

Document 2



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT  
DIRECTORATE H - Nuclear Energy  
Euratom coordination, International relations  
Head of Unit

0-2 AUG 2007

Luxembourg,

[REDACTED] D(2007) 318770

LIMITED

NOTE TO



**Subject:** Notification of an investment project to the European Commission under Article 41 of the Treaty establishing the European Atomic Energy Community concerning the completion of Units 3 and 4 of Mochovce Nuclear Power Plant, Slovak Republic

The enclosed letter has been submitted by "Slovenské Elektrárne" under the provisions of Article 41 of the Euratom Treaty. It contains the notification of an investment project for the completion of Units 3 and 4 of Mochovce Nuclear Power Plant in the Slovak Republic.

Please note that the information is to be considered "commercial-in-confidence".

As usual an inter-service working group will be formed to examine this project, as specified in Article 43 of the Treaty, to prepare the Commission's "point of view". You are invited to examine the investment project and inform me of any questions which you might have to the investor. These questions will be transmitted to Slovenské Elektrárne by my unit. I would therefore like ask you to receive your questions by 10<sup>th</sup> September 2007.

In order to discuss the project and to prepare the Commission "Point of View" a meeting will be organised at which Slovenské Elektrárne will be invited to give a presentation of the project and answer questions. You will be informed of the exact date of the meeting (probably 2<sup>nd</sup> half of September) as soon as possible.

Commission européenne, L-2920 Luxembourg, Telephone: (352) 43 01-1.  
[REDACTED]  
[REDACTED]

May I also draw your attention to the fact that Commission services will be consulted on the "point of view" again once it has been drafted.

For any further information please contact: [REDACTED]

Enclosure: Notification letter

c.c.: [REDACTED]

Document 3



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT

DIRECTORATE H - Nuclear Energy  
Euratom coordination, international relations  
Head of Unit

Luxembourg, 21 SEP. 2007  
[REDACTED] D(2007) 322375

[REDACTED]  
Závod, 3 a 4 blok Elektrárne  
Mochovce  
935 39 Mohovche  
-Slovakia-

**Subject:** Communication of an investment project under Article 41 Euratom Treaty concerning the completion of Units 3 & 4 of NPP "Mochovce", Slovakia

**Ref.:** Letter of Mr. Paolo Ruzzini, Chairman of the Board of Directors and General Director Slovenske Elektrárne, addressed to Mr. Ruete, Director General, DG Energy and Transport, dated 16 July 2007

Dear [REDACTED],

We have received your communication of an investment project under Article 41 Euratom Treaty concerning the completion of Units 3 & 4 of NPP "Mochovce", Slovakia.

The European Commission services have started to examine the project pursuant to Council Regulation (Euratom) No 2587/1999 of 2 December 1999 defining the investment projects to be communicated to the Commission in accordance with Article 41 of the Treaty establishing the Euratom Atomic Energy Community<sup>1</sup> and Commission Regulation (EC) No 1209/2000 determining procedures for effecting the communications prescribed under Article 41 of the Treaty establishing the European Atomic Energy Community<sup>2</sup>.

To continue with the examination of the project, we would like to ask you to provide us with supplementary information by answering the questions attached to this letter.

Should this prove necessary, I would like to inform you that we may ask for additional information at a later stage.

<sup>1</sup> Official Journal L 315, 9/12/1999, P. 01 -- 03

<sup>2</sup> Official Journal L 138, 09/06/2000 P. 12 - 14.

To advance the preparation of the Commission Point of View, we also would like to organise a meeting at the Commission premises here in Luxembourg on 22 October 2007, to provide you with the possibility to present your project and clarify eventual questions from the interested services of the Commission.

On the basis of the information received, the Commission will then communicate its views on the investment project in form of a Point of View in accordance with Article 43 Euratom Treaty to the Slovakian government.

Should you have any questions concerning the dossier, please do not hesitate to contact [REDACTED] He will also contact you to organise the above-mentioned meeting.

I have copied this letter also to the Slovakian Permanent Representation to the European Union.

Yours sincerely,

Enclosure: Questions concerning the communication of an investment project under Article 41 Euratom Treaty concerning the completion of Units 3 & 4 of NPP "Mochovce", Slovakia

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Document 4



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT  
DIRECTORATE.H - Nuclear Energy  
Euroforum coordination, international relations

Luxembourg, 12 November 2007  
[REDACTED] 327462

NOTE TO THE FILE

Subject: Outcome of meeting Commission/Investor "Slovenské Elektrárne"  
on: Notification of an investment project to the European  
Commission under Article 41 of the Treaty establishing the  
European Atomic Energy Community concerning the completion of  
Units 3 and 4 of Mochovce Nuclear Power Plant in Slovakia,  
Monday, 22 October 2007, Bâtiment Euroforum— 10, rue Robert  
Stumper – L-2557 Luxembourg (see Agenda attached)

1. PARTICIPANTS:

Investor side:

[REDACTED]

Commission:

TREN H

[REDACTED]

ESA

[REDACTED]

DG ECFIN

Commission européenne, L-2920 Luxembourg. Téléphone: (352) 43 01-1.  
[REDACTED]  
[REDACTED]

## 2. HISTORICAL AND PROCEDURAL BACKGROUND

- In accordance with Article 41 of the Euratom Treaty, Slovenské Elektrárne ("SE") communicated to the Commission an investment project for the completion of Units 3 and 4 of Mochovce Nuclear Power Plant in Slovakia. The communication was received on 20 July 2007.
- By virtue of Article 43 of the Euratom Treaty, the Commission shall discuss with the person having communicated the investment project all its aspects, which relate to the objectives of the Treaty. Pursuant to such a discussion, the Commission communicates its views to the Member State concerned.
- In the present case, the Commission is currently discussing all the elements of the investment as communicated to the Commission pursuant to Council Regulation (Euratom) No 2587/1999 of 2 December 1999 defining the investment projects to be communicated to the Commission in accordance with Article 41 of the Treaty establishing the Euratom Atomic Energy Community and Commission Regulation (EC) No 1209/2000 determining procedures for effecting the communications prescribed under Article 41 of the Treaty establishing the European Atomic Energy Community.
- The Commission sent questions to SE on 21 September 2007. Answers from SE were received on 9 October 2007.
- A meeting with the Investor was held in Luxembourg on 22 October 2007. At this occasion, SE presented the project and provided the Commission with additional information.
- A Commission point of view will now be established for adoption early in 2008. Once adopted by the Commission the point of view will be transmitted to the Slovakian authorities.

## 3. SUMMARY OF THE MEETING

- The meeting was chaired by [REDACTED]
- The first part of the meeting was devoted to the Slovakian side presenting a technical overview and status of the investment project (see: copy of presentation attached).

- In the second part of the meeting a systematic review of the still outstanding questions posed by the Commission and a review of the replies submitted by the Slovaks has been done, permitting further clarifications or supplementary related questions to be dealt with directly during the meeting.

— DELETED —

## 5. REPLIES RECEIVED ON ADDITIONAL QUESTIONS

With letter of 31 October 2007 Slovenske Elektrarne provided the Commission with information on the above outlined questions. (see replies attached).

## 6. CONCLUSIONS

- Both sides expressed their opinion that the meeting has been conducted in a constructive and fruitful atmosphere. The presentation and the discussion had led to a better understanding of the project.
- On the basis of the information received, including the replies concerning the additional questions raised during the meeting, the draft Point of view will now be established by DG TREN services. It will then be submitted in a formal ISC to the interested Commission services.
- The Commission explained the follow-up procedure to the Slovakian side with respect to timing for completion of point of view on the Commission, which has to go through ISC to formulate the opinion pursuant to Article 43 Euratom Treaty, which would be signed by Commissioner Piebalgs and communicated to Slovakia, early 2008.

Contact:



## Agenda

for the meeting on Monday, 22 October 2007, starting at 10.00  
Room EUFO 0278 – Bâtiment Euroforum – 10, rue Robert Stumper –  
L-2557 Luxembourg

**Subject: Notification of an investment project to the European Commission under Article 41 of the Treaty establishing the European Atomic Energy Community concerning the completion of Units 3 and 4 of Mochovce Nuclear Power Plant, Slovak Republic**

1. Up-date of the situation of the investment project (by investor)
2. Discussion of the project (in particular on the basis of the notification, written questions/comments from the Commission services transmitted to the investor and the written replies from the investor)
3. AOB

Contact person:

[REDACTED]

[REDACTED]



EUROPEAN COMMISSION  
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DIRECTORATE H - Nuclear Energy  
Euratom coordination, international relations

## REPORT

**Subject:** Mission to Mochovce/Bratislava 9-11 March 2008 to verify some open issues on the notification of Slovenske Elektrarne (ENEL) on the completion of units 3 and 4 of the Mochovce NPP (Agenda attached: ANNEX I)

A team of 6 people participated in the mission: [REDACTED]

1. The Commission team was supported throughout the mission by a very open and collaborative attitude of both the investor Slovenske Elektrarne (ENEL) and the Slovakian authorities, in particular the national regulator UJD.

### Evening 9 March 2008

2. A "brainstorming" meeting Sunday evening after arrival of the entire mission team resulted in a focusing of the mission objectives on 3 main issues:
  - Additional verification of the safety features of the proposed plant (Safety aspect)
  - Implementation by the investor of a comprehensive strategy for the reuse of existing components on the installation (Conservation aspect)
  - Protection against malevolent events, such as plane crashes (Security aspect)

### Monday 10 March 2008

The 10 March was fully dedicated to the on-site visit to Mochovce NPP Units 1 & 2 and 3 & 4 as well as extensive discussions with the investor Slovenske Elektrarne (ENEL).

3. After a general presentation of the Mochovce 1 & 2 units [REDACTED] the team visited the operating part of the Mochovce site.
4. Then followed a session of presentations and discussions related to the investment project to finalise the construction of Mochovce 3 & 4 units [REDACTED]
  - Strategy on preservation and protective works related to the completion of Mochovce units 3 & 4 in compliance with IAEA guideline "Management of delayed NPP projects" (TECDOC 1110), the relevant Slovakian regulations and under surveillance of the Slovak National Regulator UJD.
  - Description of the concrete completion/conservation activities currently carried out on the already existing civil works (ca. 70 %) and the existing equipment (ca. 30%): all equipment defined for use in the future operation units 3 & 4 are checked for technical compliance, quality and functioning and are then submitted to a conservation program.<sup>1</sup>
  - Outline of the main safety characteristics of Mochovce NPP 3 & 4 new design which is based upon elements of inherent safety, mainly originating from its low power densities in the reactor core, high safety margins and large amounts of water in the primary and secondary circuits, giving extra passive safety to the plant (which is typical for VVERs).
  - Paper on Mochovce 3 & 4 resistance against aircraft crashes (see details below)
5. The main features and discussion points related to the presentation on **resistance of Mochovce 3 & 4 design against aircraft crashes** can be summarised, as follows:<sup>2</sup>
  - **Random aircraft crash** has been taken into account in the Mochovce design and evaluated under a probabilistic approach, as recommended by the IAEA. The result was that the probability is below the internationally accepted threshold for which engineering measures are required.
  - Regarding the **Malevolent aircraft crash** scenario it has to be recognized that this is regulated under national responsibility. International bodies, such as IAEA and WENRA, do not establish any requirements regarding specifically malevolent aircraft crash. In fact, they do not distinguish between accidental and malevolent causes of crashes. In Slovakia no national provisions require the inclusion of a malevolent aircraft crash in the design base of a new NPP. Therefore there was no obligation, neither from national nor from international requirements, to include malevolent aircraft crash in the design base of Mochovce 3 & 4.

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<sup>1</sup> See ANNEX II: Technical background note prepared by JRC colleagues: "Material and component preservation"

<sup>2</sup> See ANNEX III: Technical background note prepared by JRC colleagues: "Protection of the nuclear plant from external human induced events of both accidental and malevolent nature with special emphasis to aircraft crash"

- However, recent analysis of Mochovce 3 & 4 design, where the investor nevertheless considered the impact of a small plane as a "beyond design basis" event, has shown that its structure can resist a light aircraft crash (CESSNA type). This implies that not all safety systems are operational following a massive impact, while the plant can still be brought to a safe shutdown condition. Evaluations of secondary effects, such as from large fires, have not been performed.
- As Mochovce 3 & 4 has a robust concrete structure, with wall ca. 1.5 m thickness in large parts, significant resistance of the plant structure is also expected for bigger aircraft; however no analysis has been carried out so far.
- In **conclusion** it can be said that the resistance of Mochovce 3 & 4 structure against aircraft crash is comparable to most modern existing plants.

• [REDACTED]

Tuesday, 11 March 2008

6. The meeting in the **morning** with the regulator UJD and a representative from the ministry of defence did not bring any additional knowledge, [REDACTED]

[REDACTED]

7. [REDACTED]

8. [REDACTED]

[REDACTED]

• [REDACTED]

9. The mission concluded in a meeting with the investor Slovenske Elektrarne (ENEL),

[REDACTED]

DELETED