

**Detroit Edison**



10 CFR 52

May 31, 2007  
NRC3-07-0001

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

- References:
- 1) NRC Regulatory Issue Summary 2007-08: Updated Licensing Submittal Information to Support the Design-Centered Licensing Review Approach, dated April 16, 2007
  - 2) Letter from DTE Energy (Douglas R. Gipson) to USNRC (James E. Dyer), Notification of Combined Operating License (COL) Application Schedule, dated February 15, 2007

Subject: Voluntary Response to RIS 2007-08: Plans for the Submittal of a Combined License Application for the DTE Energy Fermi Site

DTE Energy is providing information in this letter in response to Regulatory Issue Summary, RIS 2007-08 (Reference 1), regarding DTE support of the NRC's design-centered review approach (DCRA) for Combined License Applications (COLA). The enclosed information applies to DTE Energy's intent to develop a COLA for the Fermi site in Newport, Michigan. The letter provides an overview of DTE Energy's plans, followed by the specific information requested by the RIS.

**Overview**

By letter dated February 15, 2007 (Reference 2), DTE Energy informed the NRC of its intent to prepare an application for a Combined License (COL) for a new nuclear power plant being considered for construction and operation at the Fermi 2 nuclear plant site in Newport, Michigan. DTE Energy has commenced activities to prepare the COLA on a schedule which would support submittal in the fourth calendar quarter of 2008.

DTE Energy has contracted Black & Veatch to support preparation of the COLA. Black & Veatch is performing a similar work scope for the Entergy River Bend COLA. DTE

Energy has also engaged Black & Veatch in an Owner's Engineer capacity to support the project.

Site geo-hydrology investigation monitoring well construction began in late April 2007. Monitoring well construction is expected to be complete by mid-June 2007. Core boring activities for the geotechnical data collection plan are expected to follow immediately, beginning sometime between June 12, 2007 and June 30, 2007.

DTE Energy has not yet selected a reactor technology. Geotechnical data collection will begin in parallel with reactor technology selection. The data collection plan is being designed to maintain technology neutrality and support characterization of the site for the five reactor technologies under consideration. It is initially focused on core borings that are common to more than one reactor technology, and continues with technology specific boring scopes of work. DTE Energy expects to finalize its reactor technology selection before December 31, 2007.

Philosophically, DTE Energy fully intends to maximize the benefit from the DCRA. This will be accomplished through not only referencing a standard Design Certification, but also by following a Reference-COL application (R-COL) through the licensing process without exceptions (*i.e.*, to be a Subsequent-COL application (S-COL), as defined in the DCRA). DTE Energy intends only to deviate from the R-COL where unique site characteristics would necessitate an exception.

The following subsections provide responses to the information requested in the Voluntary Response section of the RIS.

***Requested Licensing Submittal Information***

- Design-Centered Working Groups (DCWGs) – Following the selection of the reactor technology, DTE Energy intends to affiliate with the corresponding DCWG.
- Which applicant will be the R-COL applicant? – This will depend on the reactor technology decision. DTE expects to be a S-COL applicant referencing a R-COL application.
- When (month and year) will the COL application be made? What is the design, site location, and number of units at the site? – Preparation of the Fermi COLA is scheduled to be completed by September 30, 2008. While DTE Energy has authorized a substantial investment to prepare the COLA, a final decision to submit the application has not been made. The current schedule would support a submittal in October 2008. COLA preparation and site characterization currently are proceeding assuming a single unit. However, the option of licensing more than one unit has not been ruled out, should generation needs, technology attributes, economics, and other factors support such a decision.

- What portions of the COL application (chapters, sections, subsections) will be relying on the DC? Once the reactor technology is selected, DTE Energy intends to reference the selected reactor technology DC without exception.
- What portions of the R-COL application (chapters, sections, subsections) will be referenced (i.e., replicated verbatim) and what portions of the application are likely to be site-specific? Once the reactor technology is selected, DTE Energy intends to reference the R-COL application without deviation except where unique site characteristics would necessitate a deviation.
- When (month and year) will applicants complete the detailed design information to be verified under those inspections, tests, analyses, and acceptance criteria that are directed certification information (design acceptance)? Will this information be completed in a Design Certification amendment application, in the R-COL application, in S-COL application, in post-COL Final Safety Analysis Report updates, or a combination thereof? Having not yet selected a reactor technology, DTE Energy is not in a position to address this question at this time. DTE Energy intends to conform to the process and schedule established as part of the DCRA for the selected technology.

#### ***Site and Environmental Information***

- For ESP Applicants DTE does not plan to apply for an ESP.
- Does the applicant plan to submit an environmental report or limited work authorization request prior to other portions of the COL application? No.
- What scope and schedule does the applicant project for site characterization activities such as core borings and testing core samples? Site geo-hydrology investigation monitoring well construction began in late April 2007. Monitoring well construction is expected to be complete by mid-June 2007. Core boring activities for the geotechnical data collection plan are expected to follow immediately, beginning sometime between June 12, 2007 and June 30, 2007.

DTE Energy has not yet selected a reactor technology. Geotechnical data collection will begin in parallel with reactor technology selection. The data collection plan is being designed to maintain technology neutrality and support characterization of the site for the five reactor technologies under consideration. It is initially focused on core borings that are common to more than one reactor technology, and continues with technology specific boring scopes of work. DTE Energy expects to finalize its reactor technology selection before December 31, 2007.

- What interactions have taken place with local and State authorities and other Federal agencies to support licensing new reactors? – DTE Energy has communicated its intention to prepare a Combined License Application for a new plant at the Fermi site to a broad cross section of state and local officials. DTE

Energy has begun interactions with the Michigan Public Service Commission regarding the need of new electric generation.

***Plant Construction Requirements Information***

- Who are the vendors and consultants that are assisting in the preparation of the application? The NRC requests that the potential applicants submit a list of entities that are providing input to and are preparing the COL application under a QA Program. Black & Veatch, headquartered in Overland Park, KS have been selected to assist DTE Energy in the preparation of the Fermi COLA. The Black & Veatch Quality Assurance Program, which meets the requirements of 10 CFR 50, Appendix B and ASME NQA-1, is being applied to appropriate aspects of the work scope. Black & Veatch has overall responsibility for preparation of the Fermi COLA and B&V and its principal subcontractors will be governed by Black & Veatch QA requirements.
- What information do the applicants have regarding the timing of construction, the ordering of long lead time components, and other commitments to construction? Furthermore, what vendors will be designing, fabricating, and testing safety-related components for eventual plant construction? The specific responses to these questions will be technology dependent. If the plant is constructed, critical milestones from the Energy Act of 2005 are expected be met as follows:
  - First Safety-Related Concrete Poured – January 1, 2014
  - Commercial Operation - January 2017

DTE Energy appreciates the opportunity to assist the NRC in planning for this important activity. If you have any questions regarding this response or require further information, please contact Mr. Peter W. Smith, Director, Nuclear Projects, at (734) 586-4271.

Sincerely,



Douglas R. Gipson  
Executive Vice President, Power Generation

cc: L. J. Burkhart  
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