How can we achieve that a NOAK (nth-of-a-kind) plant to be built for the first time in a given country still reaps the benefits of a NOAK instead of becoming a FOAK (first-of-a-kind) because it has to be adapted to this country’s specific requirements and regulations?

Françoise De Bois,, VP Nuclear Safety & Licensing, Reactors & Services, AREVA

April 21st, 2015
Reaping NOAK benefits

How can we achieve that a NOAK (nth-of-a-kind) plant to be built for the first time in a given country still reaps the benefits of a NOAK instead of becoming a FOAK (first-of-a-kind) because it has to be adapted to this country’s specific requirements and regulations?

Design
Safety demonstration
Supply chain management
Construction & Project execution
Project management
Project organization
Etc.

Site requirements
Regulatory framework
Licensing Steps
Regulatory Body expectations
Laws
Etc.

Licensing angle: specific provisions to reap the full benefits of a series

Regulatory Body
Licensee
Vendor
Regulating nuclear and radiation safety is a national responsibility

Regulatory bodies have to be independent bodies

Every regulatory body is unique

Licensing process is a major and essential project driver
Licensing process fundamentals 2/2

Independent National Regulatory Body (RB)

Regulatory Framework
RB requirements

Licensing Steps
RB expectations

To secure Licensability

To secure Project Execution
What is the part of the Regulatory Body?

The Regulatory Body should:

- Present the 1) up to date, 2) comprehensive, and 3) written regulatory framework
- Present the Licensing Steps, including scope and extent of surveillance, acceptance criteria, hold points and clarity on the use of the licensing results of the country of origin and/or of the Reference Plant
- Explain their decision making process
- Review and comment the “Licensing Plan” prepared by the Licensee and the Vendor
- In case of change of the regulatory requirements, declare it as soon as possible and recognize it is an evolution (to avoid “licensing creep”)
- Use metrics to communicate on Licensing earned value

Predictability and stability of the regulatory system are key
What is the part of the Licensee?

The Licensee should:

- Have a “NOAK attitude” and avoid additional non site-specific or non regulatory requirements
- Take advantage of the Vendor’s licensing experience in other countries
- Cascade all regulatory requirements, steps and needs in its requests
- Clearly define / assign licensing tasks and responsibilities for each party
- Include the Vendor in the exchanges with the Regulatory Body to ease mutual understanding
- Recognize the importance of the licensing tasks and their impact on the project time schedule from the very beginning
- Prepare the “Licensing Plan” with the Vendor

A “NOAK attitude” from the Licensee is key
What is the part of the Vendor?

The Vendor should:

- Always have a “Regulatory Body-focus” attitude
- Identify and bridge differences of understanding between each country’s licensing approach
- Advise the Licensee accordingly
- Recognize the possible need to adapt some of the processes, the architecture and contents of some deliverables to meet regulatory requirements and / or ease licensing
- Prepare the “Licensing Plan” with the Licensee

The capacity of the Vendor to adapt and meet other country’s requirements is key
### Key Take Aways

**Licensing angle: specific provisions to reap the full benefits of a series**

<table>
<thead>
<tr>
<th>Regulatory Body</th>
<th>Licensee</th>
<th>Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictability and stability of the regulatory system are key</td>
<td>A “NOAK attitude” from the Licensee is key</td>
<td>The capacity of the Vendor to adapt and meet other country’s requirements is key</td>
</tr>
</tbody>
</table>