

Cernavoda NPP: Units 3 and 4



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Cernavoda Units 3 and 4 Project – Current Status

Description

Achievements

- 2 Units x 720 MW CANDU 6
- Expected electricity 10-11 TWh/a; 12% from overall country production;
- EnergoNuclear - project company for development, construction and operation;
- ArcelorMittal, Enel and SNN executed the Revised Investment Agreement (Mid 2012, 35 MEuro);
- EPC contract approach is base for negotiations with potential prime contractors;
- Romanian Authorities are looking for new investors.



- EC positive opinion in relation with Project
- Licensing Basis Document;
- Definition of the Project
 - List of Design Changes
 - Applicable Codes and Standards
 - Safety goals (CDF, LRF, Seism)
 - Capacity factor
- Technical Inspections of the Existing Assets
- Radwaste Management Strategy;
- Preliminary Decommissioning Plan;
- Progress in EPC Procedure;
- Preliminary assessment of the Project feasibility.

Units 3 and 4 Stress Tests

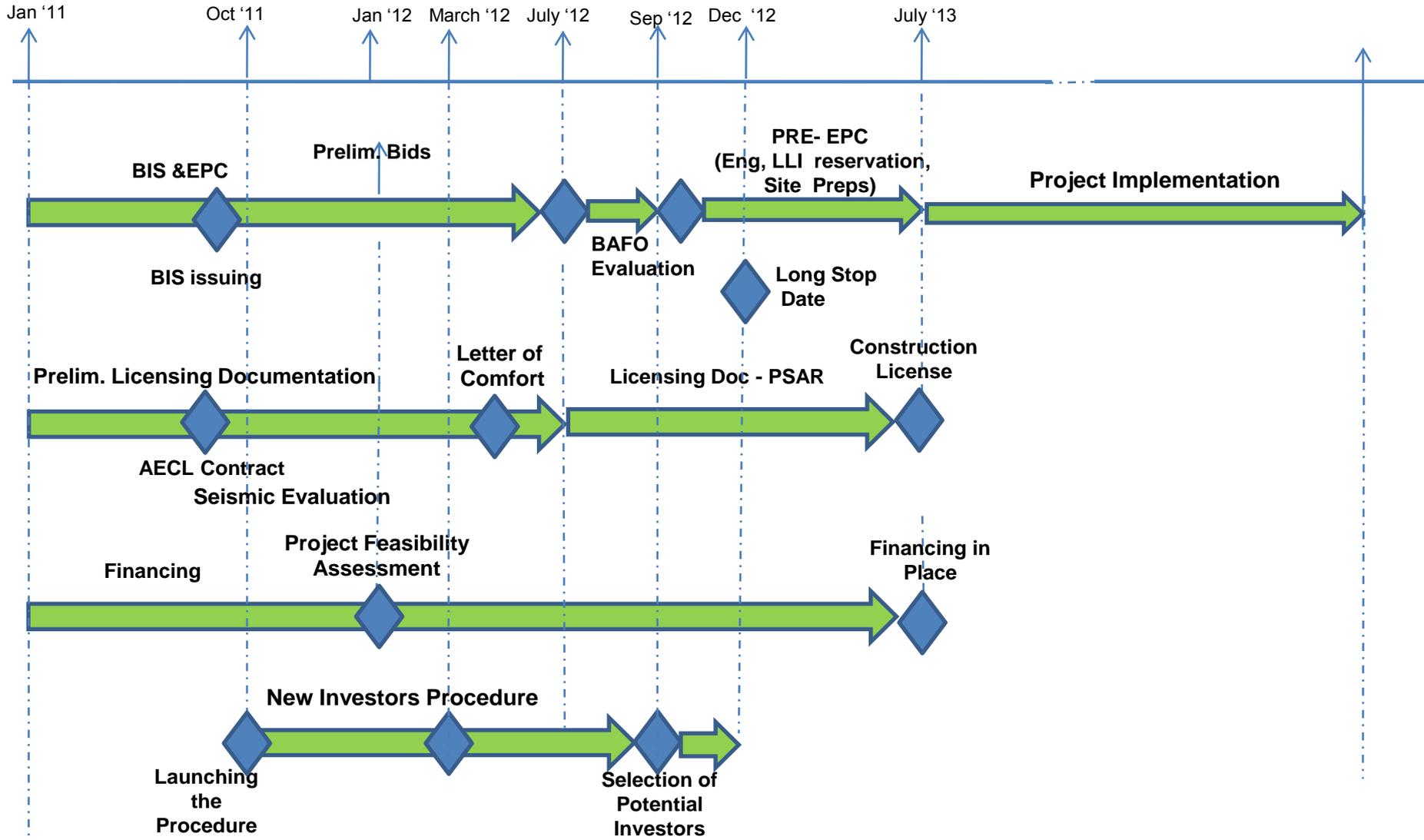
- A document similar with the stress test prepared in accordance with ENSREG specifications was produced with the aim of assessing the plant margins.
- The assessment shows that the systems are designed with sufficient robustness, redundancy and features such that the plant can be operated to prevent the progression of core damage or to mitigate the effects of core damage to protect the public.
- In some cases, improvements to the design have been identified that will further enhance the capability of the plant to cope with the analyzed extreme events.

Units 3&4 Safety Improvements

For Units 3&4, to address the response and mitigation of Beyond Design Basis Accidents (including Severe Accidents), several design changes were identified, such as:

- Upgrading the Emergency Water System to Emergency Heat Removal System;
- Moderator and Recovery System;
- Installation of Passive Autocatalytic Recombiners (PARs) inside the containment, to mitigate buildup of hydrogen;
- Increasing capacity of Class I batteries;
- External Calandria Vault Water Make-Up Line;
- Emergency Filtered Containment Venting System - to prevent containment failure and subsequent uncontrolled release of radioactivity under severe accident conditions.

Objectives - Timeline for Cernavoda NPP Units 3 & 4 – Pre-Project Phase



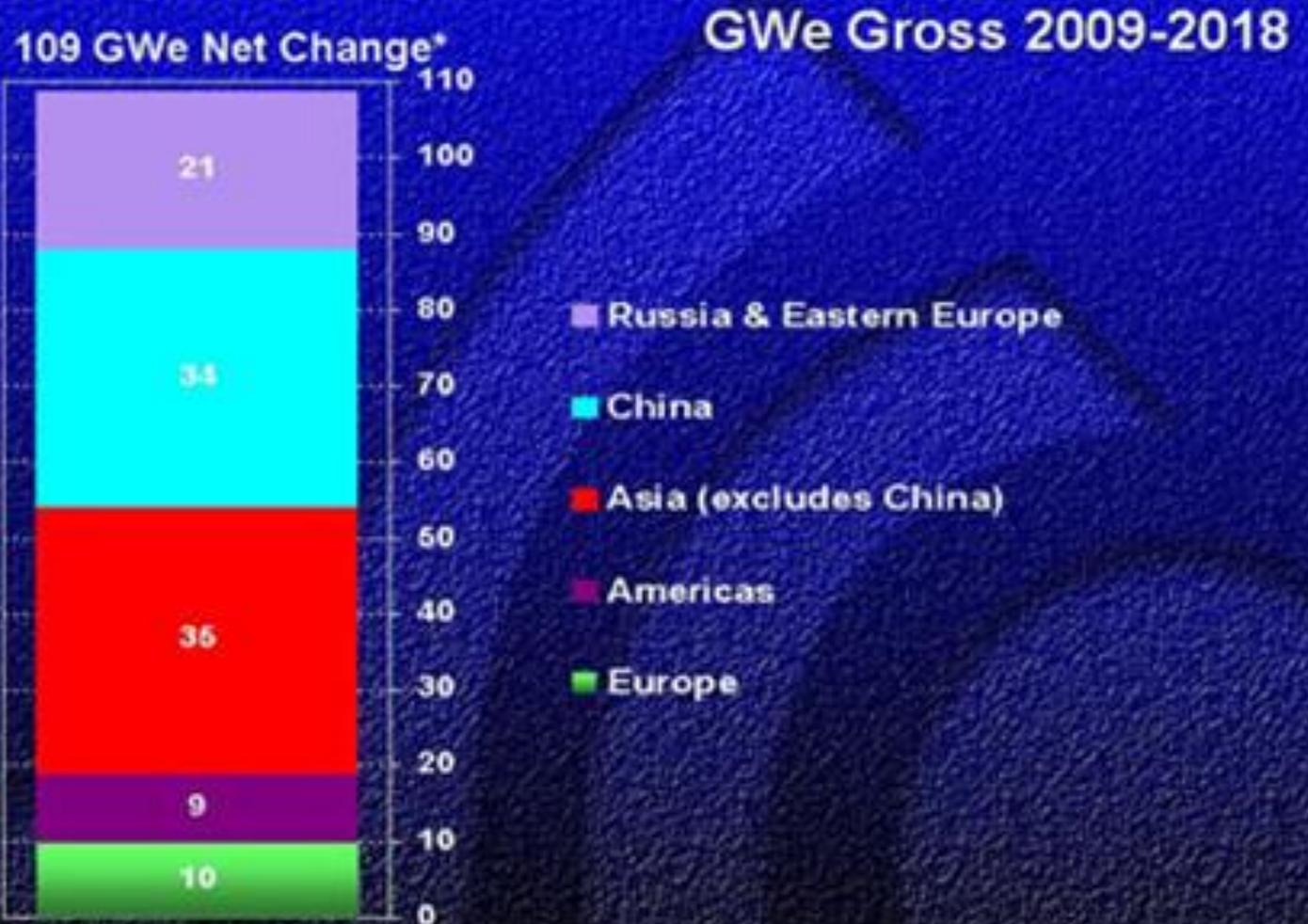
What we are offering?

- Proven technology
- Licensable design
- EU positive opinion
- O&M experience
- Existing infrastructure
- Existing assets
- Authorized site

External vendors in EU and vicinity: Lithuania and Turkey projects

- Lithuania's government and Hitachi Ltd have agreed the contractual framework for the Visaginas nuclear power plant project. The concession agreement, signed 30 March, covers rights for the project company to design, construct, operate and decommission the plant as well as host country and investor rights and obligations.
- Hitachi and Hitachi-GE Nuclear Energy Ltd (Hitachi-GE) proposed an advanced boiling water reactor (ABWR) for the Visaginas nuclear project, which is expected to be completed in 2020.
- Westinghouse also submitted a bid to build the Visaginas reactor, with its AP1000 design.
- In Turkey, the project company was set up to build, own and operate the Akkuyu nuclear power plant on Turkey's eastern Mediterranean coast, based on Russian technology. This will be Russia's first foreign plant on a build-own-operate basis and will comprise four 1200 MWe AES-2006 units as of US\$ 20 billion project.
- At this stage the 3 major Russian companies own the total share of the project but the Turkish firm Park Teknik and state generation company Elektrik Uretim AS (EUAS) are expected to take up significant shares, with Russian equity diminishing to 51%.

Cameco's New Build Outlook



Thank you!