

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	
	)	
DTE ELECTRIC COMPANY	)	Docket No. 52-033-COL
	)	
(Fermi Nuclear Power Plant, Unit 3)	)	

AFFIDAVIT OF STEVEN D. THOMAS

I, Steven D. Thomas, do hereby state as follows:

1. I am Engineering Manager for Black & Veatch Corporation ("B&V"). In my current position I am responsible for the technical aspects of the COL project for the DTE Fermi site, including site investigation activities, site specific systems conceptual designs, document development, and quality assurance plan development, among other things. A statement of my professional qualifications is attached.
2. I am responsible for the paragraphs in the direct testimony on Contention 15 filed today that are marked with my initials.
3. I attest to the accuracy of those statements, support them as my own, and endorse their introduction into the record of this proceeding.
4. I hereby certify under penalty of perjury that the forgoing is true and complete to the best of my knowledge, information, and belief.

Executed in accord with 10 C.F.R. § 2.304(d),

signed electronically by Steven D. Thomas

Steven D. Thomas  
Engineering Manager  
Black & Veatch Corporation  
11401 Lamar Ave.  
Overland Park, KS 66211  
[thomassd@bv.com](mailto:thomassd@bv.com)

Dated at Overland Park, KS  
this 30th day of April 2013

## Steven D. Thomas

Senior Consultant /  
Project Mechanical -  
Nuclear Projects

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***Specialization:  
Nuclear Power Plant  
Licensing; Regulatory  
Issues; Programs;  
Configuration  
Management***

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### Education

Bachelor of Science, Nuclear  
Engineering, University of  
California, 1982

Westinghouse PWR Nuclear Plant  
SRO Certification

### Total Years Experience

29

### Joined Black & Veatch

2007

### Language Capabilities

English

Since joining Black & Veatch in January 2007, Steve Thomas has functioned as the Engineering Manager on the COL project for the DTE Fermi site. In this role, Steve is responsible for technical aspects of the project. This includes the site investigation activities, site specific systems conceptual designs, document development, quality assurance plan development, etc.

Prior to joining Black & Veatch, Steve Thomas advanced to a Principal Engineer/Design Engineering Supervisor at a two unit nuclear station. He was responsible for all mechanical issues on all assigned projects.

### REPRESENTATIVE PROJECT EXPERIENCE

*Black & Veatch*

*2007-Present*

Engineering Manager. Steve is currently the Engineering Manager for the COL project for the Detroit Edison Fermi project. In this role, Steve reports directly to the Project Manager and is responsible for technical aspects of the project. This includes the site investigation activities, site specific systems conceptual designs, document development, quality assurance plan development, etc.

Subsequent to submitting the COLA to the NRC, Steve has been involved with assisting with the regulatory reviews. In this role, Steve's responsibilities include interfacing directly with the client and outside agencies, and developing and managing responses to requests related to the application.

*Prairie Island Nuclear Generating Plant*

*2005-2006*

Design Engineering Supervisor. Prairie Island is one of several nuclear power plants operated as a fleet by the Nuclear Management Company (NMC). Steve supervised a diverse group of design engineers in the Configuration Management and Analyses Group. The Configuration Management and Analyses Group establish and maintain the Configuration Management Processes at Prairie Island. This group also provides the majority of the mechanical (hydraulic and thermal), electrical, and civil / structural analyses for the site. These analyses are either performed by personnel in the group, off-site vendors, or the fleet analyses department. These analyses may be relatively straightforward or quite complex, involving sophisticated computer modeling tools.

As supervisor of this group, Steve had responsibility for implementation and oversight of the processes used to perform

analyses and evaluate proposed changes to the facility. Associated responsibilities include participating in fleet teams, providing training, monitoring industry activities, implementing self assessments, responding during inspections and, overall, ensuring the quality of the products developed using these processes. The Configuration Management Group also maintains the Updated Safety Analyses Report, including providing the required updates to the Nuclear Regulatory Commission.

*Prairie Island Nuclear Generating Plant*  
*1997-2005*

Principal Engineer. As part of the Configuration Management group he has been involved in several design bases and configuration management related projects. These projects include design bases reconstitution efforts, performing or directing various types of analyses, responding to Regulatory Correspondence and assessing Industry experience.

In the role of Principal Engineer, Steve demonstrated the ability to work independently, taking the lead in his areas of responsibility. For example, Steve functioned as the site lead for response to significant regulatory issues. This included forming teams to evaluate the issues, determine the necessary actions, coordinate performance of the identified actions, and monitor the completion of these actions. In addition, when responding to selected issues, Steve also functioned as the fleet technical lead for the plants within the NMC. These responsibilities included coordinating the efforts of the technical leads at each NMC site and evaluating and implementing areas that the sites could gain efficiencies through working together.

Steve has been involved in other broad based industry initiatives involving important technical issues and revisions to change control processes used at nuclear power plants. These efforts involved interaction with personnel from other utilities (outside the NMC) and the Nuclear Regulatory Commission.

During this time, Steve also successfully completed the Nuclear Certification program at Prairie Island.

*Automated Engineering Services*  
*1995-1997*

Project Manager. Steve assisted Prairie Island with issue resolution stemming from assessment of licensing and regulatory initiatives at other facilities. Steve participated in a project to perform a comprehensive review and update of design bases documentation.

Technical efforts included interface with, and use of, computer based modeling tools to analyze hydraulic response to various system configurations, evaluation of component performance, working with other organizations to develop sophisticated computer modeling for two phase flow analyses, compartment pressure and temperature analyses, and ventilation system capability studies.

*TENERA*

*1990-1995*

Project Manager. Steve was assigned to the Systems Engineering Group with TENERA. He performed design and implementation reviews of electrical and mechanical systems. These reviews focused on ensuring components and associated systems satisfied their design and licensing bases. He successfully managed a program used to assess design discrepancies discovered during these reviews. When discrepancies were discovered, the significance of the discrepancy was evaluated, compliance with regulatory commitments was assessed and, when necessary, efficient and cost effective solutions were proposed.

*Mare Island Naval Shipyard*

*1983-1990*

Chief Test Engineer. As a Chief Test Engineer, Steve performed activities related to supervising and coordinating the activities of personnel (planning, engineers, and maintenance) engaged in nuclear repair, design modification, overhaul and testing. Planning and scheduling activities involved working closely with other groups such as the Ship Engineering Officers, Plant Design Organizations, and the Naval Reactors Office (the Regulatory Oversight Organization).