Subject: ANSWERS TO THE QUESTIONS RELATED TO THE ASSESSMENT OF THE ENVIRONMENTAL IMPACT OF THE PROJECT FOR THE CONSTRUCTION OF TPP KO B3

ESPOO CONVENTION

At the request of "Implementation Committee, Convention on Environmental Impact Assessment in a Transboundary Context, Protocol on Strategic Environmental Assessment (Palais des Nations CH-1211 Geneva 10 Switzerland),

Public Company Electric Power Industry of Serbia initiated a new procedure for the development of the Study on the assessment of the environmental impact of the Project for the construction of new Block B3 at Thermal Power Plant (TPP) Kostolac B, on cadastral parcel 303, Cadastre Municipality (CM) Kostolac-Selo, on the territory of the city of Požarevac for the following reasons:

- Consent to the previous Study on the assessment of the environmental impact of the Project for the construction of new Block B3 at TPP Kostolac B expired on 31 December 2015.
- Amendment to the technical solution in the Preliminary Project Design from 2013 was made and used as a basis for the development of the Study on the assessment of the environmental impact, which consists of the following:
  - Extension of the coal warehouse with the construction of the third landfill line and equipped with a crusher (project amendment)
  - Amendment to the external method of the transport of ash, slag and gyspum from Block B3 and depositing in the excavation area of Open Cast Mine (OCM) "Drinno" (project amendment)
- New conditions and consents as well as the location permit were obtained in accordance with the amended technical solution:

In that respect, and pursuant to Article 12 of the Law on the Environmental Impact Assessment ("Official Gazette of the Republic of Serbia", Nos. 135/04, 36/09 and 72/09), the Ministry of Agriculture and Environmental Protection received a Request for determining the scope and content of the Study on the assessment of the environmental impact of the Project for the construction of new Block B3 at TPP Kostolac B, on cadastral parcel 303, CM Kostolac-Selo, on the territory of the city of Požarevac and a notification letter, according to the procedure of the ESPO Convention, which will be submitted to the Republic of Romania.
a) **Question:** Please provide a map showing the exact location of the open cast mine (in the vicinity of the lignite thermal power plant) and its distance from the border with Romania.

**Answer:**

- The distance from the open cast mine to the Romanian border (air distance) is 15.325 km (see the enclosed map of the area).
b) **Question:** Taking into consideration the definition of the "proposed activity" on the basis of the Espoo Convention, i.e. "any activity" or "any major change in the activity that is subject to the decision of the competent authority in accordance with the applicable national procedure", as well as the Decision from the meeting of the parties that the "notification shall be necessary unless it is not possible to exclude adverse transboundary impact (Decision IV/2, Annex I, paragraph 54), please clarify and provide an explanation:

i. Why does the Republic of Serbia believe that the extension of the lignite open cast mine is not a project covered with the scope of the Espoo Convention, and that, consequently, it is not subject to the assessment of the transboundary environmental impact?

ii. For what reason did the Republic of Serbia not implement the local procedure for the environmental impact assessment for the planned open cast mine?

**Answer:**

- The plan is to increase production in OCM Drmno from 9 to 12 million tons of coal a year, *within the limits of the existing exploitation field*, all for the purposes of the operation of the new Block B3 in TPP Kostolac B. The production increase in OCM Drmno is included in the Feasibility Study with the Preliminary Project Design for the provision of the required quantities of coal for the operation of the existing thermal power plants in Thermal Power Plants and Mines (TE-KO) Kostolac and new Block B3 (350 MW).

- The environmental impact of coal mining in OCM Drmno was analysed in the Study on the assessment of the environmental impact of coal exploitation open cast mine "Drmno" in
Kostolac, for the capacity of nine million tons of coal a year, by the processing facility, i.e. the Mining and Geology Faculty in Belgrade, in 2009. The competent authority gave consent to the Study with Decision No. 353-02-0360/2008-02 dated 10 April 2009.

- A procedure for deciding on the need for impact assessment was conducted for the Preliminary Project Design for the provision of the required coal quantities for the operation of the existing thermal power plants in TE TO Kostolac and new Block B3 (350 MW) in OCM Drmino, from 9 to 12 million tons a year. The Decision of the competent authority No. 353-02-901/2013-05 of 26 July 2013 sets out that there is no need to develop the Study on the assessment of the environmental impact. The Decision requires implementation of the environmental protection measures defined in the Study on the assessment of the environmental impact of coal exploitation open cast mine Drmino in the capacity of 9 million tons a year.

- The environmental protection measures defined in the Study include:
  ✓ Measures for the prevention, reduction and elimination of adverse environmental effects envisaged by the Law (air protection, noise protection, water protection, fire protection)
  ✓ Measures to be taken in case of an accident
  ✓ Environmental protection technical solutions (recycling, treatment and disposal of waste substances, reclamation, remediation, etc.)

In addition to the envisaged measures, the monitoring system was also defined for the area of OCM Drmino. The system ensures reliable assessment of the size and intensity of pollution and possible damage, as well as timely taking of measures for the prevention of harmful pollution, or for successful remediation of detected and recorded pollution.

e) **Question:** Can the Republic of Serbia confirm that the proposed activity has no significant transboundary environmental impact?

**Answer:**

The proposed activity is not introducing innovations in terms of excavation technology and types of the main excavation, transport and landfill machinery, or innovations in the auxiliary machinery and other supporting mining operations. There are no new identified sources of pollution, except for those analysed in the Study on the assessment of the environmental impact of coal exploitation open cast mine “Drmino” in Kostolac, for the capacity of nine million tons of coal a year, and where environmental measures are defined.

d) **Question:** Is the increase in lignite production in the open cast mine considered to be part of the project for the extension of TPP Kostolac B?

**Answer:**

The raw material base for Block B3 is open cast mine “Drmino” which belongs to the eastern part of the Kostolac coal basin. This mine supplies coal to blocks 1 and 2 of TPP “Kostolac B”, blocks at TPP “Kostolac A”, and one part of coal quantities is allocated for mass consumption.
e) **Question:** What lignite quantities are excavated in the open cast mine and what is the planned production after its extension?

**Answer:**

Currently, the thermal power plants of the total capacity of 697 MW supply coal from the open cast mine Drmno. The current project capacity of OCM "Drmno" is 9 x 10^6 t/year, and project TPP "Kostolac B3" plans capacity increase to 12x10^6 t/year.

f) **Question:** According to the legislation of the Republic of Serbia, does the extension of open cast mines undergo the environmental impact assessment?

**Answer:**

The answer is provided in item b).

g) **Question:** When did the Republic of Serbia start with lignite exploitation in this open cast mine? Was the procedure for the environmental impact assessment conducted before commencement of the exploitation of the open cast mine? If YES:

i. **Question:** Was the environmental impact assessment conducted, how long did it take, and was the procedure completed before the start of exploitation?

ii. **Question:** Did this procedure also include the extension of the open cast mine?

**Answer:**

Lignite exploitation in the open cast mine Drmno commenced in 1987 with the commencement of the operation of Block B1 of the Thermal Power Plant Kostolac.

The first Law on the Environmental Impact Assessment was adopted in 2004 and published in the "Official Gazette of the Republic of Serbia", 135/04, and amended in 2009, therefore, there was no Law on the Environmental Impact Assessment when open cast mine Drmno started its operation.

A procedure for deciding on the need for impact assessment was conducted for the Preliminary Project Design for the provision of the required coal quantities for the operation of the existing thermal power plants in TE TO Kostolac and new Block B3 (350 MW) in OCM Drmno, from 9 to 12 million tons a year.

**Question:** In addition to the above stated, please answer the questions related to the planned construction of the new block in TPP Kostolac B.

**Answer:**

The basic concept of the construction of this thermal power plant envisaged construction of four blocks of installed capacity of 350 MW each. During the implementation of Phase I, two blocks were constructed and commissioned in 1988 (Block B1), i.e. in 1992 (Block B2).

The construction of the Blocks reserved space, and an area of shared plants and facilities as well as infrastructure was built for the needs of Phase II of TPP "Kostolac B". The plan was to locate the blocks to be built in Phase II next to the existing ones, or next to the thermal power plant of the Main Plant Facility. In 2009, conditions were met to commence with the implementation of this phase, when the development of the project documentation started,
which included an analysis of a possibility for the construction of a block with a different capacity, and available coal reserves were considered for its operation (previous works for the construction of the new block at TPP Kostolac B).

The documentation served as a basis for the development of the previous feasibility study and General Design, which included an analysis of two-way solutions (Block with installed capacity of 350 MW and 600 MW) for the purpose of viewing various aspects of the justifiability of their construction.

The Block with a capacity of 350 MW was selected, with supercritical steam parameters and high efficiency.

Facilities on Block B3 will be located southeast from existing Blocks B1 and B2, and south from the coal warehouse.

Expected completion of the construction of Thermal Power Plant Kostolac B3 is in 2020.

h) Question: Please provide information on the capacity of (i) Block B3 and (ii) the whole Power Plant.

Answer:

Lignite thermal and energy block of TPP "Kostolac B3" from open cast mine "Drmno" will have electrical capacity of 350 MW, on generator terminals, whereas the expected capacity in the network is about 308 MW.

Thermal power plant Kostolac B has two existing Blocks B1 and B2 with an installed capacity of 348.5 MW each. (2X348.5 MW)

i) Question: Please provide information about the current state of affairs in court proceedings – appeal pending before the Appellate Court in the Republic of Serbia against the validity of the decision on the environmental impact assessment, which was submitted by the non-governmental organization, and used to contest the validity of the decision; when was the appeal submitted and when shall the proceedings be completed?

Answer:

- The Citizens Association of the Center for Ecology and Sustainable Development of NGO (CEKOR) initiated proceedings before the Administrative Court of Serbia, Nemanjina Street No. 9, Belgrade – the appeal was registered under number III-U6832/14 of 6 May 2014, and the Ministry of Agriculture and Environmental Protection (formerly the Ministry of Energy, Development and Environmental Protection, Nemanjina No. 22-26, 11000 Belgrade) is in the capacity of the defendant.
- Public Company Electric Power Plant of Serbia – Company TE KO Kostolac, Nikole Tesle Street No. 5-7, 12208 Kostolac (Document No. 3301 dated 29 October 2014) submitted a reply to the appeal in the capacity of a stakeholder.
- There have been no invitations from the Administrative Court of Serbia for discussions/hearings until today (1 June 2016).

j) Question: Please state the location of a cooling water intake for Project Kostolac B3.
Answer:

A flow system with cooling water from the Danube River is envisaged for Block B3 of TPP “Kostolac”. Space of the existing cooling water service station (for Blocks B1/B2) does not envisage space for the installation of additional equipment for the new block, only construction of a new (separate) facility of the service station, together with the existing facility was envisaged by using the existing supply channel of the cooling water from the river. The designed quantity of cooling water for Block B3 amounts to 44,680 m³/h (12.40 m³/s).

The construction of existing Blocks B1 and B2 envisages a centralised plant for the chemical preparation of additional, demineralised water for the compensation of losses in the circular flow of water - steam. The plant is designed to be able to accept extension for the requirements of the second phase. The current quality of the produced demi water meets the requirements of the existing blocks, however, stricter requirements should be taken into consideration in terms of the quality of feed water, as well as the possibility of demi water quality degradation in the future operation of the lines due to the aging of the equipment. In terms of this, construction of a new plant for chemical preparation of water for Block B3 was envisaged. The new plant includes two lines for complete demineralisation of water, 50 m³/h in capacity, and they are supplied with raw water from the Danube River.

k) Question: How many blocks are in TPP Kostolac B? Is their combined impact taken into account in the implementation of the procedure for the environmental impact assessment and the Study on the assessment of the environmental impact?

Answer: Thermal Power Plant Kostolac B has two Blocks TE KO B1 and B2. The combined impact will be considered in the implementation of the repeated procedure of the environmental impact assessment.

Yours sincerely,

[Signature]

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Serbian point of contact to the ESPOO Convention

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Ministry of Environment, Waters and Forests of Romania,
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