

W17 Engineering and Regulatory Approaches to New and Innovative Design Submittals

The NRC is continuing to conduct reviews of Part 52 licensing applications. The majority of these Combined License (COL) and Design Certification (DC) applications utilize systems, structures and components (SSCs) - including design methods - for which there are past precedent and clear regulatory guidance. However, in some cases, the applicants have included SSCs or design methods for which minimal nuclear related experience is available and the regulatory guidance is either unclear or non-existent. As part of ongoing licensing actions, the NRC staff is actively engaged in reviews containing several such SSCs and design methods. This session will address successes and challenges identified in these efforts. In addition, staff expectations for submittals and subsequent review of these new and/or innovative SSCs or methods will be discussed.

Session Chair: Laura Dudes, Deputy Director, NRC/NRO

Speakers/Panelists:

Analysis and Design of Innovative Structures

Presentation View

Handout View

John Ma, Senior Structural Engineer, NRC/NRO

Bret Tegeler, Senior Structural Engineer, NRC/NRO

Aircraft Impact Assessment of New Reactor Designs

Presentation View

Handout View

Bhagwat Jain, Senior Structural Engineer, NRC/NRO

Gas Turbine Generators – US APWR

Presentation View

Handout View

Tania Martinez Navedo, Electrical Engineer, NRC/NRO

Extended-Duty Batteries

Presentation View

Handout View

Tania Martinez Navedo, Electrical Engineer, NRC/NRO

The UK Approach to the Assessment of Novel Designs in Nuclear Facilities

Presentation View

Handout View

Robert Jennings, Manager, Systems Assessment Unit, New Civil Reactor Build, Nuclear Installations Directorate, United Kingdom

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