



NRC-010

# **Combined License Application Review LNP Units 1 and 2**

## **Overview Panel July 28, 2016**

# **Overview of Staff Review of LNP 1 and 2 COL Application**

- **LNP COL Application and Contents**
- **AP1000 Design Certification**
- **LNP COL Overview – Safety**
- **LNP COL Overview – Environmental**
- **Summary of Staff Findings – COL Application**

# **LNP 1 and 2 COL Application**

- **In July 2008, Progress Energy Florida submitted the application**
- **In April 2013, the applicant changed its name to Duke Energy Florida, LLC (DEF)**
- **DEF would be licensed to construct and operate LNP 1&2**

# **LNP 1 and 2 COL Application**

- **Incorporates by reference the AP1000 Design Certification, Amendment 19**
- **Staff safety evaluation for AP1000 documented in NUREG-1793 and its supplements**

# **LNP 1 and 2 COL Application Contents**

- **LNP 1 and 2 plant-specific information**
- **COL Information Items**
- **Departures from certified design**

# **LNP 1 and 2 COL Overview: Safety Review**

- **Advisory Committee on Reactor Safeguards (ACRS) Review**
  - **Five AP1000 Subcommittee meetings and two Full Committee meetings held on COL application and safety evaluation report (SER)**

# **LNP 1 and 2 COL Overview: Safety Review**

<b>ACRS Reports</b>	<b>Staff Responses</b>
<b>12/7/11</b>	<b>1/24/12</b>
<b>4/25/12</b>	<b>5/29/12</b>
<b>4/18/16</b>	<b>5/22/16</b>

- **Final SER issued May 31, 2016**

# **LNP 1 and 2 COL Overview: Required Findings**

- **Findings – 10 CFR 52.97**
  - **Applicable standards and requirements of the AEA and the Commission's regulations have been met**
  - **Required notifications to other agencies or bodies have been duly made**



# **LNP 1 and 2 COL Overview: Required Findings**

- Reasonable assurance that facility will be constructed and will operate in conformity with the license, the AEA, and NRC regulations**
- Applicants are technically and financially qualified to engage in the activities authorized**

# **LNP 1 and 2 COL Overview: Required Findings**

- Issuance of the licenses will not be inimical to the common defense and security or to the health and safety of the public**
- Findings required by Subpart A of 10 CFR Part 51 have been made**

# **LNP 1 and 2 COL Overview: Environmental Review**

- **EIS completed in accordance with:**
  - **National Environmental Policy Act of 1969**
  - **10 CFR Part 51**
- **U.S. Army Corps of Engineers was a cooperating agency**

# **LNP 1 and 2 COL Overview: Environmental Review**

- **Staff follows a systematic approach to evaluate impacts**
  - **Solicit and reconcile scoping comments**
  - **Conduct technical review**

# **LNP 1 and 2 COL Overview: Environmental Review**

- Issue draft EIS for public/  
stakeholder comment**
- Consider and disposition  
comments in preparing final EIS**

# **LNP 1 and 2 COL Overview: Environmental Review**

- **Stakeholder involvement is a key aspect of the process**
- **Final EIS published April 27, 2012, as NUREG-1941**

# **LNP 1 and 2 COL Overview: Environmental Review**

- **Record of Decision:**
  - **States the decision**
  - **Identifies all alternatives considered**

# **LNP 1 and 2 COL Overview: Environmental Review**

- **Record of Decision, continued:**
  - **Discusses preferences among alternatives**
  - **States whether the Commission has taken all practicable measures, within its jurisdiction, to avoid or minimize environmental harm**



# **LNP 1 and 2 COL Overview: Environmental Review**

- **Findings – 10 CFR 51.107(a)**
  - **Requirements of Section 102(2)(A),(C), and (E) of NEPA and the regulations in 10 CFR Part 51, Subpart A, have been met**

# **LNP 1 and 2 COL Overview: Environmental Review**

- After considering the final balance among conflicting factors in the record of the proceeding, the appropriate action is issuance of the COLs**

# **LNP 1 and 2 COL Overview: Environmental Review**

- After weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, the COLs should be issued**

# **LNP 1 and 2 COL Overview: Environmental Review**

- The staff's NEPA review has been adequate**

# Overview of Panel Presentations

<b>Panel</b>	<b>Issues Discussed</b>	<b>Evaluation</b>
<b>Safety</b>	<ul style="list-style-type: none"><li>• <b>Geologic and geotechnical site characteristics</b></li><li>• <b>Roller compacted concrete foundation design</b></li><li>• <b>Condensate return design change</b></li></ul>	<b>FSER</b>
<b>Environmental</b>	<ul style="list-style-type: none"><li>• <b>U.S. Fish and Wildlife Service Biological Opinion</b></li><li>• <b>Alternative Sites</b></li></ul>	<b>FEIS</b>

# Acronyms

- **ACRS – Advisory Committee on Reactor Safeguards**
- **AEA – Atomic Energy Act**
- **CFR – Code of Federal Regulations**
- **COL – Combined License**
- **DC – Design Certification**
- **DEF – Duke Energy Florida, LLC**
- **EIS – Environmental Impact Statement**

# Acronyms

- **FEIS – Final Environmental Impact Statement**
- **FSER – Final Safety Evaluation Report**
- **LNP – Levy Nuclear Plant**
- **NEPA – National Environmental Policy Act**
- **SER – Safety Evaluation Report**