



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 26, 2011

Mr. Barry S. Allen
Site Vice President,
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
Mail Stop A-DB-3080
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1, LICENSE RENEWAL
APPLICATION

Dear Mr. Allen:

By letter dated August 27, 2010, FirstEnergy Nuclear Operating Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the Operating License NPF-003 for Davis-Besse Nuclear Operating Station, Unit 1, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with Mr. Cliff Custer and the date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-2323 or e-mail paula.cooper@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Paula E. Cooper".

Paula E. Cooper, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:
Requests for Additional Information

cc w/encl: Listserv

DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1
LICENSE RENEWAL APPLICATION
REQUESTS FOR ADDITIONAL INFORMATION

General

1. On February 16, 2011, a draft copy of the environmental audit needs list was e-mailed to the licensee for preparation of the NRC's environmental audit held on March 7-11, 2011. This list specified the additional information needed by the NRC staff to perform its environmental review.

In response to the staff's request, the applicant had the information available to the staff for its review during the site environmental audit. The information is needed by the staff to have sufficient information to prepare its supplemental environmental impact statement.

Please submit the information provided at the environmental audit for docketing.

2. The Environmental Report (ER) states that there is a lease agreement with U.S. Fish and Wildlife Service (USFWS) for land tracts adjacent to the Davis-Besse site.

Please provide a copy of the lease agreement describing the lease terms and legal description of the land currently leased by the USFWS for docketing.

3. The ER refers to areas of the Davis Besse site that are not clearly delineated on Figure 3.1-1 general plant layout or on an exhibit.

Please include an aerial map or site plan delineating the following:

- a. Owner-controlled area
- b. Protected area
- c. Disturbed area (i.e., disturbance depth greater than 2 ft)
- d. Undisturbed area (i.e., pockets of undisturbed land or land with possible surface disturbance in the past of less than 2 ft, such as by agricultural practices prior to plant construction) within the 221-acre non-marshland industrial area
- e. Marshland (undisturbed)
- f. National Wildlife Refuge leased areas

Aquatic & Terrestrial

1. The ER states that there is a lease agreement with USFWS for portions of the Davis-Besse site. Information received during the audit indicates the lease is valid until 2022, or five years into the period of extended operation.

Please provide information on USFWS's management of the marsh areas under their control (i.e., impoundments and invasive species management). Please provide an evaluation of the potential environmental impacts, if any, in the event the lease with USFWS is not renewed in 2022.

ENCLOSURE

Health Physics

1. The Updated Safety Analysis Report (USAR), Section 11.5.5, Storage Facilities, discusses how low-level radioactive waste is handled at Davis-Besse Nuclear Power Station. Davis-Besse Nuclear Power Station cannot dispose of Class B and C low-level radioactive waste at the Barnwell, South Carolina facility due to Ohio not being in the Atlantic Interstate Low-Level Radioactive Waste Management Compact. The USAR states that Davis-Besse Nuclear Power Station has sufficient capacity within the Low Level Radioactive Waste Storage Facility (LLRWSF) building for approximately five years of storage for Class B and C waste. In addition to the storage capability, the Annual Radiological Environmental Operating Report discusses the use of a contractor to process and take title of the Class B and C waste for its disposal. However, based on the information contained in the ER and the USAR, the staff is unable to reach the conclusion that Davis-Besse Nuclear Power Station has adequate capability to store and dispose of low level radioactive waste over the term of license renewal.

Please provide additional information about Davis-Besse's typical yearly low-level waste generation rates, processing methods, storage capability, and disposal options that demonstrate that there will be adequate storage and disposal capability during the period of license renewal.

Cultural

1. The ER states that there is a current lease agreement with USFWS for portions of the Davis-Besse site. Information received during the cultural break out session at the audit did not clearly specify the process of notifying the Ohio State Preservation Office in the event cultural resources are discovered on the leased land.

Please describe the process or procedure for notifying the Ohio State Preservation Office in the event cultural resources were discovered on the land leased from the USFWS.

2. The ER states that the site was constructed using fill. The geology section of the ER indicated the presence of two to three feet of topsoil overlaying an estimated 10 thousand year old glacial stratum. Areas of the plant site that remain undisturbed have a higher probability of containing cultural resources than areas previously disturbed. Photos seen during the audit show areas where significant excavation was performed during construction. The staff needs additional information in order to meet the request made by the Ohio State Preservation Office.

Please include an aerial map or site plan delineating areas that have had extensive excavation.

References

Air & Meteorology	
AM 1	NOAA 2009. NOAA e-mail, J. Kosanik to J, Snooks (AREVA), National Weather Service, March 3, 2009.
AM 2	System Description for Meteorological Monitoring System for the Toledo Edison Company Davis-Besse Nuclear Power Station, Unit 1, Oak Harbor, Ohio, SD-032C, Rev. 2, 10/04/2005
AM 3	Ohio EPA, Davis-Besse Station, Auxiliary Boiler Air Quality Permit, Date of Issuance: 05/26/89.
AM 4	Ohio EPA, No Permit Needed for Diesel Generators at Davis-Besse NPS, October 1, 1996.
AM 5	TRC Environmental Corporation, Emission Inventory Report, Centerior Energy Corporation, Davis-Besse Nuclear Power Station, Oak Harbor, Ohio, February 10, 1995.
AM 6	DBNPS, Greenhouse gas emissions at Davis-Besse, dated 03/04/2011 (1 page)
AM 7	DBNPS, Actual vs Potential Emissions of Stationary Combustion Sources for 2005-2009 (15 pages) – Gale will add emissions for 2010
AM 8	Memorandum from J.S. Seitz (OAQPS), Second Extension of January 25, 1995 Potential to Emit Transition Policy and Clarification of Interim Policy, July 10, 1998 (4 pages)
AM 9	Ohio EPA, Final Title V Permit to West Lorain Plant, Issue Date: 11/19/04 (1 page)
AM 10	Ohio EPA, 2004-2005 Non-Title V Air Emissions Report for Davis-Besse Station, dated 02/21/2005 (1 page)
AM 11	Ohio EPA, 2006-2007 Non-Title V Air Emissions Report for Davis-Besse Station, dated 04/04/2008 (1 page)
AM 12	Ohio EPA, 2008-2009 Non-Title V Air Emissions Report for Davis-Besse Station, dated 02/26/2010 (1 page)
AM 13	Ohio EPA, Engineering Guide #61, "What is Ohio EPA's policy for limiting the potential to emit (PTE) of air contaminant emissions at a facility for purposes of avoiding federal permitting?," Revised September 5, 1996 (3 pages)
AM 14	Letter from Polly Bolssoneault (DBNPS) to Jay Liebrecht (Ohio EPA), Submittal of the 2010 Annual Report for DBNPS Auxiliary Boiler (3 pages)
AM 15	Davis-Besse 10 Yr. Average Operating Hours and Fuel Burn (2 pages)
AM 16	DBNPS, Diesel PM summaries (2 pages)

Aquatic	
A 1	AE1.b_L-08-039 Water WD rpt. for 2007_2008-02-05.pdf
A 2	AE1.b_L-09-027 Water WD Rpt for 2008_2009-02-11.pdf
A 3	AE1.b_L-10-030 Water WD Rpt for 2009_2010-01-22.pdf
A 4	AE1.b_L-11-033 Water WD Rpt for 2010_2011-02-16.pdf
A 5	AE1.b_RAOG-07-0009 Water WD Rpt for 2006.pdf
A 6	AE3.a_Cooper et al. 1981 Larval fish and ent.pdf
A 7	AE3.b_Reutter et al 1980 Env Evaluation Final Report Study 1.pdf
A 8	AE3.c_Reutter J.M. 1981a, Ent.pdf
A 9	AE3.d_Reutter 1981 b, Imp.pdf
Terrestrial	
T 1	TR1_ATTACH TR-1.PDF
T 2	TR1_ODNR 2010_PUB356(Oct 2010).pdf
T 3	TR1_ODNR 2011_RarePlantSpeciesbyCounty.pdf
T 4	TR3_Site Layout for New Structures_12-7-10.pdf
T 5	TR4, 5 _Davis-Besse Site Veg Mgmt Contracts.pdf
T 6	TR4, 5_FirstEnergy Xmiss Line Veg Mgmt Specifications.pdf
T 7	TR4_NOBP-OP-2000_Env Best Mgmt Practices.pdf
T 8	TR6.a_USFWS 2009b Critical Habitat.pdf
T 9	TR6.b_ODNAP 2009a.pdf
T 10	TR6.b_ONWRA 2009.pdf
T 11	TR6.c_Bolsenga and Herdendorf 1993.pdf
T 12	TR6.c_Campbell 1995.pdf
T 13	TR6.c_FirstEnergy 2008.pdf
T 14	TR6.c_GORP 2009.pdf
T 15	TR6.c_Herdendorf 1987.pdf
T 16	TR6.c_MIPN 2009.pdf
T 17	TR6.c_ODNAP 2009c.pdf
T 18	TR6.c_ODNAP 2009d.pdf
T 19	TR6.d_Downhower 1988.pdf
T 20	TR6.d_Ewert and Rodewald 2008, Mng Habits for Migrating Birds in ...
T 21	TR6.d_FirstEnergy 2008.pdf

Terrestrial (contd.)	
T 22	TR6.d_USFWS 2008.pdf
T 23	TR6.e_ERIE 1995.pdf
T 24	TR6.e_Lucas 2008.pdf
T 25	TR6.e_Ottawa 2008.pdf
T 26	TR6.e_Sandusky 2008.pdf
T 27	TR6.f_USFWS 2009_Refuge Profiles.pdf
T 28	TR6.g_FECorp 2009.pdf
T 29	TR6.g_OPSB 2007.pdf
T 30	TR6.g_USEPA 2009.pdf
Hydrology	
H 1	Bowser-Morner Associates, Inc., 2002, letter from J. Hewlett, Senior Geologist, to First Energy Service Co. c/o Toledo Edison Company, regarding Preliminary Wetland Evaluation, Proposed Temporary Containment Area, Davis-Besse Plant, July 19.
H 2	Centerior Energy, 1994, letter from L.F. Stortz, Vice-President – Nuclear, Davis-Besse, to T.O. Hic Division of Emergency and Remedial Response, Ohio Environmental Protection Agency, in, regarding Submittal of Information Regarding Spill of Gasoline, Identification Number 01-62-0180, February 22.
H 3	Davis-Besse Nuclear Power Station, 2004, Periodic Test Procedure DB-CN-04032, Wastewater Treatment Sludge Holding Tank Analysis, Revision 01, prepared by R. Edwards, October 28.
H 4	Davis-Besse, 2004, National Pollutant Discharge Elimination System (NPDES) Program, Administrative Procedure DB-CN-00030, prepared by S. Chimo, June 21.
H 5	Davis-Besse, 2007, Business Practice DBBP-CHEM-2005, Spill Prevention Control and Countermeasure (SPCC) Plan, approved by V. Capozziello, March 16.
H 6	Davis-Besse, undated, Condition Report #04-01719, "In 2004-05 Spent Fuel Pool Leakage to Onsite Groundwater", discovery date 3/5/2004
H 7	Davis-Besse, undated, Business Practice DBBP-CHEM-2009: Storm Water Pollution Prevention Plan, Rev. 00, 28 pages.
H 8	Environmental Resources Management, 2007, Groundwater Flow Characteristics Report, Davis-Besse Nuclear Power Station, Oak Harbor, Ohio: prepared for FirstEnergy Nuclear Operating Company, January 16.
H 9	Environmental Resources Management, 2008, Groundwater Monitoring Well Installation & Monitoring Report, Davis-Besse Nuclear Power Station, Oak Harbor, Ohio: prepared for FirstEnergy Nuclear Operating Company, March 18.

Hydrology (contd.)	
H 10	First Energy, 1998, letter from J.H. Lash, Plant Manager, Davis-Besse Nuclear Power Station, to C. Zipp, State Fire Marshall Office, regarding Underground Storage Tank Overfill Release Report, Incident Number 6281145-00, September 18.
H 11	FirstEnergy Nuclear Operating Company, 2007, letter from V.A. Kaminskas, Director – Site Operations, to A. Gall, Division of Surface Water, Ohio Environmental Protection Agency, regarding Submittal of 2006 Annual Sludge Disposal Report for the Davis-Besse Nuclear Power Station, January 29.
H 12	FirstEnergy Nuclear Operating Company, 2008, letter from V.A. Kaminskas, Director – Site Operations, to R. Zuzik, Division of Surface Water, Ohio Environmental Protection Agency, regarding Submittal of the 2007 Annual Sludge Disposal Report for the Davis-Besse Nuclear Power Station, January 18.
H 13	FirstEnergy Nuclear Operating Company, 2009, letter from B. Allen, Vice President - Nuclear, to A. Gall, Sewage Sludge Coordinator, Ohio Environmental Protection Agency, regarding Submittal of the 2008 Annual Sludge Disposal Report for the Davis-Besse Nuclear Power Station, January 23.
H 14	FirstEnergy Nuclear Operating Company, 2010, letter from P.M. Boissoneault, Manager, Site Chemistry, to A. Gall, Sewage Sludge Coordinator, Ohio Environmental Protection Agency, regarding Submittal of the 2009 Annual Sludge Disposal Report for the Davis-Besse Nuclear Power Station, January 21.
H 15	FirstEnergy Nuclear Operating Company, 2011, letter from P.M. Boissoneault, Manager, Site Chemistry, to A. Gall, Sewage Sludge Coordinator, Ohio Environmental Protection Agency, regarding Submittal of the 2010 Annual Sludge Disposal Report for the Davis-Besse Nuclear Power Station, January 25.
H 16	FirstEnergy, 2010, letter from S.F. Brown, Senior Engineer, to R. Zuzik, Division of Surface Water, Ohio Environmental Protection Agency, regarding National Pollutant Discharge Elimination System Permit Renewal Application, Davis-Besse Nuclear Power Station, EPA ID No. OH0003786, Permit No. 2IB00011*ID, October 21.
H 17	OEPA, 2010, letter from E. Swindall, Division of Water, to FirstEnergy Nuclear Gen Corp – Davis-Besse, regarding Preliminary Compliance Review of Discharge Monitoring Report, November 20.
H 18	OEPA, 2010, letter from E. Swindall, Division of Water, to FirstEnergy Nuclear Gen Corp – Davis-Besse, regarding Preliminary Compliance Review of Discharge Monitoring Report, September 21.
H 19	Davis-Besse, undated, Graphs of tritium in wells
Socioeconomics, Environmental Justice & Land Use	
S 1	EJS4, 5_Support Payments & Property Values
S 2	EJS3_Site Pop List_2-25-09(county sort)
S 3	EJS3_ATTCH EJS-3
S 4	EJS2_L10-120 2009 Annual Rad Effluent Release Rpt

Socioeconomics, Environmental Justice & Land Use (contd.)	
S 5	All 3 U.S. Government Leases for Ottawa Wildlife Refuge
S 6	Formal documentation for land swap agreement (if there is one)
Cultural	
C 1	Copies of photographs (6, 7, 15, 18, and 19 on flash drive at audit) demonstrating the level of disturbance on the industrialized portions of the plant.
C 2	Draft Final Preliminary Assessment Report: Locust Point Anti-Aircraft Artillery Firing Area, FUDS Property No. G05OH0996, Nov 2010, 2 volumes, prepared by Shaw Environmental for Army Corps of Engineers. Request for Docket.

April 26, 2011

Mr. Barry S. Allen
Site Vice President,
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
Mail Stop A-DB-3080
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1, LICENSE RENEWAL
APPLICATION

Dear Mr. Allen:

By letter dated August 27, 2010, FirstEnergy Nuclear Operating Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the Operating License NPF-003 for Davis-Besse Nuclear Operating Station, Unit 1, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with Mr. Cliff Custer and the date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-2323 or e-mail paula.cooper@nrc.gov.

Sincerely,

/RA/

Paula E. Cooper, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:
Requests for Additional Information

cc w/encl: Listserv

DISTRIBUTION:

See next page

ADAMS Accession Number: ML11094A099

OFFICE	LA:DLR	BC:RERB:DLR	BC:RPB2:DLR:	PM:RPB2:DLR
NAME	YEdmonds	Almboden	DWrona (BPham for)	PCooper
DATE	04/08/2011	04/21/2011	04/22/2011	04/26/2011

OFFICIAL RECORD COPY

Letter to Barry S. Allen from Paula E. Cooper dated April 26, 2011

**SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1, LICENSE RENEWAL
APPLICATION**

DISTRIBUTION:

HARD COPY:

DLR RF

E-MAIL:

PUBLIC

RidsNrrDir Resource
RidsNrrDirRpb1 Resource
RidsNrrDirRpb2 Resource
RidsNrrDirRarb Resource
RidsNrrDirRapb Resource
RidsNrrDirRasb Resource
RidsNrrDirRerb Resource
RidsNrrDirRpob Resource

PCooper
BHarris
DWrona
EMiller
MMahoney
ICouret, OPA
TReilly, OCA
BHarris, OGC
VMitlyng, RII
JCameron, RIII