

**Virginia Electric and Power Company  
Surry Power Station  
5570 Hog Island Road  
Surry, Virginia 23883**

February 15, 2013

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

Serial No.: 13-087  
SPS: JCP  
Docket No.: 50-281  
License No.: DPR-37

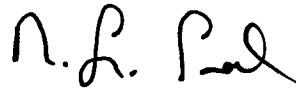
Dear Sirs:

Pursuant to 10CFR50.73, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to Surry Power Station Unit 2.

Report No. 50-281/2013-001-00

This report has been reviewed by the Station Facility Safety Review Committee and will be forwarded to the Management Safety Review Committee for its review.

Very truly yours,



N. L. Lane,  
Site Vice President  
Surry Power Station

Enclosure

Commitment contained in this letter: None

JE22  
NRR

cc: U.S. Nuclear Regulatory Commission, Region II  
Marquis One Tower, Suite 1200  
245 Peachtree Center Ave., NE  
Atlanta, GA 30303-1257

NRC Senior Resident Inspector  
Surry Power Station

**LICENSEE EVENT REPORT (LER)**  
(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

|  |                                      |                          |
|--|--------------------------------------|--------------------------|
| <b>1. FACILITY NAME</b><br>Surry Power Station, Unit 2 | <b>2. DOCKET NUMBER</b><br>05000-281 | <b>3. PAGE</b><br>1 OF 3 |
|--|--------------------------------------|--------------------------|

**4. TITLE**  
Bird Contacting Power Lines Results in Emergency Diesel Generator Auto-Start

| 5. EVENT DATE |     |      | 6. LER NUMBER |                   |         | 7. REPORT DATE |     |      | 8. OTHER FACILITIES INVOLVED |               |
|---------------|-----|------|---------------|-------------------|---------|----------------|-----|------|------------------------------|---------------|
| MONTH         | DAY | YEAR | YEAR          | SEQUENTIAL NUMBER | REV NO. | MONTH          | DAY | YEAR | FACILITY NAME                | DOCKET NUMBER |
| 12            | 29  | 12   | 2013          | 001               | 00      | 02             | 15  | 2013 | Surry Power Station, Unit 1  | 05000-280     |
|               |     |      |               |                   |         |                |     |      | FACILITY NAME                | DOCKET NUMBER |

|  |  |   |  |   |  |  |  |  |  |  |  |
|--|--|---|--|---|--|--|--|--|--|--|--|
| <b>9. OPERATING MODE</b><br><br>N          | <b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §:</b> (Check all that apply) |   |  |   |  |  |  |  |  |  |  |
|  | <input type="checkbox"/> 20.2201(b)  | <input type="checkbox"/> 20.2203(a)(3)(i)   | <input type="checkbox"/> 50.73(a)(2)(i)(C)             | <input type="checkbox"/> 50.73(a)(2)(vii)     |  |  |  |  |  |  |  |
| <b>10. POWER LEVEL</b><br><br>100          | <input type="checkbox"/> 20.2201(d)  | <input type="checkbox"/> 20.2203(a)(3)(ii)  | <input type="checkbox"/> 50.73(a)(2)(ii)(A)            | <input type="checkbox"/> 50.73(a)(2)(viii)(A) |  |  |  |  |  |  |  |
|  | <input type="checkbox"/> 20.2203(a)(1)   | <input type="checkbox"/> 20.2203(a)(4)      | <input type="checkbox"/> 50.73(a)(2)(ii)(B)            | <input type="checkbox"/> 50.73(a)(2)(viii)(B) |  |  |  |  |  |  |  |
|  | <input type="checkbox"/> 20.2203(a)(2)(i)  | <input type="checkbox"/> 50.36(c)(1)(i)(A)  | <input type="checkbox"/> 50.73(a)(2)(iii)              | <input type="checkbox"/> 50.73(a)(2)(ix)(A)   |  |  |  |  |  |  |  |
|  | <input type="checkbox"/> 20.2203(a)(2)(ii)   | <input type="checkbox"/> 50.36(c)(1)(ii)(A) | <input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A) | <input type="checkbox"/> 50.73(a)(2)(x)       |  |  |  |  |  |  |  |
|  | <input type="checkbox"/> 20.2203(a)(2)(iii)  | <input type="checkbox"/> 50.36(c)(2)        | <input type="checkbox"/> 50.73(a)(2)(v)(A)             | <input type="checkbox"/> 73.71(a)(4)          |  |  |  |  |  |  |  |
|  | <input type="checkbox"/> 20.2203(a)(2)(iv)   | <input type="checkbox"/> 50.46(a)(3)(ii)    | <input type="checkbox"/> 50.73(a)(2)(v)(B)             | <input type="checkbox"/> 73.71(a)(5)          |  |  |  |  |  |  |  |
| <input type="checkbox"/> 20.2203(a)(2)(v)  | <input type="checkbox"/> 50.73(a)(2)(i)(A)   | <input type="checkbox"/> 50.73(a)(2)(v)(C)  | <input type="checkbox"/> OTHER                         |   |  |  |  |  |  |  |  |
| <input type="checkbox"/> 20.2203(a)(2)(vi) | <input type="checkbox"/> 50.73(a)(2)(i)(B)   | <input type="checkbox"/> 50.73(a)(2)(v)(D)  | Specify in Abstract below or in NRC Form 366A          |   |  |  |  |  |  |  |  |

**12. LICENSEE CONTACT FOR THIS LER**

|   |  |
|---|--|
| FACILITY NAME<br>N.L. Lane, Site Vice President | TELEPHONE NUMBER (Include Area Code)<br>(757) 365-2001 |
|---|--|

**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX |
|-------|--------|-----------|--------------|--------------------|-------|--------|-----------|--------------|--------------------|
| C     | EA     | XFMR      | M390         | Y                  |       |        |           |              |                    |

|  |  |
|--|--|
| <b>14. SUPPLEMENTAL REPORT EXPECTED</b><br><input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO | <b>15. EXPECTED SUBMISSION DATE</b><br>MONTH: _____ DAY: _____ YEAR: _____ |
|--|--|

**ABSTRACT** (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

At 08:03 on December 29, 2012, with both Unit 1 and Unit 2 operating at 100%, the supply breaker to the B reserve station service transformer (RSST) tripped open on an instantaneous over-current of the B and C phases due to a pelican contacting the overhead lines from the switchyard to the B RSST. This resulted in a lockout of the B RSST and loss of power to the E transfer bus and the Unit 2 H emergency bus from its normal off-site power supply. An under-voltage auto start signal was generated, and emergency diesel generator (EDG) 2 started and loaded on the Unit 2 H emergency bus as designed. Equipment performed as expected during the event, and there were no unexplained occurrences. Visual inspections verified there was no damage to the lines, supply breaker, or B RSST. The E transfer bus was reenergized at 12:23, and the normal source of power was restored to Unit 2 H emergency bus at 12:42. EDG 2 was returned to auto at 15:18. All electrical distribution systems were restored to a normal alignment. The work management process has been initiated to install bird diverters on the lines. This report is being submitted, pursuant to 10 CFR 50.73(a)(2)(iv)(A), for automatic actuation of EDG 2. This event did not affect the health and safety of the public.

**LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET**

| 1. FACILITY NAME    | 2. DOCKET   | 6. LER NUMBER |                   |         | 3. PAGE |
|---------------------|-------------|---------------|-------------------|---------|---------|
| Surry Power Station | 05000 - 281 | YEAR          | SEQUENTIAL NUMBER | REV NO. | 2 of 3  |
|                     |             | 2013          | - 001             | - 00    |         |

**NARRATIVE**

**1.0 DESCRIPTION OF THE EVENT**

At 08:03 on December 29, 2012, with both Unit 1 and Unit 2 operating at 100%, the supply breaker [EIS-EA-BKR] to the B reserve station service transformer (RSST) [EIS-EA-XFMR] tripped open on an instantaneous over-current of the B and C phases due to a pelican contacting the overhead lines from the switchyard to the B RSST. This resulted in a lockout of the B RSST and loss of power to the E transfer bus [EIS-EA-BU] and the Unit 2 H emergency bus [EIS-EA-BU] from its normal off-site power supply. An under-voltage automatic start signal was generated, and emergency diesel generator (EDG) 2 [EIS-EK-GEN] started and loaded on the Unit 2 H emergency bus as designed.

All equipment performed as expected during the event, and there were no unexplained occurrences.

Visual inspections verified there was no damage to the lines, supply breaker, or B RSST. The E transfer bus was reenergized at 12:23, and the normal source of power was restored to Unit 2 H emergency bus at 12:42. EDG 2 was returned to automatic control at 15:18. All electrical distribution systems were restored to a normal alignment.

At 15:21, an event notification was made to the NRC for the EDG 2 actuation in accordance with 10 CFR 50.72(b)(3)(iv)(A). This report is also being submitted, pursuant to 10 CFR 50.73(a)(2)(iv)(A), for automatic actuation of EDG 2.

**2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS**

The event was uncomplicated, with no equipment failures. Equipment performed as expected. EDG 2 started and restored power to the 2H bus as designed. Sufficient alternate sources of power were available, including the swing EDG and the station blackout diesel. This event is considered to be of low safety significance. As a result, the health and safety of the public were not affected.

**3.0 CAUSE**

The overhead lines extending from the switchyard to the B RSST traverse over the intake canal. A pelican observed in the canal flew up into the lines and contacted the B and C phases.

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| Surry Power Station | 05000 - 281 | YEAR          | SEQUENTIAL NUMBER | REV NO. | 3 of 3  |
|                     |             | 2013          | - 001             | - 00    |         |

**4.0 IMMEDIATE CORRECTIVE ACTION(S)**

Visual inspections of the overhead lines, supply breaker, and B RSST identified no damage.

The E transfer bus was reenergized, the normal source of power was restored to Unit 2 H emergency bus, and EDG 2 was returned to automatic control.

**5.0 ADDITIONAL CORRECTIVE ACTIONS**

The company biologist and the Department of Agriculture were contacted for recommendations for preventing pelican interaction with overhead lines.

**6.0 ACTIONS TO PREVENT RECURRENCE**

The work management process has been initiated to install diverters on the live high voltage lines that extend over the intake canal.

**7.0 SIMILAR EVENTS**

No similar events involving birds contacting the lines from the switchyard to the RSSTs have occurred. However, other events involving birds contacting other overhead lines have occurred. Diverters have been installed in response to these events.

**8.0 MANUFACTURER/MODEL NUMBER**

Moloney Elec. Co./Serial Number P690265

**9.0 ADDITIONAL INFORMATION**

None