



# **Combined License Application Review FERMI 3**

## **Overview**

**February 4, 2015**

# **Overview of Staff Review of Fermi 3 COL Application**

- **Fermi 3 COL Application and Contents**
- **ESBWR Design Certification (DC)**
- **Fermi 3 COL Overview – Safety Review**
- **Fermi 3 COL Overview – Environmental Review**
- **Summary of Staff Findings – COL Application**

# **Fermi 3 COL Application**

- **Detroit Edison Company (now DTE Electric Company) submitted the application on September 18, 2008**
- **Incorporates by reference:**
  - **ESBWR Design Certification Document (DCD), Revision 10**
  - **10 CFR Part 52, Appendix E, “Design Certification Rule for the ESBWR Design”**
- **Staff safety evaluation for ESBWR NUREG-1966 and NUREG-1966, Supplement 1**

# **Fermi 3 COL Application Contents**

- **Fermi 3 plant-specific information**
- **Standard content material in accordance with design-centered review approach**

# **Fermi 3 COL Overview: Safety Review**

- **Design-Centered Review Approach**
  - **Subject of Regulatory Issue Summary 2006-06**
  - **Endorsed by Commission in Staff Requirements Memorandum (SECY-06-0187)**
  - **Single technical review for each standard issue outside of the DC scope supports decisions on multiple COL applications referencing the same design center**

# **Fermi 3 COL Overview: Safety Review**

- **Review performed for reference COL (RCOL)**
- **Applied to subsequent COL (SCOL)**

# **Fermi 3 COL Overview: Safety Review**

- **Application of Design-Centered Review Approach**
  - **North Anna Unit 3 was original ESBWR R-COL**
  - **August 2009: Safety evaluation report (SER) with open items issued for North Anna**
  - **May 2010: Fermi 3 became R-COL**

# **Fermi 3 COL Overview: Safety Review**

- NRC staff verified standard content for North Anna directly applicable to Fermi 3**
- DTE responded to open items related to standard content in North Anna SER**

# **Fermi 3 COL Overview: Safety Review**

- **Advisory Committee on Reactor Safeguards (ACRS) Review**
  - **Six ESBWR Subcommittee meetings and one Full Committee meeting held related to Fermi 3 COL application and advanced final safety evaluation**
  - **ACRS letter report provided September 22, 2014**

# **Fermi 3 COL Overview: Safety Review**

- Staff response provided November 14, 2014**
- FSER issued November 18, 2014**

# **Fermi 3 COL Overview: Safety Review**

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

# **Fermi 3 COL Overview: Safety Review**

- **Summary of Findings, continued**
  - **There is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of the Act, and the Commission's regulations**

# **Fermi 3 COL Overview: Safety Review**

- **Summary of Findings, continued**
  - **Applicant is technically and financially qualified to engage in the activities authorized**
  - **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**

# **Fermi 3 COL Overview: Environmental Review**

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

# **Fermi 3 COL Overview: Environmental Review**

- **Staff follows a systematic approach to evaluate impacts**
  - **Solicit and reconcile scoping comments**
  - **Conduct technical review**
  - **Issue draft EIS for public/stakeholder comment**
  - **Consider and disposition comments in preparing final EIS**

# **Fermi 3 COL Overview: Environmental Review**

- Stakeholder involvement is a key aspect of the process**
- Final EIS published January 18, 2013, as NUREG-2105**

# **Fermi 3 COL Overview: Environmental Review**

- **A Record of Decision is required by 10 CFR 51.102**
- **Record of Decision is a concise public record of the decision that:**
  - **States the decision**
  - **Identifies all alternatives considered**
  - **Discusses preferences among alternatives**

# **Fermi 3 COL Overview: Environmental Review**

- States whether the Commission has taken all practicable measures, within its jurisdiction, to minimize environmental harm**

# **Fermi 3 COL Overview: Environmental Review**

- **Summary of Findings – 10 CFR 51.107(a)**
  - **The requirements of Section 102(2)(A),(C), and (E) of NEPA and the regulations in 10 CFR Part 51 have been met**
  - **After considering the final balance among conflicting factors in the record of the proceeding, the appropriate action is issuance of the COL**

# **Fermi 3 COL Overview: Environmental Review**

- After weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, the COL should be issued**
- The staff's NEPA review has been adequate**

# Fermi Overview of Panel Presentations

Panel Number	Issues to be Discussed	Evaluation
Safety Panel 1	Soil-Structure Interaction	FSER Chapters 2 and 3
Safety Panel 2	Fermi Actions in Response to Fukushima Near-Term Task Force Recommendations	FSER Chapter 20
Environmental Panel 1	<ul style="list-style-type: none"> <li>• Summary of process for developing the EIS</li> <li>• Analysis of Alternatives</li> <li>• Summary of Conclusions and Recommendations</li> </ul>	FEIS
Environmental Panel 2	<ul style="list-style-type: none"> <li>• Historic Preservation Related to Fermi 1</li> <li>• International Interactions</li> <li>• Implementation of the Continued Storage Rule</li> </ul>	FEIS