



Supporting Long Term Planning of Energy Options

IAEA Mission to Support the Self-Assessment of Poland National Nuclear Infrastructure

End-Of-Mission Report

Warsaw, Poland

27-29 April, 2010

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| Team Members: | Jose Bastos, | NSNI - IAEA |
| | A. Cherf, | OLA -IAEA |
| | Ioan Rotaru, | External expert, Romania |

END-OF-MISSION REPORT

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| Project title: | Supporting Long term Planning of Energy |
| Project task: | Supporting the Self-Assessment of Nuclear Power Option in Poland |
| Name of experts: | Team Leader: Anne Starz, NENP/NPES - IAEA Team Members: Jose Bastos, NSNI - IAEA A. Cherf, OLA-IAEA Ioan Rotaru, External Expert Romania |
| Date of mission: | 2010, April 27-29 |
| Counterpart: | Ministry of Economy, Department of Nuclear Energy |
| Attendants: | As per Appendix 2 of this report |

1. TERMS OF REFERENCE

1.1. Objectives of the IAEA Expert Mission

The main objective of the missions was to support the preparation of the Self-Assessment of Poland National Nuclear Infrastructure.

1.2. Scope of the mission

In the preparation of this IAEA mission, the Poland counterpart team prepared the evaluation of the status of the infrastructure issues described in NE Series Milestones Guide (NG-G-3.1) applying the evaluation approach described in NE Series Evaluation technical report (NG-T-3.2). The separate assessments from more than twenty participating organizations were sent in advance to the IAEA mission.

The self-assessments contain:

- an evaluation of the current status of nuclear infrastructure of Poland,
- and
- the intentions of the different local organisations for involvement/participation in future Nuclear Power Programme for Poland, based on their existing capabilities.

The initial IAEA mission scope was the following:

- Clarify on specific topics of the self-assessment document;
- Identify areas for improvement on the self-assessment process;
- Support the preparations for a future INIR mission:

2. DUTIES PERFORMED BY THE IAEA TEAM

2.1. Basis for the mission

The following have been used as basis for this mission:

- ✓ IAEA publications:
 - a. International Atomic Energy Agency, Milestones in the development of a national infrastructure for nuclear power, IAEA Nuclear Energy Series No. NG-G-3.1, IAEA, Vienna (2007).
 - b. International Atomic Energy Agency, Evaluation of the status of national nuclear infrastructure development, IAEA Nuclear Energy Series No. NG-T-3.2, IAEA, Vienna (2008).
- ✓ Self-Assessment documents prepared by the counterpart.

2.2. Conduct of the mission

The mission utilized the following techniques:

- a) Study of documents, performed in two stages (i) prior to the mission, as a part of preparation and (ii) during the mission.
- b) Plenary sessions for discussions were organized as per mission agenda, presented in Appendix 1.
- c) Presentations were made by Poland representative and by IAEA and questions clarified.
- d) Discussions and collaborative interview process were made to identify areas for improvement or further actions.

3. WORK DONE

- ✓ The plan for finalizing the Nuclear Power Programme for Poland by the end of the year was presented by counterpart (Department of Nuclear Power from Ministry of Economy).
- ✓ Taking into account the preparatory input, the IAEA mission objectives were adjusted to focus on the following:
 - Presentation of the legal framework for a national nuclear power programme.
 - Presentation of the NEPIO role in Phase 1 of the Nuclear Power Programme.
 - Presentation of the human resources issue, in particular for the regulatory body
 - Recommendations to the counterpart referring to the planning and assessment process based on the IAEA Milestone document and for each of the 19 issues.
 - Explanation of the self-assessment process based on the IAEA guide (methodology, procedure, criteria for evaluation for each of the 19 milestone issues, action plan, etc.).

4. RESULTS ACHIEVED

The IAEA team was informed about documents issued by the Council of Ministers (Government of Poland) related to the nuclear power introduction and responsibilities in this field:

- ***Energy Policy for Poland until 2030*** – November 2009.
- Resolution no. 4/2009 ref. to ***Nuclear Power development***.
- Regulation of ***Appointment of the Government Commissioner for Nuclear Power in Poland*** – May 2009.

Ministry of Economy issued also the “*Strategic Plan*”, in accordance with Energy Policy and “Poland 2030 – Development Challenges” document, in which the overall Nuclear Power activities schedule was established including a list of draft laws composing the legislative framework.

The IAEA team was also introduced to the functions and responsibilities of two committees supporting the Government:

- An *Interministerial Committee for Polish Nuclear Power* that was established in July 2009 by the Prime Minister’s Ordinance.
- The *Non-profit Advisory Committee for Cooperation with Government Commissioner for Nuclear Power in Poland* that was established by the Minister of Economy’s Ordinance.

The tentative Nuclear Power Activities Schedule had the following milestones:

- **Stage 1, by December 31, 2010:** finalisation of the draft of Nuclear Power Programme for Poland and submission to Council of Ministers approval and promulgation of legislations governing the nuclear power programme.
- **Stage 2, by December 31, 2013:** NPP site selection and conclusion of the construction contract of the first NPP.
- **Stage 3, by December 31, 2015:** completion of the engineering and obtaining all legal permits.
- **Stage 4, by December 31, 2020:** construction/erection of the first NPP.

Responsibilities for development of Nuclear Power Programme for Poland are clearly defined in the Council of Ministers and Ministry of Economy decisions, the main players being the following:

- Government Commissioner for Nuclear Power in Poland;
- Department of Nuclear Power of Ministry of Economy
- National Atomic Energy Agency (PAA), acting as Nuclear Regulatory Body;
- Power Generation Electricity (PGE) company, acting as future NPP Investor.

IAEA Team observations are the following:

- ✓ Discussions were open and frank.
- ✓ Many stakeholders from Universities and technical institutes were present at the discussions. However it was noted a limited participation of PGE, which was represented by a subsidiary company. The future regulatory body was involved, and at times a senior level.
- ✓ The team was informed that an independent regulatory body is being created to oversee the nuclear power programme. It was noted in the Agency presentation that independence is not only a matter of legislation, but also of having the competence to perform the necessary functions. During the discussions it was agreed that a training programme needs to be established to develop the required competencies.
- ✓ Poland has relevant experience from previous planning for an NPP, from the operation of a research reactor, in institutes and academic organizations that can contribute to the current efforts.
- ✓ A proposal was presented for organizing the planning process and self-assessment through the use of task groups that would review a set of related infrastructure issues.

The proposal included the identification of relevant IAEA reference documents and materials. The IAEA Team observed this was a positive development and in the right direction.

- ✓ Specific recommendations regarding the self-assessment proposal were made.
- ✓ The work programme was not evaluated, but the team had a general impression that Poland will be able to produce the draft of the National Nuclear Power Program for approval by Government by the end of 2010.
- ✓ The team observed that the time schedule presented is ambitious. It was observed by the team that the steps of the licensing process is not included in the schedule. This element should be included to provide a broader view of all major steps to be conducted. For instance, it appeared to the team that the date set for the promulgation of the set of draft laws by 31 December is also ambitious.
- ✓ Some structural issues need to be addressed and clarified prior to the final phase of the legislative drafting process.

From the discussions and presentations made by the counterparts, the IAEA team identified the following potential issues:

- Strengthening *coordination and management* of the Nuclear Power Programme planning process by Department of Nuclear Power.
- More active involvement of the future NPP Investors (PGE) in the Phase 1 of national Nuclear Power Programme and further activities.
- Clarifying the roles and actions needed from the organizations with relevant experience
- Planning for adequate development of the national regulatory body - PAA (strategy, human resources, regulations, etc.).

In order to assist Poland on the improvement of the planning activities, the recommendations are included in the next chapter of this report.

5. SUGGESTIONS FOR IMPROVING THE SELF-ASSESSMENT PROCESS

5.1. To the counterparts

1: IAEA Team suggests that the coordination and management of the planning process for Nuclear Power Programme to be strengthened. The legislative drafting process should also involve relevant organizations at the early stage of the programme.

2: Task groups should involve (or be led by) different participating organizations, under direction/coordination of the Department of Nuclear Power of Ministry of Economy.

3: The work of the task groups should contribute to the planning for the Nuclear Power Programme and preparation of the self-assessment.

4: IAEA Team suggests that the proposed grouping of issues be carefully reviewed and re-aligned to reflect the responsibilities of participating organizations as was discussed during the meetings. In this context, the eight draft laws which are being prepared should be merged to avoid overlaps and conflict of responsibilities and requirements.

5: IAEA Team suggests that future NPP Investor/Owner/Operator represented by PGE SA improve its participation in the planning process for Nuclear Power Programme.

6: PGE may consider establishing/strengthening the team within the company responsible for planning for the first NPP to perform strategic planning for the investment and ownership functions.

7: IAEA Team suggests that the final draft of Nuclear Power Programme to be subject of a self-assessment process based on the specific procedure to be issued by the Department of Nuclear Power of Ministry of Economy. This evaluation process should have the following steps:

- a. Definition of the terms of reference for the evaluation, the organizations to be involved and the individuals who will conduct the evaluation.
- b. Evaluation of the status of development of the national nuclear infrastructure against the basis listed in IAEA specific document (NG-T-3.2), including status of the infrastructure development activities and supporting materials that demonstrate the conclusions of the evaluation team.
- c. Identification of the areas needing further attention.
- d. Preparation of an action plan to address these areas.

8: IAEA Team suggests that the self-assessment process will be closed by an Evaluation Report, which will be used by the counterpart to request an IAEA INIR mission. The Evaluation Report should contain the following information:

- a. Identification of the “team of evaluators” by position/ role in the organization;
- b. Identification of the “team of respondents”;
- c. A description of the process used to conduct the evaluation;
- d. Lists of the evidence reviewed and further actions required;
- e. Summary conclusions giving the state of achievement of each condition;
- f. References to any relevant material used for conducting the evaluation;
- g. Confidentiality requirements, if any.
- h. Action plan for identified gaps, indicating issue being addressed, clear statement of the action, completion time and responsible organisation for the completion of the actions.

9: The IAEA Team suggests that an INIR mission be planned following the completion of the drafting of the Nuclear Power Programme and the self-assessment process.

5.2. Suggestions for further work with the IAEA

1. IAEA legislative assistance is recommended in the process of the specific nuclear laws preparation by Poland responsible authorities, if requested.
2. IAEA assistance is recommended in the field of nuclear research activities restructuring and creation of the Technical Support Organisation for Nuclear Power Programme, if requested
3. IAEA assistance is recommended to provide to Poland counterparts with support for identifying and building competencies in the organizations involved in the Nuclear Power Programme, including one or more expert missions for defining the workforce needs and training requirements.
4. Consideration should be given to establishing a national TC project to support the development of the Nuclear Power Programme.

6. APPENDIXES:

6.1. Appendix 1: IAEA Expert Mission agenda

6.2. Appendix 2: List of counterpart participants

Appendix 1: IAEA Expert Mission agenda

27 April 2010

- 11:00 AM** Welcome coffee and participants introductions.
- 11:20 – 13:00 PM** Presentation:
1. NUCLEAR ENERGY STRATEGY POLAND - Ministry of Economy, Department of Nuclear Energy.
 2. Discussions.
- 13:00 – 14:00 PM** Lunch break
- 14:00 – 17:00 PM** Presentations:
1. Seminar on legal matters on nuclear energy.
 2. “OVERALL MILESTONES APPROACH STEERING” - Ministry of Economy, UDT.
 3. “FUNCTIONS OF A NEPIO – ESPECIALLY COORDINATIONS” - IAEA team.
 4. “SINGLE DRAFT SELF-EVALUATION MILESTONES (19 ISSUES) - POLISH APPROACH” - Ministry of Economy, UDT and Department of Nuclear Energy.
 5. Discussions.

28 April 2010

- 9:00 AM** Welcome coffee and participants introductions.
- 9:20 – 13:00 PM** Workshop and the discussion of the self-evaluation process and go through each of the 19 issues to foster development of an integrated self assessment based on a good understanding of the evaluation methodology (interactive discussion).
- 13:00 – 14:00 PM** Lunch break
- 14:00 – 17:00 PM** Workshop and the discussion of the self-evaluation process and go through each of the 19 issues to foster development of an integrated self

assessment based on a good understanding of the evaluation methodology (interactive discussion).

29 April 2010

- 9:00 AM** Welcome coffee and participants introductions.
- 9:20 – 13:00 PM** Summary discussions and closing addresses.

Appendix 2: List of counterpart participants

2010 April 27:

- 1) **Hanna Trojanowska**, Pełnomocnik Rządu RP Podsekretarz Stanu w Ministerstwie Gospodarki
- 2) **Marek Walczak**, Prezes Urzędu Dozoru Technicznego (UDT)
- 3) **Maciej Jurkowski**, Wiceprezes PAA
- 4) **Roman Jaworski**, Zastępca Głównego Inspektora Ochrony Środowiska (GIOŚ)
- 5) **Piotr Otawski**, Zastępca Generalnego Dyrektora Ochrony Środowiska Generalnej Dyrekcji Ochrony Środowiska (GDOŚ)
- 6) **Krzysztof Gulda**, Departament Strategii Ministerstwa Nauki i Szkolnictwa Wyższego (DS MNiSW)
- 7) **Henryk Majchrzak**, Dyrektor Departamentu Energetyki MG (DE MG)
- 8) **Beata Jaczewska**, Dyrektor Departamentu Rozwoju Gospodarki MG (DRG MG)
- 9) **Tomasz Ostaszewicz**, Dyrektor Departamentu Międzynarodowej Współpracy Dwustronnej MG (DWD MG)
- 10) **Krystyna Krecińska**, Dyrektor Biura Prawnego MG (BPr MG)
- 11) **Andrzej Strupczewski**, Przewodniczący Komisji Bezpieczeństwa Jądrowego Instytutu Energii Atomowej POLATOM (IEA)
- 12) **Tomasz Jackowski**, Pełnomocnik Dyrektora Instytutu Problemów Jądrowych im Andrzeja Sołtana (IPJ)
- 13) **Gracjan Wiśniewski**, Wicedyrektor Biura Rozwoju UDT
- 14) **Lech Malecki**, Departament Energii Jądrowej Ministerstwa Gospodarki
- 15) **Andrzej Chwas**, Departament Energii Jądrowej Ministerstwa Gospodarki
- 16) **Tomasz Nowacki**, Departament Energii Jądrowej Ministerstwa Gospodarki.

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4. **Marek Woszczyk**, Wiceprezes URE

5. **Roman Jaworski**, Wiceprezes GIOŚ
6. **Piotr Otawski**, GDOŚ
7. **Krzysztof Gulda**, DS MNiSW
8. **Gracjan Wiśniewski**, UDT
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21. **Marek Moneta**, UŁ
22. **Jan Składzień**, PŚl
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24. **Stefania Kasprzyk**, Prezes. PSE-Operator S.A.

