



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

| ACRS Reports | Staff Responses |
|---------------------|------------------------|
| 12/7/11 | 1/24/12 |
| 4/25/12 | 5/29/12 |
| 4/18/16 | 5/22/16 |

- **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

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

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**