure for consequential, which could have significant	Yes	Yes		foreign experts presents on site;

	impact on the environment such as more houses, new roads, support industrial units or new utilities, etc.?				services; Advancing education and living level for the staff which will work in finally at this reactors
86.	Will the project lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment, e.g.: Support infrastructure (roads, power supply, waste treatment, etc.)? Development of houses? Extractive industry? Supply industry? Others?	Yes	Yes		Positive impact; Addition services production nuclear electrically energy which are disserved of people (Districts Constanta, Ialomita, Tulcea, Calarasi)
87.	Could the project limit the subsequent modality of using the site, so that there will be a significant effect on environment?	Yes	Yes	All environmental components	Zone is and will be a zone with strict regime of protection and security (exclusion)
88.	Will the project set a precedent for later developments?	Yes.	Yes	All environmental components	Eventually finalization of U5
89.	Will the project have cumulative effects due to the proximity to other existing or planned projects with similar effects?	Yes.	Yes	Air, Water, Soil	It is U1 in function; It is U2 in technologically samples
90.	Does the project refer to permanent decommissioning of certain activities? In this case, could a post-decommissioning impact occur?	Yes	Yes		All materials; All wastes; All the equipments which is possible to be contaminated must eliminate in maxim security conditions