

November 8, 2017

VIA ELECTRONIC FILING

M. Lynn Jarvis, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

Re: *Application of Dominion Energy North Carolina Pursuant to G.S. 62-133.2 and Commission Rule R8-55 Regarding Fuel and Fuel-Related Costs Adjustments for Electric Utilities*
Docket No. E-22, Sub 546

Dear Ms. Jarvis:

On October 30, 2017, Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, filed its public version of the Rebuttal Testimony of John Rosenberger in the above-captioned proceeding. Please accept for filing on behalf of Dominion Energy North Carolina its replacement Rebuttal Testimony of John Rosenberger, public redacted version. Portions of this testimony contain confidential nuclear facility operations information. This information is designated by the Company as confidential and qualifies as "trade secrets" under N.C.G.S. § 66-152(3). Pursuant to N.C.G.S. § 132-1.2, the Company has redacted this confidential information from the public version of this filing and has filed the corresponding confidential pages under seal on October 30, 2017.

Please do not hesitate to contact me should you have any questions. Thank you for your assistance with this matter.

Very truly yours,

/s/Mary Lynne Grigg

MLG:kjg

Enclosure

**REBUTTAL TESTIMONY
OF
JOHN ROSENBERGER
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 546**

1 **Q. Please state your name, position of employment, and business address.**

2 A. My name is John Rosenberger, and I am Director – Nuclear Site Engineering
3 for Virginia Electric and Power Company d/b/a Dominion Energy North
4 Carolina (“Dominion Energy North Carolina” or the “Company”). My
5 business address is Surry Power Station, 5570 Hog Island Road, Surry,
6 Virginia 23883. A statement of my background and qualifications is attached
7 as Appendix A.

8 **Q. Have you previously submitted testimony in this proceeding?**

9 A. No, I have not.

10 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

11 A. I am responding to the pre-filed Direct Testimony submitted by Public Staff
12 Witness Dustin R. Metz concerning certain outages at North Anna Units 1 and
13 2 and Surry Units 1 and 2, which comprise the Company’s nuclear generation
14 fleet.

15 **Q. How is your testimony organized?**

16 A. My testimony is organized as follows:

- 17 I. E-22, Sub 546 Outage 1 Response (North Anna 2 – July/August 2016)
18 II. E-22, Sub 546 Outage 2 Response (Surry 2 – October 2016)

- 1 III. E-22, Sub 534 Outage 1 Response (Surry 2 – July 2015)
2 IV. E-22, Sub 534 Outage 2 Response (Surry 1 – July 2015)
3 V. E-22, Sub 534 Outage 3 Response (Surry 1 – October/November
4 2015)
5 VI. E-22, Sub 534 Outage 4 Response (Surry 2 – December 2015)

6 **Q. Before turning to your responses to the specific outages identified by**
7 **Public Staff Witness Metz, do you have any general comments on his**
8 **assessment?**

9 A. Yes. I have reviewed his testimony and found his assessment troubling. As
10 an example, Mr. Metz quotes from the North American Electric Reliability
11 Corporation (“NERC”) Event Reporting guidance document the categories of
12 outages. (Metz at 7:4-18, 8:1-6.) Mr. Metz neglects to identify two of the
13 three categories of forced (unplanned) outages and focuses on the extreme
14 forced outage of a unit trip even though half of the disputed outages fall
15 within the other two categories.

16 Furthermore, Mr. Metz mischaracterizes the NERC definition of forced
17 (unplanned) outage – immediate as bound by severe failure that affects safety
18 or design/technical specifications of the plant. This manipulation of a subset
19 of possible occurrences that could cause or present the need to trip a unit to
20 support a predetermined position is misleading. Other examples will be
21 presented as I review the outages in question.

22 I further note that Public Staff Witness Metz has selectively applied
23 information from Root Case Evaluations (“RCEs”) or conversations outside of

1 the discovery process to match a predetermined narrative. As discussed by
2 Company Witness Branford L. Stanley in his rebuttal testimony, RCEs are not
3 written with the intent to assess reasonable and prudent operations, which has
4 been communicated to Mr. Metz on numerous occasions. Yet, this document
5 is full of conclusions based on contributing causes or enhancements
6 discovered during the evaluation process. It is important to note that of the
7 168 outages associated during last year's and this year's test periods, only 11
8 were nuclear. This means that less than 7% of the outages to be assessed as
9 reasonable and prudent would have the possibility of having a RCE available
10 for review, as non-nuclear units are not mandated to perform these
11 evaluations. Also, because of Mr. Metz's unfamiliarity with the power plants
12 in question and the nature of the RCEs performed by the Company, the Public
13 Staff issued approximately 350 discovery questions associated with the five
14 RCEs.

15 **I. E-22, SUB 546 OUTAGE 1 RESPONSE (NORTH ANNA 2 –**
16 **JULY/AUGUST 2016)**

17 **Q. Please describe the outage that occurred at North Anna Unit 2 in**
18 **July/August of 2016.**

19 **A.** North Anna Unit 2 was taken out of service for an unplanned/forced outage
20 between July 30, 2016, and August 3, 2016. Specifically, Company personnel
21 observed unidentified leakage of the Reactor Coolant System ("RCS") and
22 initiated a process to determine the source of the leak. Once it was
23 determined that there was an unisolable through-wall leak in the controlled
24 bleed-off piping associated with the Reactor Coolant Pump seal, the Company

1 initiated a unit shutdown. This shutdown was required by the technical
2 Specifications. [BEGIN CONFIDENTIAL] [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] [END CONFIDENTIAL]

11 The Company remedied this situation by placing the unit in a condition to
12 perform the necessary repairs, collecting vibration data associated with the
13 piping, replacing the piping, performing post maintenance testing, and fully
14 restoring the unit to service approximately four days later on August 3, 2016.

15 The outage was performed in a thorough and efficient manner.

16 **Q. Why was this outage identified by Public Staff Witness Metz?**

17 A. Public Staff Witness Metz observes that installation of a pipefitting in the
18 RCS occurred in the fall of 2014. (Metz at 14:2-3). Public Staff Witness
19 Metz alleges,

20 [BEGIN CONFIDENTIAL]

21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

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[REDACTED]

[END

CONFIDENTIAL] I believe that all of these errors were within the Company's control and were reasonably avoidable. But for these errors, I do not believe this outage would have occurred."

(Metz at 21:15-22:4.)

Q. Do you agree with Public Staff Witness Metz's conclusion?

A. No, I do not. A review of Mr. Metz's testimony reveals why he may have reached such an incorrect conclusion. Specifically, in his attempt to summarize why the North Anna Unit 1 was taken offline, Public Staff Witness Metz incorrectly describes the leaking component, the severity of the leak, and the response to the leak.

Q. Please explain.

A. On page 12, lines 10-15 of his testimony, Public Staff Witness Metz states,

[BEGIN CONFIDENTIAL] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED] [END
8 CONFIDENTIAL]

9 Q. Are there any other flaws in Public Staff Witness Metz's analysis and
10 conclusion related to the North Anna Unit 1 outage?

11 A. Yes. [BEGIN CONFIDENTIAL] [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED] [END CONFIDENTIAL] (Metz at 18:17-
16 19.) This is baseless.

17 [BEGIN CONFIDENTIAL] [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED] [END
12 **CONFIDENTIAL]** These actions did not *directly* cause the outage event and
13 are discovered as part of the evaluation process as actions that would provide
14 a greater depth of corrective actions beyond addressing the root/direct cause.

15 **Q. Was this outage and the Company's management thereof reasonable and**
16 **prudent?**

17 **A.** Yes. The leak on the seal return line could not have been anticipated by the
18 Company. **[BEGIN CONFIDENTIAL]** [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED] [END CONFIDENTIAL]

12 **II. E-22, SUB 546 OUTAGE 2 RESPONSE**
13 **(SURRY 2 – OCTOBER 2016)**

14 **Q. Please describe the outage that occurred at Surry Unit 2 in October 2016.**

15 **A.** Surry Unit 2 was taken out of service for an unplanned/forced outage between
16 October 9, 2016, and October 13, 2016. Specifically, on October 9, 2016, the
17 unit automatically tripped due to a generator differential lockout. There were
18 no activities in progress at the time, and grid conditions were stable. **[BEGIN**
19 **CONFIDENTIAL]** [REDACTED]

20 [REDACTED]
21 [REDACTED]
22 [REDACTED]

1 [REDACTED]

2 [REDACTED] [END CONFIDENTIAL]

3 The Company remedied this situation by removing drain plugs and drying all
4 components that experienced water intrusion, extensively inspecting and
5 testing of components exposed to water, replacing gaskets and applying
6 silicon to flange surfaces and fully restoring the unit to service approximately
7 four days later on October 13, 2016. The quick restoration of the unit to
8 service included a thorough evaluation of the components while performing
9 actions to prevent recurrence.

10 **Q. Why was this outage identified by Public Staff Witness Metz?**

11 **A. [BEGIN CONFIDENTIAL]** [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]

18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED] [END
25 CONFIDENTIAL]

1 (Metz at 28:3-9.)

2 **Q. Do you agree with Public Staff Witness Metz's conclusion?**

3 A. No, I do not. By relying solely on the conclusions of the RCE, Public Staff
4 Witness Metz omits a significant detail in his analysis regarding the amount of
5 rainfall experienced at the site. As stated in the explanations of all RCEs, the
6 root cause must be within the control of the licensee with actions to prevent
7 repeat occurrences. Weather is not a controllable factor by the Company; so,
8 rainfall could never be found as a root cause or a contributing cause.

9 **[BEGIN CONFIDENTIAL]** [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
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12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

1 [REDACTED] [END CONFIDENTIAL] As previously stated, the
2 Nuclear Regulatory Commission mandates that root causes must be developed
3 so that they reach a Company controlled action.

4 **Q. Was this outage and the Company's management thereof reasonable and**
5 **prudent?**

6 A. Yes. The collection of water within the enclosure could not have been
7 anticipated by the Company. Even though extreme weather cannot factor into
8 the RCE process due to regulatory constraints, the unprecedented amount of
9 rainfall in the area is applicable to the analysis of whether the outage was
10 reasonable and prudent. Some areas surrounding Surry Power Station
11 experienced back-to-back 100-year storms and a few experienced rainfall in
12 amounts that reached 500-year storm levels. Again, Surry experienced 11
13 inches of rain in an 18-day period with over 5 inches coming in the 2 days
14 prior to the outage with wind gusts reaching 41 miles per hour. The Company
15 had no reason to believe that the product from the vendor would not meet the
16 needs of the station. The vendor, which is experienced in providing watertight
17 enclosures, was contracted to provide enclosures within certain specifications.
18
19 Therefore, it was not possible for the Company to foresee the extreme weather
20 the station experienced, or the fact that the enclosures would not perform their
design function.

1 **III. E-22, SUB 534 OUTAGE 1 RESPONSE (SURRY 2 – JULY 2015)**

2 **Q. Please describe the outage that occurred at Surry Unit 2 in July 2015.**

3 A. Surry Unit 2 was taken out of service for an unplanned/forced outage between
4 July 13, 2015, and July 22, 2015. Specifically, on July 13, 2015, the unit was
5 ramped offline due to increased external leakage from a Pressurizer Spray
6 Valve. **[BEGIN CONFIDENTIAL]** [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] **[END CONFIDENTIAL]**

11 The Company remedied this situation by placing the unit in a condition to
12 support leak seal of the valve, successfully leak sealing the body to bonnet
13 area, and fully restoring the unit to service approximately nine days later on
14 July 22, 2015.

15 **Q. Why was this outage identified by Public Staff Witness Metz?**

16 A. Public Staff Witness Metz discusses this outage event, but does not
17 recommend disallowance of any associated costs.

18 **IV. E-22, SUB 534 OUTAGE 2 RESPONSE (SURRY 1 – JULY 2015)**

19 **Q. Please describe the outage that occurred at Surry Unit 1 in July 2015.**

20 A. Surry Unit 1 was taken out of service for an unplanned/forced outage between
21 July 11, 2015, and July 22, 2015. Specifically, on May 31, 2015, a newly
22 installed seal showed evidence of degradation and declining differential

1 pressure across the #1 seal. The decline continued and subsequently the #3
2 seal differential pressure began to decline. On July 11, 2015, the unit was
3 shut down to replace the seal. [BEGIN CONFIDENTIAL] [REDACTED]

4 [REDACTED]
5 [REDACTED] [END CONFIDENTIAL]

6 The Company remedied this situation by replacing the seal and fully restoring
7 the unit to service approximately 11 days later on July 22, 2015.

8 **Q. Why was this outage identified by Public Staff Witness Metz?**

9 **A.** Public Staff Witness Metz states,

10 [BEGIN CONFIDENTIAL]

11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]

19 [END CONFIDENTIAL]

20 (Metz at 54:8-14.) [BEGIN CONFIDENTIAL] [REDACTED]

21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED] [END CONFIDENTIAL]

15 Q. Walking through the alleged "various causes," do you have any
16 comments regarding Public Staff Witness Metz's testimony with respect
17 to installation and/or modification of pipes or piping components?

18 A. [BEGIN CONFIDENTIAL] [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
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12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED] [END CONFIDENTIAL]

1 Q. Do you agree with Public Staff Witness Metz's determination that the
2 Company's GMP-M-13 procedure may have prevented the seal
3 degradation from occurring?

4 A. [BEGIN CONFIDENTIAL] [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED] [END CONFIDENTIAL]

1 Q. Public Staff Witness Metz identifies a design change that was required
2 for the seal injection water flange for the replacement pump and notes
3 that the 1-micron particle size was not included in the design change
4 package. (Metz at 52:14-18). He later concludes upon his experience that
5 it would be "out of the norm" for the vendor not to indicate size limits for
6 foreign material. (Metz at 65:14-66:3.) Please respond.

7 A. [BEGIN CONFIDENTIAL] [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED] [END CONFIDENTIAL]

18 Q. Do you agree with Public Staff Witness Metz's conclusion that if the
19 dead-leg or low flow areas had been identified the outage may have been
20 prevented? (Metz at 54:8-14.)

21 A. [BEGIN CONFIDENTIAL] [REDACTED]
22 [REDACTED]
23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED] [END CONFIDENTIAL]

15 **Q.** How do you respond to Public Staff Witness Metz's assertions, as noted
16 above, related to lessons learned from the North Anna failure event?

17 **A.** This conclusion by Mr. Metz appears to demonstrate a misunderstanding of
18 the power station, the Reactor Coolant System with interconnecting systems,
19 and the application of RCEs. [BEGIN CONFIDENTIAL] [REDACTED]

20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED] [END CONFIDENTIAL]
6 Q. Was the Company's management thereof reasonable and prudent?
7 A. Yes. [BEGIN CONFIDENTIAL] [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

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2

[END CONFIDENTIAL]

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**V. E-22, SUB 534 OUTAGE 3 RESPONSE (SURRY 1 –
OCTOBER/NOVEMBER 2015)**

5

Q. Please describe the outage that occurred at Surry Unit 1 in

6

October/November 2015.

7

A. Surry Unit 1 was taken out of service for an unplanned/forced outage between

8

October 13, 2015, and November 18, 2015. Specifically, on October 13,

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2015, the unit reactor tripped after receiving fault signals from the main

10

generator protection system. [BEGIN CONFIDENTIAL]

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14

15

[END CONFIDENTIAL]

16

The Company remedied this situation by disassembling the failed

17

components, procuring and refurbishing a new exciter, repairing the main

18

generator shaft, replacing the exciter shaft coupling with a newly

19

manufactured coupling, installing the Unit 2 exciter onto the Unit 1 generator,

20

and fully restoring the unit to service approximately 35 days later on

21

November 18, 2015.

1 Q. Why was this outage identified by Public Staff Witness Metz?

2 A. [BEGIN CONFIDENTIAL] [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED] [END CONFIDENTIAL]

18 (Metz at 98:12-99:2.)

19 Q. Do you agree with Public Staff Witness Metz's conclusion?

20 A. No, I do not. [BEGIN CONFIDENTIAL] [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

26 [REDACTED]

1 [REDACTED]
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13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED] [END CONFIDENTIAL]

19 Q. Do you have any specific comments on the list of “factors” that Public
20 Staff Witness Metz believes caused or contributed to the outage, as
21 detailed on pages 79-92 of his testimony?

22 A. [BEGIN CONFIDENTIAL] [REDACTED]
23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [END CONFIDENTIAL]

1 Q. Was the outage and the Company's management thereof reasonable and
2 prudent?

3 A. Yes. [BEGIN CONFIDENTIAL] [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
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6 [REDACTED]
7 [REDACTED]
8 [REDACTED] [END CONFIDENTIAL]

9 **VI. E-22, SUB 534 OUTAGE 4 RESPONSE (SURRY 2 – DECEMBER 2015)**

10 **Q. Please describe the outage that occurred at Surry Unit 2 in December**
11 **2015.**

12 **A.** Surry Unit 2 was taken out of service for an unplanned/forced outage between
13 December 4, 2015, and December 11, 2015. Specifically, the unit entered a
14 planned refueling on October 19, 2015. This planned outage was then
15 extended by approximately eight days because certain components from Surry
16 Unit 2 had been used to expedite restart of Surry Unit 1 from its October 2015
17 forced outage (discussed in Section V of my rebuttal testimony). Surry Unit
18 2's outage was then necessarily extended as the Company procured and
19 reassembled the replacement parts used for Surry Unit 1.

20 **Q. Why was this outage identified by Public Staff Witness Metz?**

21 **A.** Public Staff Witness Metz states, "While it was prudent to restart Unit 1 as
22 soon as possible, had it not tripped in the first place, Unit 2 would not have
23 incurred the additional approximate 8 days of outage. As a result, it is not

1 reasonable for North Carolina retail ratepayers to incur the replacement power
2 costs for the additional outage time.” (Metz at 99:20-100:4.) Thus, Public
3 Staff Witness Metz has identified costs associated with replacement power for
4 this outage solely as a result of his opinion related to the Surry Unit 1 October
5 2015 outage.

6 **Q. Do you agree with Public Staff Witness Metz’s conclusion?**

7 A. No, I do not agree. Contrary to Mr. Metz’s argument, the purpose of this
8 proceeding is not to determine whether a unit should have tripped or not have.
9 We are here to determine whether the Company’s actions were reasonable and
10 prudent leading up to and during the outage. I believe we have proven that
11 our actions associated with the Surry Unit 1 exciter outage were reasonable
12 and prudent. However, in this case, the decision to extend the Surry Unit 2
13 outage in order to expedite the return to service of one of the other nuclear
14 units should be viewed as a stand-alone case. The fact is that two nuclear
15 units were in an outage and the prudent response is to get each unit returned to
16 service as safely and efficiently as possible. By returning Surry Unit 1 and
17 extending the Unit 2 outage, the Company reduced total outage time by
18 approximately 17.5 days, saving approximately \$474,626 on a North Carolina
19 Jurisdictional basis. The extended duration of the Unit 1 outage at 35 days,
20 plus the additional time on Unit 2, is an example of prudent management.

21 **[BEGIN CONFIDENTIAL]** [REDACTED]

22 [REDACTED]

23 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]

9 [REDACTED] [END CONFIDENTIAL] These
10 efforts were conducted 24 hours per day, 7 days per week, until the units were
11 restored to service. All of this was managed efficiently for 35 days duration,
12 when at the beginning it was unknown how long it would take to effect the
13 repairs. In my experience, this is an example of prudent management.

14 **Q. Do any of the actions taken by the Company as part of its management of**
15 **its nuclear fleet indicate that North Anna Units 1 and 2 and Surry Units 1**
16 **and 2 have been imprudently managed or that outages could have been**
17 **avoided?**

18 **A.** No. As discussed in detail in the rebuttal testimony of Company Witness
19 Stanley, the Company has exhibited exceptional nuclear performance over
20 both the test period and the prior five-year period. Forced outages on nuclear
21 generating units will occasionally occur under even the best of scenarios. The
22 Company's expertise and experience in operating its nuclear units allowed the

1 Company to keep the outages discussed herein to the minimum timeframe
2 necessary, while also ensuring the safety and reliability of our system.

3 **Q. Does this conclude your rebuttal testimony?**

4 **A. Yes, it does.**

**BACKGROUND AND QUALIFICATIONS
OF
JOHN ROSENBERGER**

John Rosenberger is currently the Director Nuclear Engineering at Surry Power Station. Mr. Rosenberger joined Dominion Virginia Power in 1990 as an engineer at Surry Power Station. His tenure covers positions in Operations, Engineering, and Maintenance including various management positions within Dominion Energy. Before assuming his current position in 2015, he rotated as Engineering Manager through Engineering Programs, Engineering Systems, and Engineering Design at Surry Power Station. His responsibilities have included participating in the Facilities Safety Review Committee and the Corrective Action Review Board and he has extensive experience in the corrective action program including sponsorship of Root Cause Evaluations.

He earned a degree in electrical engineering from Georgia Institute of Technology in 1990, and obtained a Senior Operator Knowledge Certificate for the position of on-shift Shift Technical Advisor. He has also completed the INPO Senior Nuclear Plant Manager Course.