

## PMFermiCOLPEm Resource

---

**From:** Fringer, John  
**Sent:** Thursday, September 29, 2011 2:01 PM  
**To:** westmorelandr@dteenergy.com  
**Cc:** FermiCOL Resource  
**Subject:** FW: ER06-683 - Draft Fermi 1 MOA  
**Attachments:** MOA for Fermi 1 Demolition 7-6-11 final.docx; SHPO document guidelines.doc; List of Fermi 1 Demolition Potentially Interested Parties.docx

---

**From:** Grennell, Brian (MSHDA) [<mailto:GrennellB@michigan.gov>]  
**Sent:** Tuesday, September 27, 2011 5:15 PM  
**To:** Fringer, John  
**Subject:** RE: ER06-683 - Draft Fermi 1 MOA

John,

Here is the MOA with comments from our legal affairs counsel. It's mostly small stuff, but the biggest issue is the recordation (stipulation I). You reference a preliminary NR eligibility report submitted to us 2 years ago as serving as a recordation document, but I'm afraid that is not sufficient. Attached are the Michigan SHPO recordation guidelines that we typically include as an appendix to the MOA. Take a look and give me a call with any questions.

Thanks,

Brian G. Grennell  
Cultural Resource Management Specialist  
State Historic Preservation Office  
Michigan State Housing Development Authority  
702 W. Kalamazoo Street, P.O. Box 30740  
Lansing, MI 48909-8240

Phone (517) 335-2721 Fax (517) 335-0348  
[Grennellb@michigan.gov](mailto:Grennellb@michigan.gov) [www.michigan.gov/shpo](http://www.michigan.gov/shpo)

---

**From:** Fringer, John [<mailto:John.Fringer@nrc.gov>]  
**Sent:** Monday, September 26, 2011 7:16 AM  
**To:** Grennell, Brian (MSHDA)  
**Cc:** Olson, Bruce  
**Subject:** ER06-683 - Draft Fermi 1 MOA as you requested in your 9/23/11 voicemail  
**Importance:** High

Dear Mr. Grennell,

The subject MOA is attached per your request. Unless an extension is requested, comments on this MOA are due by COB on Wednesday, 9/28/11 as acknowledged by Ms. Faes in the attached e-mail.

Thank you for your cooperation.

Regards,  
John

---

John Fringer, P.E.  
Environmental Project Manager

U.S. Nuclear Regulatory Commission  
Office of New Reactors  
Mailstop: T-7F27  
Washington, DC 20555-0001  
phone: (301) 415-6208  
fax: (301) 415-5399  
e-mail: [john.fringer@nrc.gov](mailto:john.fringer@nrc.gov)

**Hearing Identifier:** Fermi\_COL\_Public  
**Email Number:** 938

**Mail Envelope Properties** (26E42474DB238C408C94990815A02F096898B3FE29)

**Subject:** FW: ER06-683 - Draft Fermi 1 MOA  
**Sent Date:** 9/29/2011 2:01:21 PM  
**Received Date:** 9/29/2011 2:01:23 PM  
**From:** Fringer, John

**Created By:** John.Fringer@nrc.gov

**Recipients:**

"FermiCOL Resource" <FermiCOL.Resource@nrc.gov>  
Tracking Status: None  
"westmorelandr@dteenergy.com" <westmorelandr@dteenergy.com>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1882	9/29/2011 2:01:23 PM
MOA for Fermi 1 Demolition 7-6-11 final.docx		29959
SHPO document guidelines.doc	63554	
List of Fermi 1 Demolition Potentially Interested Parties.docx		27302

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

MEMORANDUM OF AGREEMENT  
BETWEEN  
THE U.S. NUCLEAR REGULATORY COMMISSION  
AND THE MICHIGAN STATE HISTORIC PRESERVATION OFFICER  
REGARDING THE DEMOLITION OF THE  
ENRICO FERMI ATOMIC POWER PLANT, UNIT 1 FACILITY LOCATED  
IN MONROE COUNTY, MICHIGAN  
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
PURSUANT TO 36 CFR 800.6(b)(1)

WHEREAS, the United States Nuclear Regulatory Commission (NRC), through its review of the Fermi Atomic Power Plant, Unit 3 (Fermi 3) combined license (COL) application pursuant to 10 CFR 51, has determined that the construction of the proposed Fermi 3 facility will have an adverse effect upon the Enrico Fermi Atomic Power Plant (Fermi 1), which appears to meet the criteria for listing in the National Register of Historic Places (NRHP); and

WHEREAS, the NRC has consulted with the Michigan State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 USC 470f); and

WHEREAS, the NRC and SHPO have participated in the consultations and the NRC has invited Detroit Edison Company (DTE), as owner of the Fermi 1 property and NRC general licensee pursuant to 10 CFR Part 50, to be a signatory to this Memorandum of Agreement (MOA) in accordance with 36 CFR 800.6(c)(2);

NOW, THEREFORE, the NRC, DTE, and the SHPO agree that the demolition of Fermi 1 (Project) shall be implemented in accordance with the following stipulations in order to take into account the effects of the Project on historic properties.

STIPULATIONS

DTE shall notify the NRC and the Michigan SHPO of completion of Stipulations I and II prior to the demolition of the Fermi 1 structure.

I. RECORDATION

A. The NRC will document the Fermi Atomic Power Plant (Fermi I) so that there is a permanent record of their existence. The recordation packages shall follow the SHPO Documentation Guidelines (Appendix A) and shall be submitted to the SHPO for review and approval.

B. The completed Fermi Atomic Power Plant (Fermi I) documentation package shall be submitted to the SHPO for review within one (1) year of the date of this agreement. The approved original documentation package shall be submitted to the SHPO for deposit in the State Archives of Michigan and another original copy of the documentation shall be submitted to the Monroe County Library's Ellis Reference &

Information Center.

A. DTE has provided (in 2009) the SHPO with the following original recordation documents:

- "Preliminary National Register of Historic Places Evaluation for the Enrico Fermi Atomic Power Plant", Commonwealth Cultural Resources Group, March 2009.
- "Fermi 1: New Age for Nuclear Power", E. Alexanderson and H. Wagner, editors, published by the American Nuclear Society, 1979. 454 pages.

B. The above documents shall be deposited by the SHPO in the State Archives of Michigan and another original copy of the documentation shall be submitted by DTE to the Monroe County Library's Ellis Reference & Information Center.

**Comment [DOIT1]:** A preliminary NR eligibility study is not the same as recordation. The SHPO has recordation guidelines that we use for any documentation prepared as mitigation, which in addition to a historical narrative requires archival quality photographs.

**Comment [DOIT2]:** I don't have a record of this.

**Formatted:** Bullets and Numbering

## II. EXHIBIT

DTE, in consultation with the American Nuclear Society and/or other interested parties and the SHPO, shall develop and establish a public exhibit regarding the history of the Fermi 1 Plant. The parties shall consult to develop a mutually acceptable plan for the scope, location, design and duration of this exhibit.

**Comment [DOIT3]:** Is this referring to signatories or concurring parties? If so, specify that. If there are other interested parties, they should have been included long ago in the consultation process.

**Comment [DOIT4]:** This should be more defined. This was done for Big Rock, use them as an example

## III. AMENDMENT

The NRC, the SHPO or DTE may propose to the other parties that this MOA be amended, whereupon the parties will consult in accordance with 36 CFR 800.6(c)(7) to consider such an amendment.

## IV. DISPUTE RESOLUTION

Disputes regarding the completion of the terms of this agreement shall be resolved by consultation between the signatories. If, within thirty (30) days of an objection to this agreement, the signatories cannot agree on a resolution, any one of the signatories may request the participation of the Advisory Council on Historic Preservation (Council) to assist in resolving the dispute in accordance with 36 CFR 800.6(b)(1)(v).

**Comment [DOIT5]:** If referring to this document as the "agreement" it should be defined as such earlier on in the document.

## V. TERMINATION

Upon completion of Stipulations I and II, if this MOA is not amended following the consultation set out in Stipulations III and IV, it may be terminated by any signatory or invited signatory. The signatory proposing to terminate this MOA shall so notify the other signatories, explaining the reasons for termination and affording them at least 30 days to consult and seek alternatives to termination. Within 30 days following this notification of termination, any one of the signatories shall notify the other signatories if it will: a) initiate consultation to execute a subsequent MOA that explicitly terminates or supersedes its terms; or b) request the comments of the Council under 36 CFR 800.7(a) and proceed accordingly. Upon completion (i.e., conclusion) of the exhibit established in Stipulation II, DTE shall offer exhibit items pertaining to the history of Fermi 1 to local, State and Federal agencies and non-profit organizations potentially interested in permanent retention or display of these items.

**Comment [DOIT6]:** If stipulations I & II are completed, the MOA is already discharged and there is no need to terminate it. We recommend rewording this paragraph to address termination for cause, or terminating by convenience.

**Comment [DOIT7]:** This really isn't appropriate for the termination stipulation. It should be moved to Stipulation II)

Execution of this MOA by the NRC, DTE, and the Michigan SHPO and implementation of its terms evidence the NRC has afforded the Council an opportunity to comment on the Project and its effects on historic properties and the NRC has taken into account the effects of the Project on historic properties.

**SIGNATORIES:**

UNITED STATES NUCLEAR REGULATORY COMMISSION

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Scott Flanders, Director,  
Office of New Reactors, Division of Site and Environmental Reviews

MICHIGAN STATE HISTORIC PRESERVATION OFFICER

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Brian D. Conway, State Historic Preservation Officer

**INVITED SIGNATORY:**

DETROIT EDISON COMPANY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Peter W. Smith, Director  
Nuclear Development - Licensing & Engineering

## **MICHIGAN STATE HISTORIC PRESERVATION OFFICE DOCUMENTATION GUIDELINES**

The following guidelines provide instruction for producing permanent documentation of historic properties. Following submittal to the State Historic Preservation Office, the photos produced will be transferred to the State Archives, where they will be maintained and made available to the public for research purposes. In many cases, this documentation will constitute the only visual public record of a resource. It is therefore important that reports, drawings and photographs adequately depict the salient visual characteristics of the resource, and that they be produced using archivally stable materials and procedures.

The specifications outlined in this memorandum are intended to ensure that the material will be of high quality and remain in usable condition for many years to come. The guidelines were adapted from those used for submitting nominations to the National Register of Historic Places, as described in **National Register Bulletin 16: *Guidelines for Completing National Register of Historic Places Forms***. The complete text of this and other National Register Bulletins may be found on the web at <http://www.nps.gov/history/nr/publications/>.

### **I. REPORTS - GENERAL INSTRUCTIONS**

Reports should be printed on archival paper and be 8½ by 11 inches in size.

### **II. DESCRIPTIVE AND HISTORICAL NARRATIVES**

The report should contain a descriptive and historical narrative about the resource(s). The descriptive overview should concisely but thoroughly describe the resource, including discussion of its site and setting; overall design and form, dimensions, structural character, materials, decorative or other details, and alterations. The historical narrative should provide an account of the resource's history and explain its significance in terms of the national register criteria (information about the criteria for listing a resource in the national register may be found on the web at [http://www.nps.gov/history/nr/publications/bulletins/nrb15/nrb15\\_2.htm](http://www.nps.gov/history/nr/publications/bulletins/nrb15/nrb15_2.htm)). Published and unpublished sources should be used as needed to document the resource's significance. For bridges and public structures, public records and newspapers should be used for information concerning the historical background and construction of the resource and to identify those involved in its design and construction. All sources of information (including author, title, publisher, date of publication, volume and page number) should be listed in a bibliography.

### **III. MAPS**

Documentation for the historical narrative must include one or more maps that encompass the whole development, including:

- **USGS Map** – an original United States Geological Survey (USGS) topographical map indicating the location of the subdivision and listing its UTM coordinates.
- **Other Map(s)** - The maps must show the locations of all historic and non-historic features of districts and complexes. If more than one map is required to cover the entire district, a key map should illustrate the entire district and its boundaries.

**Information District Maps Must Provide**

- District or property name
- Name of community, county, and state
- Significant natural features such as lakes and rivers, with names
- All streets, railroad lines, old railroad grades, and any other transportation rights of way, labeled in bold print with their names
- Lot or property lines
- Outlines or representations for all surveyed properties
- Patterned coding of footprints or representations of all buildings to indicate whether they are contributing or non-contributing to the district's or complex's historic character and significance. The outlines or representations of contributing resources must be darkened, while they are left light for non-contributing resources.
- For districts, street addresses for all properties listed in the description's inventory section; if the properties have numbered street addresses, no other form of identification may appear on the map.
- Boundary of the property associated with the district or complex property.
- Key identifying any symbols used
- North directional arrow
- Scale bar (in case map is copied in larger or smaller format)

Do Not:

- Use color coding. Photocopying in black and white will render color coding unreadable.

### **Map Standards**

The final copies of maps must be printed on white paper meeting the national register's standards for archival stability – 20 pound acid-free paper with a two percent alkaline reserve. Two **original** copies must be provided of all maps and site plans. Tape, staples, and adhesive labels may not be used. Maps should be in 8 ½" X 11" format, if possible. Map sheets larger than 11" X 17" are not acceptable.

The district map should show both the lot lines and the outlines of the buildings. For business districts containing buildings that occupy most of their lots, the maps must show the building outlines. Outside of business districts, surveyed buildings can be shown by square boxes if maps showing building outlines are not available. Monuments and other objects may be represented by circles or dots.

### **IV. DRAWINGS - GENERAL INSTRUCTIONS**

Drawings should be drawn or printed on archival paper and folded to fit an archival folder approximately 8½ by 11 inches. Use coding, crosshatching, numbering, transparent overlays, or other standard graphic techniques to indicate the information. Do not use color because it can not be reproduced by microfilming or photocopying. Drawings should be used to document the existing condition of the resource, the evolution of a resource, alterations to a building or complex .of buildings, floor plans of interior spaces. - Site plans should have a graphic north arrow and include locations and types of trees, shrubs and planting beds. All architectural and site



plans should include dimensions indicating the overall size of buildings, sizes of major interior spaces and distances between major site features. If original drawings of the resource(s) exist, add a graphic scale the drawings and reproduce them to fit on 8½ by 11 inch archival paper. Photographic reductions are permissible provided they meet the photographic requirements specified in these guidelines.

## **V. PHOTOGRAPHS - GENERAL INSTRUCTIONS**

Submit clear and descriptive photographs and negatives in acid-free envelopes. Photographs should provide a clear visual representation of the historic integrity and significant features of the resource. The number of photographs needed will vary according to the project and the nature of the resource. The attached article by David Ames, *A Primer on Architectural Photography and the Photo Documentation of Historic Structures* (Vernacular Architecture Forum News, no date) provides helpful information for photographing buildings and structures. This article is available on the web at

<http://dspace.udel.edu:8080/dspace/bitstream/19716/2831/1/A%20primer%20on.pdf>.

## **GUIDELINES FOR PHOTOGRAPHIC COVERAGE**

Photography should include at least two general views of each building to be demolished, each if possible showing two sides, so that all four sides are photographed, plus at least one streetscape view looking in each direction of the part of the street in which each building is located. Thus, for each building, six views, unless several buildings are in one short stretch of the same street. If there are any examples left of any of the same building form that retain a high state of integrity, photos should be taken of one sample building for each building form, two views of each together showing all four sides.

### **Buildings, Structures and Objects**

- Submit one or more views to show the principal facades and the environment or setting in which the resource is located;
- Additions, alterations, intrusions, and dependencies should appear in the photographs;
- Include views of interiors, outbuildings, landscaping, or unusual details if the significance of the resource is entirely or in part based on them.

### **Historic and Archaeological Sites**

- Submit one or more photographs to depict the condition of the site and any above-ground or surface features and disturbances;
- If they are relevant to the site's significance, include drawings or photographs that illustrate artifacts that have been removed from the site;
- At least one photograph should show the physical environment and configuration of the land making up the site.

## **BASIC TECHNICAL REQUIREMENTS**

Photographs must be:

- at least 5 x 7 inches, preferably 8 x 10 inches, unmounted (do not affix the photographs to paper, cards, or any other material); photographs with borders are preferred;
- submitted in acid free envelopes; the envelopes should be labeled in pencil (see labeling instructions below).

### **Envelope Labeling Instructions**

Neatly print the following information on the upper right corner of the envelope in soft **lead pencil**:

1. Name of the resource;
2. Street Address, township, county, and state where the resource is located;
3. Name of photographer;
4. Date of photograph;
5. Description of view indicating direction of camera;
6. Photograph number.

Do not use adhesive labels for this information.

### **Film Photography**

- Photographs must be printed on double or medium-weight black-and-white paper having a matte, glossy, or satin finish; fiber-based papers are preferred; resin-coated papers that have been processed automatically will be accepted provided they have been properly processed and thoroughly washed; we recommend the use of a hypo-clearing or neutralizing agent, and toning in selenium or sepia to extend the useful life of the photographs;
- The negatives must be submitted with the prints. Each strip of negatives should be submitted in acid free envelopes that have the following information submitted in soft lead pencil in the upper right corner of the envelope.

1. Name of the resource;
2. Name of the photographer;
3. Date of photograph;
4. Negative numbers

### **Digital Photography**

#### **Camera:**

BEST: At Least 6 megapixel digital SLR Camera

Acceptable: Minimum 6 megapixel point-and-shoot digital camera

Acceptable: 2 – 5 megapixel SLR or point-and-shoot digital camera

Not acceptable:

- Camera phones
- Disposable or single-use digital cameras
- Digital cameras with fewer than 2 megapixels of resolution

**Image format:**

BEST: First generation Tag image file format (TIFF) or RAW

Acceptable:

- Joint Photographic Experts Group (JPEG) converted to TIFF
- JPEG must not be altered in any way prior to conversion
- After the image has been saved as a TIFF, use the guidelines outlined in the section titled “Labeling the Image.”

**Capturing the Image:**

BEST: Minimum 6 megapixels (2000 x 3000 pixel image) at 300 dpi

Acceptable: Minimum 2 megapixels (1200 x 1600 pixel image) at 300 dpi

**Printer paper and inks<sup>1</sup>:**

BEST Inks: Manufacturer recommended pigmented ink for photograph printing

- Some examples:
  - Epson UltraChrome K3
  - Kodak No. 10 Pigmented Inks
  - HP Vivera Pigment Inks
  - Epson Claria “Hi-Definition Inks”
  - Epson DuraBrite Ultra Pigmented Inks
  - HP Vivera 95 dye-based inks

BEST Papers: Photographic Matte Paper

Not acceptable:

- Regular copy or printer papers
- Glossy photographic paper papers
- Paper or ink not equivalent to the examples listed above
- Disk only, without prints

**The Disk:**

BEST: CD-R - with patented Phthalocyanine dye and 24 Karat gold reflective layer.

- Examples:
  - Delkin's Archival Gold™ (also referred to as eFilm® Archival Gold)
  - MAM-A Gold™(also know as Gold-On-Gold™)
  - Verbatim UltraLife™ Gold Archival Grade CD and DVD-R

Acceptable: CD-R or DVD-R

Not acceptable: CD-RW or DVD- RW

**Labeling the Disk**

BEST: Labels printed directly on the disk by way of inkjet or laser printers

Acceptable: Labeled using CD/DVD safe markers,

- Examples:

---

<sup>1</sup> The list below includes products known at this time to meet the minimum documentation specifications established for the compilation of National Register nomination documents. The list is not intended to be restrictive or comprehensive, and does not constitute, and shall not be taken as, endorsement by the State Historic Preservation Office of any of the specific products or manufacturers identified.

-Sharpies™

-Prismacolor®

Not acceptable: Ammonia or solvent based markers

**VI. ADDITIONAL ITEMS**

In addition to the items described in these guidelines, the SHPO may request additional documentation, depending on the nature and significance of a particular resource.

If you have any questions, please contact the Cultural Resources Management Specialist at 517-335-2721.

State Historic Preservation Office  
Michigan Historical Center  
702 West Kalamazoo Street  
PO Box 30740  
Lansing, MI 48909-8240

8/11

## List of Fermi 1 Demolition Potentially Interested Parties

Parties who agreed to be contacted (from Detroit Edison e-mail dated 5/25/11):

### **National Museum of Nuclear Science & History**

James Walther, Director  
601 Eubank SE  
Albuquerque, NM 87123  
505-245-2137  
e-mail: [jwalther@nuclearmuseum.org](mailto:jwalther@nuclearmuseum.org)

### **Don Ferencz - Former Fermi 1 Employee**

12298 Buckingham,  
Southgate, Michigan 48195

### **Philip M. Harrigan - former Fermi 1 employee**

1612 Tony Ct.  
Monroe, MI 48162

Other Potentially Interested Parties:

### **American Nuclear Society** (<http://www.new.ans.org/contact/>)

Laura Scheele  
Manager, Communications & Policy  
American Nuclear Society  
555 North Kensington Avenue  
La Grange Park, Illinois 60526

- 5/30/11: J. Fringer left voicemail on phone of Sharon Kerrick (*Public Information & Constituency*; 708-579-8230)
- 6/1/11: J. Fringer received a voicemail from Laura Scheele, Manager, Communications & Policy. Per my 6/2/11 phone conversation with Ms. Scheele, she is interested in being contacted, especially because Fermi 1 is a recipient of ANS's "Nuclear Historic Landmark Award" (see <http://www.new.ans.org/honors/va-nuclandmark>)

### **Monroe County Historical Museum and Historical Commission**, 126 South Monroe Street, Monroe, Michigan 48161

([http://www.co.monroe.mi.us/government/departments\\_offices/museum/index.html](http://www.co.monroe.mi.us/government/departments_offices/museum/index.html))

- 6/9/11: Per J. Fringer's phoncon (at 734-240-7780) with John Gibney, Museum Director, he is interested in exploring options for memorializing Fermi 1 at the museum.

**Michael R. Hartman, Assistant Professor**

Department of Nuclear Engineering and Radiological Sciences

University of Michigan

2355 Bonisteel Blvd

Ann Arbor, MI 48109-2104

(734) 615-5978 (phone)

(734) 763-4540 (fax)

e-mail: [mikehart@umich.edu](mailto:mikehart@umich.edu)

- 6/28/11: Per e-mail from Dr. Hartman (to J. Fringer), he asked in what capacity we would request his comments. He also provided his contact information.