



PJM Interconnection, L.L.C.  
2750 Monroe Boulevard  
Audubon, PA 19403

Steven Pincus  
Associate General Counsel  
T: (610) 666-4370 | F: (610) 666-8211  
Steven.Pincus@pjm.com

July 3, 2018

The Honorable James Richard Perry  
Secretary of the Energy  
United States Department of Energy  
1000 Independence Ave, SW  
Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Revised Outage Schedule - Order No. 202-18-4

Dear Secretary Perry:

Pursuant to Order No. 202-18-4 (the “Renewal Order”) issued June 8, 2018, by the Secretary of Energy (“Secretary”), PJM Interconnection, L.L.C. (“PJM”) and Virginia Electric and Power Company (“Dominion Energy Virginia”) respectfully submit the attached Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (“June 19, 2018 Outage Schedule”). This submission is in accordance with the Secretary’s directive that PJM and Dominion Energy Virginia provide updated outage schedules and associated Yorktown Units 1 and 2 emission estimates in the event the schedule or emission estimates change from those presented in the PJM Renewal Application Filing dated May 21, 2018 (“Renewal Application”) within two weeks of the change.<sup>1</sup>

In the Renewal Application, PJM explained that construction of the Skiffes Creek Transmission Project began in July 10, 2017, and was expected to take approximately 18-20 months.<sup>2</sup> As reported on October 12, 2017, the Skiffs Creek Transmission Project was scheduled to be completed May 12, 2019.<sup>3</sup> Subsequently, on March 16, 2018, PJM and Dominion Energy Virginia submitted a report updating the outage schedule for the Skiffes Creek Transmission

---

<sup>1</sup> Renewal Order at 2.

<sup>2</sup> Renewal Application at 10.

<sup>3</sup> Report on Yorktown Units 1 and 2 Revised Construction Schedule (“October 2017 Outage Schedule”).

Project (“March 16 Report”)<sup>4</sup>. The March 12, 2018 Outage Schedule attached to the March 16 Report includes a revised construction schedule and planned transmission outage sequence, and Yorktown run and emission estimates.

In the Renewal Order, the DOE determined that an emergency exists due to the shortage of electric energy and the shortage of facilities for the generation and transmission of electric energy.<sup>5</sup> The Secretary found the issuance of the Renewal Order is necessary to address the emergency and serve the public interest in the North Hampton Roads area.<sup>6</sup> The Renewal Order also directed PJM and Dominion Energy Virginia to provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the outage schedule or emission estimates change from those presented in the PJM Renewal Application within two weeks of the change.<sup>7</sup>

The attached June 19, 2018 Outage Schedule includes a revised construction schedule and planned transmission outage sequence for the Yorktown-Lanexa 34 115 kV Transmission Line, but the Yorktown run estimates remain unchanged from the March 12, 2018 Outage Schedule. The June 19, 2018 Outage Schedule extends the March 12, 2018 Outage Schedule from June 15, 2018, to August 31, 2018, only for the planned transmission outages associated with the Yorktown-Lanexa 34 115 kV transmission line. This report is filed out of an abundance of caution because the revised schedule for the Yorktown-Lanexa 34 115 kV transmission line does not add any additional run days for the expected dispatch of the Yorktown units for

---

<sup>4</sup> The March 16 Report was incorrectly dated March 16, 2017, but the attached Skiffes Creek Construction Transmission Outage Schedule was correctly dated March 12, 2018.

<sup>5</sup> Renewal Order at 1.

<sup>6</sup> Renewal Order at 1.

<sup>7</sup> Renewal Order at 2.

reliability. The Skiffes Creek transmission project is still estimated to be complete by August 21, 2019.<sup>8</sup>

The construction schedule may change again. PJM and Dominion Energy Virginia will provide an updated outage schedule and associated Yorktown Units 1 and 2 emission estimates in the event the outage schedule or emission estimates changes as directed by the Renewal Order.

### **REQUEST FOR CEII DESIGNATION**

The filing includes the following attachments:

1. Non Public version of Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (password protected containing Critical Energy Infrastructure (“CEII”) material);  
and
2. Public version of Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of March 12, 2018 (public version with CEII material redacted).

In regard to the Non Public version, PJM and Dominion Energy Virginia respectfully requests the transmission outage and limited contingency information submitted to the DOE be designated as CEII pursuant Federal Power Act (“FPA”) Section 215A(d) and the implementing regulations, 18 C.F.R. Section 388.113.

In Fixing America's Surface Transportation Act (“FAST”) Section 215A(a)(3), CEII is specifically defined as information “designated as critical electric infrastructure information by

---

<sup>8</sup> Under the revised schedule PJM is not expected to dispatch the units after May 15, 2019.

... the Secretary of the Department of Energy pursuant to subsection (d).”<sup>9</sup> Under FPA Section 215A(a)(3), CEII includes information that is submitted to the DOE, and designated as such by DOE.<sup>10</sup> The regulations define CEII in pertinent part as follows:

“1) *Critical electric infrastructure information* means information related to critical electric infrastructure ... Provided to the Commission or other Federal agency ... that is designated as critical electric infrastructure information by the Commission or the Secretary of the Department of Energy pursuant to section 215A(d) of the Federal Power Act. Such term includes information that qualifies as critical energy infrastructure information under the Commission's regulations. Critical Electric Infrastructure Information is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552(b)(3) and shall not be made available by any Federal, State, political subdivision or tribal authority pursuant to any Federal, State, political subdivision or tribal law requiring public disclosure of information or records pursuant to section 215A(d)(1)(A) and (B) of the Federal Power Act.”

2) *Critical energy infrastructure information* means specific engineering, vulnerability, or detailed design information about ... existing critical infrastructure that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person in planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
- (iv) Does not simply give the general location of the critical infrastructure.”<sup>11</sup>

PJM and Dominion Energy Virginia submits the redacted information is CEII because it provides details about the production, generation and transportation of energy, which if

---

<sup>9</sup> FAST Act, Pub. L. No. 114-94, section 61,003, 129 Stat. 1312, 1776.

<sup>10</sup> FAST Act, Pub. L. No. 114-94, section 61,003, 129 Stat. 1312, 1773 (“critical electric infrastructure information means information ... generated by or provided to the Commission or other Federal agency ... that is designated as critical electric infrastructure information by the Commission or the Secretary pursuant to subsection (d)”).

<sup>11</sup> 18 C.F.R. Section 388.113(c)(1) and (2).

publically available could be useful in planning an attack on critical infrastructure in the North Hampton Road area of the Commonwealth of Virginia, namely the electric transmission system.

Respectfully submitted,

*/s/ Steven R. Pincus*

Steven R. Pincus  
Associate General Counsel  
PJM Interconnection, L.L.C.  
955 Jefferson Avenue  
Valley Forge Corporate Center  
Norristown, PA 19403-2497  
Phone: 610-666-4370  
Email: [pincus@pjm.com](mailto:pincus@pjm.com)

Craig Glazer  
VP, Federal Government Policy  
PJM Interconnection, L.L.C.

Michael C. Regulinski  
Managing General Counsel  
Dominion Energy Services, Inc.  
120 Tredegar Street, RS-2  
Richmond, Virginia 23219  
Phone: (804) 819-2794  
Email: [michael.regulinski@dominionenergy.com](mailto:michael.regulinski@dominionenergy.com)

cc: Pat Hoffman, U.S. Department of Energy  
Catherine Jereza, U.S. Department of Energy  
Rakesh Batra, U.S. Department of Energy  
Katherine Konieczny, U.S. Department of Energy  
Sanjay Narayan, Sierra Club Environmental Law Program (Public Version of Outage Schedule)

## NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (subject to change)

Outage	Outage Time Frame	Limiting Contingency	Load Threshold	Hours over Load Threshold**	Days over load threshold**	Dominion Emissions Estimates
████████████████████	7/9/17-9/29/17	████████████████████ ████████████████████ ████████████████████	>18,400 MW	87	18	NOx 243.06 SO2 933.11 PM10 52.62 CO2 122385.6 Pb 0.01 Hg 0.0015 HCl 22.01 HF 3.56 CO 11.88
████████████████████	9/29/17-10/27/17	████████████████████ ████████████████████ ████████████████████	>17,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
████████████████████	10/27/17-10/30/17	████████████████████ ████████████████████ ████████████████████	1 unit > 12,000 MW,  2 units > 14,000 MW	0  0	0  0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
████████████████████	10/30/17-3/22/18	████████████████████ ████████████████████ ████████████████████	>17,200 MW	20	6	NOx 81.02 SO2 311.04 PM10 17.54 CO2 40795.2 Pb 0.0033 Hg 0.0005 HCl 7.34 HF 1.19 CO 3.96

## NON-PUBLIC CONFIDENTIAL – CEII

**Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (subject to change)**

[REDACTED]	3/25/18-8/31/18	[REDACTED]		0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
[REDACTED]	3/25/18-6/15/18	[REDACTED]	1 unit > 12,000 MW,  2 units > 14,000 MW	242  87	26  15	NOx 553.64 SO2 2125.42 PM10 119.85 CO2 278767.2 Pb 0.0227 Hg 0.0035 HCl 50.13 HF 8.12 CO 27.06
[REDACTED]	9/4/18-11/30/18	[REDACTED]	>13,000 MW	172	22	NOx 297.07 SO2 1140.47 PM10 64.31 CO2 149582.4 Pb 0.0122 Hg 0.0019 HCl 26.90 HF 4.36 CO 14.52
[REDACTED]	9/4/18-11/30/18	[REDACTED]	>18,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
[REDACTED]	12/01/18-12/31/18, 2/15/19-4/15/19	[REDACTED]	1 unit > 14,400 MW,  2 units > 16,400 MW	73  13	11  3	NOx 189.05 SO2 725.75 PM10 40.92 CO2 95188.8 Pb 0.0078 Hg 0.0012 HCl 17.12 HF 2.77 CO 9.24

## NON-PUBLIC CONFIDENTIAL – CEII

**Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (subject to change)**

[REDACTED]	12/01/18-12/31/18, 2/15/19-4/15/19	[REDACTED]	>18,100 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
[REDACTED]	4/9/19-4/15/19	[REDACTED]	1 unit > 12,000 MW,  2 units > 14,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
[REDACTED]	4/9/19-4/15/19	[REDACTED]	>18,000 MW	0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
[REDACTED]	3/28/19-4/1/19	[REDACTED]		0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0
[REDACTED]	5/11/19-5/15/19	[REDACTED]		0	0	NOx 0.0 SO2 0.0 PM10 0.0 CO2 0.0 Pb 0.0 Hg 0.0 HCl 0.0 HF 0.0 CO 0.0



## NON-PUBLIC CONFIDENTIAL – CEII

**Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (subject to change)**

	6/16/18-9/3/18, 1/1/19-2/14/19		>18,400 MW	66	16	NOx 216.05 SO2 829.43 PM10 46.77 CO2 108787.2 Pb 0.0089 Hg 0.0014 HCl 19.56 HF 3.17 CO 10.56
			<b>Total Estimate</b>	760	117	NOx 1579.89 SO2 6065.22 PM10 342.01 CO2 795506.4 Pb 0.0649 Hg 0.0099 HCl 143.05 HF 23.17 CO 77.23

Planned transmission outages associated with Skiffes Creek transmission project that may require Yorktown 1 & 2 units to run scheduled to be completed on May 15, 2019. Skiffes Creek transmission project construction schedule is estimated to be complete by August 21, 2019.

\*\* Estimates are for both Yorktown 1 & 2 units.

## NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (subject to change)

		07-2017	08-2017	09-2017	10-2017	11-2017	12-2017	01-2018	02-2018	03-2018	04-2018	05-2018	06-2018	07-2018	08-2018	09-2018	10-2018	11-2018
<b>Days over load threshold **</b>		9	9	0	0	0	1	4	1	2	2	11	26	7	8	16	2	4
<b>Hours over Load Threshold **</b>		39	48	0	0	0	3	13	4	6	8	95	220	30	34	145	13	14
<b>Dominion Emission Estimates (tons)</b>	NOx	107.7	6.0	0.0	0.0	0.0	0.0	44.4	0.0	27.01	27.01	148.54	351.09	94.52	108.03	216.05	27.01	54.01
	SO2	416.9	20.8	0.0	0.0	0.0	0.0	157.6	0.0	103.68	103.68	570.23	1347.83	362.88	414.72	829.43	103.68	207.36
	PM10	12.83	14.9	0.0	0.003	0.0	0.0	10.97	0.0	5.85	5.85	32.15	76.00	20.46	23.39	46.77	5.85	11.69
	CO2	49,417.9	2,744.1	-	5.8	-	-	19,702.3	-	13,598.4	13,598.4	74,791.2	76,779.2	7,594.4	4,393.6	108,787.2	13,598.4	27,196.8
	Pb	0.0046	0.00028	0.0	0.0	0.0	0.0	0.000272	0.0	0.0011	0.0011	0.0061	0.0144	0.0039	0.0044	0.0089	0.0011	0.0022
	Hg	0.000897	0.0000546	0.0	0.0	0.0	0.0	0.000318	0.0	0.0002	0.0002	0.0009	0.0022	0.0006	0.0007	0.0014	0.0002	0.0003
	HCl	12.92	0.79	0.0	0.0	0.0	0.0	4.59	0.0	2.45	2.45	13.45	31.79	8.56	9.78	19.56	2.45	4.89
	HF	1.62	0.10	0.0	0.0	0.0	0.0	0.57	0.0	0.40	0.40	2.18	5.15	1.39	1.58	3.17	0.40	0.79
	CO	5.64	0.36	0.0	0.0	0.0	0.0	1.9	0.0	1.32	1.32	7.26	17.16	4.62	5.28	10.56	1.32	2.64

Figures highlighted in green are actual emission data for the month

## NON-PUBLIC CONFIDENTIAL – CEII

Skiffes Creek Construction Transmission Outage Schedule and Yorktown Units 1 and 2 Emission Estimates as of June 19, 2018 (subject to change)

		12-2018	01-2019	02-2019	03-2019	04-2019	05-2019
<b>Days over load threshold **</b>		10	1	4	0	0	0
<b>Hours over Load Threshold **</b>		59	2	27	0	0	0
<b>Dominion Emission Estimates (tons)</b>	NOx	135.03	13.50	54.01	0.0	0.0	0.0
	SO2	518.39	51.84	207.36	0.0	0.0	0.0
	PM10	29.23	2.92	11.69	0.0	0.0	0.0
	CO2	67,992.0	6,799.2	27,196.8	-	-	-
	Pb	0.0055	0.0006	0.0022	0.0	0.0	0.0
	Hg	0.0008	0.0001	0.0003	0.0	0.0	0.0
	HCl	12.23	1.22	4.89	0.0	0.0	0.0
	HF	1.98	0.20	0.79	0.0	0.0	0.0
CO	6.60	0.66	2.64	0.0	0.0	0.0	