

*NRC sand sheet 7*

**Orth, Steven**

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**From:** Steven Orth *RZ*  
**Sent:** Friday, January 19, 2007 9:52 AM  
**To:** Timothy Frye  
**Cc:** Steven Garry  
**Subject:** Region III Review of Licensees' Response to NEI Questionnaire  
**Attachments:** NEI GROUNDWATER QUESTIONNAIRE FOR Point Beach.wpd; NEI GROUND WATER QUESTIONNAIRE FOR BRAIDWOOD.wpd; NEI GROUND WATER QUESTIONNAIRE FOR BYRON.wpd; NEI GROUND WATER QUESTIONNAIRE FOR CLINTON.wpd; NEI GROUND WATER QUESTIONNAIRE FOR D.C. COOK.wpd; NEI GROUND WATER QUESTIONNAIRE FOR DAVIS BESSE.wpd; NEI GROUND WATER QUESTIONNAIRE FOR DRESDEN.wpd; NEI GROUND WATER QUESTIONNAIRE FOR FERMI.wpd; NEI GROUND WATER QUESTIONNAIRE FOR LASALLE.wpd; NEI GROUND WATER QUESTIONNAIRE FOR MONTI.wpd; NEI GROUND WATER QUESTIONNAIRE FOR PALISADES.wpd; NEI GROUND WATER QUESTIONNAIRE FOR PERRY.wpd; NEI GROUND WATER QUESTIONNAIRE FOR PRARIE IS.wpd; NEI GROUND WATER QUESTIONNAIRE FOR Quad. Cities.wpd; NEI GROUNDWATER QUESTIONNAIRE FOR Duane Arnold.wpd; NEI GROUNDWATER QUESTIONNAIRE FOR Kewaunee.wpd

Tim,

Region III has completed the review of our licensees' responses to the NEI Questionnaire. The requested worksheets are attached to this e-mail.

Overall, we found that the responses were complete. However, we noted some omitted leaks/spills in the case of Dresden. We believe that these omissions are due to poor historical records (previous NRC violation re. 50.75g). Nonetheless, we are still actively following up with the licensee.

If you have any questions, please contact me.

Steve

*P-5*

WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER QUESTIONNAIRE  
RESPONSES

Operating Utility: **Exelon**

Nuclear Power Plant: **Lasalle**

Reviewer: **Mitchell (mwm2)**

1. Is there any kind of onsite ground water monitoring being performed? If not, skip questions 2 and 5. **Yes**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Yes**

If not, briefly describe why:

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **Yes**

Does this agree with your information? **Yes** Most recent data reported in Conestoga-Rovers Associates Report dated September 2006 reports 148,100 pCi/l, tritium (1987).

If not, describe why:

6. Does the site remediate spills or leaks? **Yes**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: NMC

Nuclear Power Plant: PALISADES

Reviewer: JOHN CASSIDY

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
If not, skip questions 2 and 5.
2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**  
If not, briefly describe any differences:
3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**  
If not, briefly describe why:
4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**  
If not, briefly describe any differences or reasons why not: .
5. Were ground water activity levels greater than EPA limits reported? **NO**  
Does this agree with your information? **YES**  
If not, describe why: .
6. Does the site remediate spills or leaks? **YES**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: EXELON

Nuclear Power Plant: BYRON

Reviewer: JOHN CASSIDY

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
If not, skip questions 2 and 5.
2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**  
If not, briefly describe any differences:
3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**  
If not, briefly describe why:
4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**  
If not, briefly describe any differences or reasons why not: .
5. Were ground water activity levels greater than EPA limits reported? **NO**  
Does this agree with your information? **YES**  
If not, describe why: .
6. Does the site remediate spills or leaks? **NO**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: Nuclear Management Company (NMC)

Nuclear Power Plant: Point Beach Nuclear Plant (PBNP)

Reviewer: Martin J. Phalen

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
**Limited to the two potable water drinking wells and the remediated retention pond.**

If not, skip questions 2 and 5.

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**

If not, briefly describe why:

4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **NO**

Does this agree with your information? **YES**

If not, describe why:

6. Does the site remediate spills or leaks? **YES**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: FENOC

Nuclear Power Plant: DAVIS-BESSE

Reviewer: JOHN HOUSE

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
If not, skip questions 2 and 5.
2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**  
If not, briefly describe any differences:
3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**  
If not, briefly describe why:
4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**  
If not, briefly describe any differences or reasons why not:
5. Were ground water activity levels greater than EPA limits reported? **NO**  
Does this agree with your information? **YES**  
If not, describe why:
6. Does the site remediate spills or leaks? **YES**

WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER QUESTIONNAIRE  
RESPONSES

Operating Utility: **Detroit Edison**

Nuclear Power Plant: **Fermi 2**

Reviewer: **Mitchell (mwm2)**

1. Is there any kind of onsite ground water monitoring being performed? If not, skip questions 2 and 5. **Yes**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Yes**

If not, briefly describe why:

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **No**

Does this agree with your information? **Yes**

If not, describe why:

6. Does the site remediate spills or leaks? **Yes**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: FENOC

Nuclear Power Plant: PERRY

Reviewer: JOHN HOUSE

1. Is there any kind of onsite ground water monitoring being performed? **YES**

If not, skip questions 2 and 5.

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. **YES**

Does this agree with your information? **YES**

If not, briefly describe why:

4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **YES**

Does this agree with your information? **YES**

If not, describe why:

**NOTE: The licensee's July 31, 2006 questionnaire described a quarterly liquid grab sample from the under-drain system that had 59,500 picocuries/liter of tritium. The plant response data spreadsheet identified this sample but did not identify this sample as having activity above EPA limit of 20,000 picocuries/liter.**

6. Does the site remediate spills or leaks? **NO**

**NOTE: The licensee stated that data from leak/spills was documented in accordance with 10 CFR 50.75g but no other remediation efforts are anticipated prior to decommissioning.**



## Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: Dominion

Nuclear Power Plant: Kewaunee

Reviewer: Martin J. Phalen

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
If not, skip questions 2 and 5.
2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**  
If not, briefly describe any differences:
3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**  
If not, briefly describe why:
4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**  
If not, briefly describe any differences or reasons why not:
5. Were ground water activity levels greater than EPA limits reported? **NO**  
Does this agree with your information? **YES**  
If not, describe why:
6. Does the site remediate spills or leaks? **YES**

WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER QUESTIONNAIRE  
RESPONSES

Operating Utility: **Excel**

Nuclear Power Plant: **Monticello**

Reviewer: **Mitchell (mwm2)**

1. Is there any kind of onsite ground water monitoring being performed? If not, skip questions 2 and 5. **Yes**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes**

If not, briefly describe any differences:

**On-site: 3 monitoring wells have their main use to identify leaking diesel fuel tanks.  
Off-site : 3 potable water source wells are monitored in association with the REMP program.**

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Yes**

If not, briefly describe why:

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **No**

Does this agree with your information? **Yes**

If not, describe why:

6. Does the site remediate spills or leaks? **Yes**

## Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: EXELON

Nuclear Power Plant: BRAIDWOOD

Reviewer: JOHN CASSIDY

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
If not, skip questions 2 and 5.
2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**  
If not, briefly describe any differences:
3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**  
If not, briefly describe why:
4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**  
If not, briefly describe any differences or reasons why not:
5. Were ground water activity levels greater than EPA limits reported? **YES**  
Does this agree with your information? **YES**  
If not, describe why:
6. Does the site remediate spills or leaks? **YES**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: EXELON

Nuclear Power Plant: QUAD CITIES

Reviewer: JOHN HOUSE

1. Is there any kind of onsite ground water monitoring being performed? **YES**

If not, skip questions 2 and 5.

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**

If not, briefly describe why:

**NOTE: Most recent data reported in Conestoga-Rovers Associates Report dated September 2006.**

4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**

If not, briefly describe any differences or reasons why not:

**NOTE: Most recent data reported in Conestoga-Rovers Associates Report dated September 2006.**

5. Were ground water activity levels greater than EPA limits reported? **YES**

Does this agree with your information? **YES**

If not, describe why:

**NOTE: One well sample was 32,300 picocuries/liter.**

6. Does the site remediate spills or leaks? **YES**

Worksheet To Review Site-Specific NEI Ground Water Questionnaire Responses

Operating Utility: Florida Power and Light

Nuclear Power Plant: Duane Arnold Energy Center (DAEC)

Reviewer: Martin J. Phalen

1. Is there any kind of onsite ground water monitoring being performed? **YES**  
If not, skip questions 2 and 5.
2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **YES**  
If not, briefly describe any differences:
3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **YES**  
If not, briefly describe why:
4. Do the number and sources of leaks/spills reported in the questionnaire match your information? **YES**  
If not, briefly describe any differences or reasons why not:
5. Were ground water activity levels greater than EPA limits reported? **NO**  
Does this agree with your information? **YES**  
If not, describe why:
6. Does the site remediate spills or leaks? **No**

WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER  
QUESTIONNAIRE RESPONSES

Operating Utility: **Amergen/Exelon Nuclear**  
Nuclear Power Plant: **Clinton Power Station Unit 1**  
Reviewer: **Wayne Slawinski**

1. Is there any kind of onsite ground water monitoring being performed?  
**Yes, a network of monitoring wells were installed in 2006.**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes, as referenced in the response to the questionnaire and as described in the Clinton Power Station Hydrogeologic Investigation Report (dated September 2006)**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Yes, as described in the Clinton Power Station Hydrogeologic Investigation Report (dated September 2006)**

If not, briefly describe why:

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **No**  
Does this agree with your information? **Yes**

If not, describe why:

6. Does the site remediate spills or leaks? **None has been required.**

WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER  
QUESTIONNAIRE RESPONSES

Operating Utility: **Indiana Michigan Power**

Nuclear Power Plant: **Donald C. Cook Nuclear Plant Units 1 and 2**

Reviewer: **Wayne Slawinski**

1. Is there any kind of onsite ground water monitoring being performed?  
**Yes, via several previously installed onsite monitoring wells.**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Yes**

If not, briefly describe why:

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **None since 1991 as described in the licensee's response to the questionnaire. Information prior to 1991 is unknown.**

Does this agree with your information? **Yes**

If not, describe why:

6. Does the site remediate spills or leaks? **None has been required.**

**WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER  
QUESTIONNAIRE RESPONSES**

**Operating Utility: Amergen/Exelon Nuclear**

**Nuclear Power Plant: Dresden Nuclear Power Station Units 1, 2, and 3**

**Reviewer: Wayne Slawinski**

1. Is there any kind of onsite ground water monitoring being performed? **Yes, an extensive system of monitoring wells previously existed prompted by historical spills in the late 1980s and early 1990s. Additional wells were installed in 2006 to further characterize historical and more recent spill/leak events.**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes, as referenced in the response to the questionnaire and as described in the Dresden Generating Station Hydrogeologic Investigation Report (dated September 2006).**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Several leak/spill events were referenced in the licensee's response to the questionnaire and are summarized in the Dresden Generating Station Hydrogeologic Investigation Report (dated September 2006). However, at least two other spill/leak events appear to have occurred in the early-mid 1990s (as documented in NRC Region III Inspection Reports No. 93010 and 94015) that were not specifically reported in either the response to the questionnaire or in the aforementioned Dresden Generating Station Hydrogeologic Investigation Report.**

If not, briefly describe why: **Based on a review of historical NRC inspection reports, the Dresden Station experienced repeated spill/leak incidents throughout the early to mid-1990s caused by cathodic protection system degradation and/or system design flaws. These incidents were summarized in the questionnaire or in the aforementioned Dresden Generating Station Hydrogeologic Investigation Report with two exceptions. A 7000 gallon Unit-1 radwaste system pit leak in September 1994, and a 270 gallon Unit-2/3 condensate storage tank in 1992 were not listed in the**



**questionnaire response or in the associated hydrogeologic investigation report.**

**It is known that the licensee's older historic 10 CFR 50.75(g) file was incomplete and not well maintained; consequently, not all spill/leak incidents were properly documented. During our review of historic NRC inspection reports, we noted that a violation of 10 CFR 50.75(g) was issued to the licensee in 1996 for the failure to maintain records of information important to decommissioning resulting from spills of contaminated material.**

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **No, as discussed above.**

If not, briefly describe any differences or reasons why not: **Refer to response to question 3 above.**

5. Were ground water activity levels greater than EPA limits reported? **Yes, in various locations within the protected area. No sample results from any wells outside the protected area exceeded EPA limits.**

Does this agree with your information? **Yes**

If not, describe why:

6. Does the site remediate spills or leaks? **Yes, some remediation efforts (soil excavation) were performed as reported in the licensee's response to the questionnaire.**

WORKSHEET TO REVIEW SITE-SPECIFIC NEI GROUND WATER QUESTIONNAIRE  
RESPONSES

Operating Utility: **Excel**

Nuclear Power Plant: **Prairie Island**

Reviewer: **Mitchell (mwm2)**

1. Is there any kind of onsite ground water monitoring being performed? If not, skip questions 2 and 5. **Yes**

2. Do the number of onsite ground water sampling locations reported in the questionnaire match the information you have collected previously and any corporate knowledge you are aware of? **Yes**

If not, briefly describe any differences:

3. Review whether onsite and/or offsite contamination was reported. Does this agree with your information? **Yes**

If not, briefly describe why:

4. Do the **number** and **sources** of leaks/spills reported in the questionnaire match your information? **Yes**

If not, briefly describe any differences or reasons why not:

5. Were ground water activity levels greater than EPA limits reported? **No**

Does this agree with your information? **Yes**

If not, describe why:

6. Does the site remediate spills or leaks? **Yes**