

Joseph H. Plona  
Site Vice President

6400 N. Dixie Highway, Newport, MI 48166  
Tel: 734.586.5910 Fax: 734.586.4172

~~Security-Related Information - Withhold Under 10 CFR 2.390~~

**DTE Energy**



10 CFR 73.5

November 19, 2009  
NRC-09-0059

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington D C 20555-0001

Reference: Fermi 2  
NRC Docket No. 50-341  
NRC License No. NPF-43

Subject: Request for Exemption from Physical Security Requirements

In accordance with the requirements of 10 CFR 73.5, Detroit Edison hereby requests Nuclear Regulatory Commission (NRC) approval of an exemption from specific requirements of 10 CFR Part 73, "Physical Protection of Plants and Materials" for Fermi 2 by extending the deadline for the implementation of certain measures required by the new rule from March 31, 2010 to May 31, 2011.

The NRC issued a final rule for new security requirements on March 27, 2009. Pursuant to the final rule and absent a formal exemption, the new security requirements must be implemented by March 31, 2010. Detroit Edison has evaluated these new requirements and determined that implementation of specific parts of the new requirements will require additional time to allow for the completion of significant physical modification upgrades to the existing security systems and structures.

Enclosure 1 provides the physical and programmatic security information to support this exemption request. Enclosure 2 contains a schedule showing milestones for each of the security modifications required to implement the new rule. The information provided in Enclosures 1 and 2 is considered security-related information associated with the physical protection of Fermi 2, as described in 10 CFR 2.390(d)(1). Accordingly, Detroit Edison requests that the information provided in Enclosures 1 and 2 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390. Enclosure 3 contains the environmental assessment for the security changes requested in the proposed exemption. Enclosures 4 and 5 are non-proprietary versions of Enclosures 1 and 2.

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

S001  
NRC

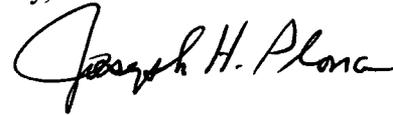
~~Security Related Information Withhold Under 10 CFR 2.390~~

Detroit Edison requests approval of this exemption request by January 29, 2010. This request for exemption from specific requirements of 10 CFR Part 73 was discussed with the NRC staff during a conference call on September 18, 2009.

There are no new commitments included in this document.

Should you have any questions or require additional information, please contact Mr. Rodney W. Johnson of my staff at (734) 586-5076.

Sincerely,



Enclosures

1. Request for Exemption from Physical Security Requirements (*Security Related Information – Withhold Under 10 CFR 2.390*)
2. Schedule of Milestones for Security Modifications (*Security Related Information – Withhold Under 10 CFR 2.390*)
3. Request for Exemption from Physical Security Plan Environmental Assessment
4. Non-Proprietary Version of Enclosure 1
5. Non-Proprietary Version of Enclosure 2

cc: NRC Project Manager  
NRC Resident Office  
Reactor Projects Chief, Branch 4, Region III  
Regional Administrator, Region III  
Supervisor, Electric Operators,  
Michigan Public Service Commission [w/o Enclosures 1 and 2]

Enclosures 1 and 2 contain Security Related Information – Withhold Under 10 CFR 2.390. Upon Separation, the cover letter and Enclosures 3, 4 and 5 are DECONTROLLED.

**Enclosure 3  
NRC-09-0059**

**Request for Exemption from Physical Security Plan  
Environmental Assessment**

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

**Request for Exemption from Physical Security Plan  
Environmental Assessment**

1. Describe any change to the types, characteristics, or quantities of non-radiological effluents discharged to the environment as a result of the proposed exemption.

Response:

There are no expected changes in the types, characteristics, or quantities of non-radiological effluents discharged to the environment associated with the proposed exemption. This application is associated with implementation of security changes. These security changes will not result in changes to the design basis requirements for the structures, systems, and components (SSCs) at Fermi 2 that function to limit the release of non-radiological effluents during and following postulated accidents. All the SSCs associated with limiting the release of offsite non-radiological effluents will therefore continue to be able to perform their functions, and as a result; there is no significant non-radiological effluent impact. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of non-radiological effluents. In addition, the method of operation of non-radiological waste systems will not be affected by this exemption.

2. Describe any changes to liquid radioactive effluents discharged as a result, of the proposed exemption.

Response:

There are no expected changes to the liquid radioactive effluents discharged as a result of this exemption. The proposed security changes will not interact to produce any different quantity or type of radioactive material in the reactor coolant system. These security changes will not result in changes to the design basis requirements for the SSCs at Fermi 2 that function to limit the release of liquid radiological effluents during and following postulated accidents. All the SSCs associated with limiting-the release of liquid radiological effluents will therefore, continue to be able to perform their functions, and as a result, there is no liquid radiological effluent impact.

3. Describe any changes to gaseous radioactive effluents discharged as a result of the proposed exemption.

Response:

There are no expected changes to the gaseous radioactive effluents discharged as a result of this exemption. The proposed security changes will not interact to produce any different quantity or type of radioactive material in the reactor coolant system. These security changes will not result

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

in changes to the design basis requirements for the SSCs at Fermi 2 that function to limit the release of gaseous radiological effluents during and following postulated accidents. All the SSCs associated with limiting the release of gaseous radiological effluents will therefore, continue to be able to perform their functions, and as a result, there is no significant gaseous radiological effluent impact.

4. Describe any change in the type or quantity of solid radioactive waste generated as a result of the proposed exemption.

Response:

These security changes will not result in changes to the design basis requirements for the structures, systems, and components (SSCs) at Fermi 2 that function to limit the release of solid waste during and following postulated accidents. All the SSCs associated with limiting the release of solid radioactive waste will therefore continue to be able to perform their function. Radiation surveys will be performed in accordance with plant radiation protection procedures on excavated dirt, such as inside the protected area or radiation control areas, that will be disposed of offsite. Any contaminated dirt will be handled in accordance with plant procedures. Fermi 2 has a radiation survey program and procedures to handle any contaminated excavated soil that is inside the protected area or radiation control areas. Therefore, these security changes will not result in changes to the type or quantity of solid radioactive waste generated.

5. What is the expected change in occupational dose as a result of the proposed exemption under normal and design basis accident conditions?

Response:

Under normal power operation there would be no expected radiological impact on the workforce. There are no other expected changes in normal occupational operating doses. Control room dose is not impacted by the proposed security changes. Therefore, these security changes will not result in changes in occupational dose as a result of the proposed exemption.

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

6. What is the expected change in the public dose as a result of the proposed change under normal and Design Basis Accident conditions?

Response:

Dose to the public will not be changed by the proposed security changes during normal operations. As noted in items 2, 3 and 4 above there is no basis to contemplate an increased source of liquid, gaseous or solid radiological effluents that could contribute to increased public exposure during normal operations and DBA conditions. The proposed security changes do not impact systems used during normal operation nor systems used to detect or mitigate a DBA.

7. What is the impact to land disturbance for the proposed security changes?

Response:

The proposed security changes include installation of a new Protected Area fence and relocating approximately 500 feet of Protected Area fence away from the Protected Area access portal. Installation of a new Protected Area fence is taking place close to the existing fence, inside the current isolation zone. The isolation zone was previously disturbed by construction activities. The 500 feet of Protected Area fence being relocated is being placed in a pre-existing parking lot; previously disturbed property. The remainder of the modifications will be performed inside the Protected Area.

There will be no impacts to historical and cultural resources because the security changes are to be made in previously disturbed areas. No changes to the National Pollution Discharge Elimination System permit are needed. There will not be an effect on the aquatic or terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act. There will be no impacts to essential fish habitat covered by the Magnuson-Steven's Act. There will be no impact to the air or ambient air quality.

Fermi 2 has a procedure in place to address land disturbances. The procedure requires a Environmental Excavation Permit and a Excavated Material Management Plan.

Conclusion:

There is no significant radiological environmental impact associated with the proposed security changes at Fermi 2. These proposed changes will not affect any historical sites nor will they affect non-radiological plant effluents.

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

**Enclosure 4**  
**NRC-09-0059**

**Non-Proprietary Version of Enclosure 1**

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

## **Request for Exemption from Physical Security Requirements**

### **Overview:**

The basis for requesting an extension of the March 31, 2010 date to May 31, 2011 is the need for completion of significant physical modifications to comply with the new 10 CFR 73 rule requirements. While some of the work scope required by the 10 CFR 73 rule change requirements will be completed by March 31, 2010, some modifications will require additional time to complete.

Prior to the 10 CFR 73 rule change, Detroit Edison recognized that the current Fermi 2 security system and infrastructure required upgrades to meet industry standards, enhance the site's protective strategy and to replace aging security equipment. The plan to upgrade the security system was approved by plant management in April 2008 with an original completion date of August 2011. [

]

Following publication of the 10 CFR 73 rule change, additional work scope was identified above and beyond the original security system upgrade plans. [

]

Detroit Edison is investing significant resources into the 10 CFR 73 rule compliance and continuing upgrade of the existing security system. The proposed schedule represents a significant amount of physical work and accounts for the Fermi 2 organizational capacity required to address the scope, complexity, and integration of the 10 CFR 73 rule change security modifications and the planned security upgrade modifications.

Throughout implementation of the 10 CFR 73 rule change and continuing security system upgrade activities, the Fermi 2 security routines, response capability and compensatory measures, when applied, will be managed and coordinated in accordance with the approved Fermi 2 Physical Security Plan. There will be no compromise to the Fermi 2 Physical Security Plan.

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

Security Upgrades Approved for Implementation Prior to the March 27, 2009 Federal Register Notice:

While realizing that the 10 CFR 73 rule changes have a higher priority for workflow, upgrades to the Fermi 2 security system will continue to be designed and implemented in coordination with modifications required for compliance with the new rule.

- [

]

Modifications Required for Compliance with the New Rule to be completed by March 31, 2010

- [

]

Enclosures 1 and 2 contain Security Related Information – Withhold Under 10 CFR 2.390. Upon Separation, the cover letter and Enclosures 3, 4 and 5 are DECONTROLLED.

- [

]

Modifications Required for Compliance with the New Rule that Extend Beyond March 31, 2010

- [

]

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

The following was taken into consideration in order to create the Fermi 2 schedule for completion of the modifications supporting the 10 CFR 73 rule change:

- Fermi 2 security routines, response capability and compensatory measures, when applied, will be managed and coordinated in accordance with the approved Fermi 2 Physical Security Plan. There will be no compromise to the Fermi 2 Physical Security Plan.
- The organizational capacity required to address the scope, complexity, and integration of the 10 CFR 73 rule change security modifications and planned security upgrade modifications.
- [ ]
- A phased approach is used in scheduling security modifications to equipment in order to address the limitations of taking redundant equipment out of service for both alarm stations.
- Security involvement to in-process outage workers and to provide for normal security functions during the upcoming fourteenth refueling outage planned to start in the fall of 2010.
- Contingencies have been built into the schedule to accommodate complications due to construction and weather issues.

A schedule showing milestones for each of the security modifications is provided in Enclosure 2.

**Summary:**

Detroit Edison requests an extension of the March 31, 2010 date, required by the new 10 CFR 73 rule change, to May 31, 2011 in order to implement physical modifications addressing the new rule requirements.

Throughout implementation of the upgrades and 10 CFR 73 rule implementation activities, Fermi 2 security routines, response capability and compensatory measures, when applied, will be managed in accordance with the approved Fermi 2 Physical Security Plan. There will be no compromise to the Fermi 2 Physical Security Plan.

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

**Enclosure 5**  
**NRC-09-0059**

**Non-Proprietary Version of Enclosure 2**

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

**Schedule of Milestones for Security Modifications**

Modifications Required for Compliance with the New Rule to be completed by March 31, 2010

[

]

Modifications Required for Compliance with the New Rule that Extend Beyond March 31, 2010

[

]

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.

[

]

Enclosures 1 and 2 contain Security Related Information –  
Withhold Under 10 CFR 2.390. Upon Separation, the cover  
letter and Enclosures 3, 4 and 5 are DECONTROLLED.