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January 31, 2023

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C., Docket No. ER13-198-000*
2023 Informational Filing

Dear Secretary Bose:

In accordance with the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”),¹ Schedule 6, section 1.5.8(m)(1), PJM Interconnection, L.L.C. (“PJM”) submits to the Federal Energy Regulatory Commission (“Commission”), in compliance with the Commission’s March 22, 2013 order² as Appendix A to this filing, the 2022 List of Immediate-need Reliability Projects for which an existing Transmission Owner was selected as the Designated Entity. PJM also includes with this filing a status update in Appendix B, listing Immediate-need Reliability Projects included in prior reports that have not yet

¹ All capitalized terms that are not otherwise defined herein shall have the same meaning as they are defined in the Open Access Transmission Tariff (“Tariff”), PJM Operating Agreement, or the Reliability Assurance Agreement among Load Serving Entities in the PJM Region.

² See *PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214, at P 248 (Mar. 22, 2013) (“March 22 Order”) (requiring that for the category of projects identified as Immediate-need Reliability Projects PJM must maintain and post a list of prior year projects planned under the limited category of Immediate-need Reliability Projects for which the existing Transmission Owner was designated as the entity responsible for construction and ownership or financing of the project. Such list also must be filed with the Commission as an informational filing in January of the following calendar year.).

been energized or were placed in-service in 2022.³ PJM is submitting this filing for informational purposes.

I. DESCRIPTION OF INFORMATIONAL FILING

Schedule 6, section 1.5.8(m)(1) requires that in January of each year PJM post on its website and file with the Commission a list of the Immediate-need Reliability Projects designated to an existing Transmission Owner in the prior calendar year. PJM's Appendix A lists the Immediate-need Reliability Projects designated to a Transmission Owner in 2022. The list includes three (3) regional transmission expansion plan ("RTEP") baseline projects,⁴ which comprise 18 baseline upgrades,⁵ approved by the PJM Board of Managers ("PJM Board") that were exempted as Immediate-need Reliability Projects from PJM's competitive proposal window process.⁶

³ Once an Immediate-need Reliability Project is identified as energized in a report, it is no longer listed in subsequent years' reports.

⁴ As noted by PJM in its December 27, 2019 response ("December 27 Response") to the Commission's Show Cause Order issued in Docket No. EL19-91-000, PJM lists all baseline upgrades in this Informational Filing using a baseline upgrade identification number ("baseline upgrade ID"). A baseline upgrade ID may represent a baseline RTEP project or it may be one of several individual baseline upgrades to a baseline project with individual baseline upgrade IDs that constitute an RTEP project approved by the PJM Board of Managers ("PJM Board"). See *PJM Interconnection, L.L.C.*, Response to Oct. 27, 2019 Order Instituting Section 206 Proceedings, Docket No. EL19-91-000, at 2, n.7 (Dec. 27, 2019) (stating that although not a Tariff definition, "a project is the required system reinforcement or group of reinforcements that together mitigate a single reliability criteria violation or cluster of related reliability criteria violations identified by PJM through its analysis.").

⁵ Notably, specific to Appendix A, baseline project b3707 (comprised of two baseline upgrades) is identified as "in service." Additionally, 14 of the 18 baseline upgrades listed are associated with baseline project b3718 (Data Center Alley area), which project is identified as needed to address the load growth in the Dominion Zone.

⁶ The number of baseline projects included in Appendix A has continued to remain small, e.g., PJM reported: eight (8) baseline projects (comprised of 11 baseline upgrades) in the 2020 report; two (2) baseline projects (comprised of four (4) baseline upgrades) in the 2021 report; and six (6) baseline projects (comprised of 10 baseline upgrades) in the 2022 report. Likewise, the number of baseline projects carried over each year in Appendix B has continued to decrease, e.g., PJM reported: 55 baseline projects (comprised of 104 baseline upgrades) in the 2020 report; 47 baseline projects (comprised of 86 baseline upgrades) in the 2021 report; and 36 baseline projects (comprised of 69 baseline upgrades) in the 2022 report.

Consistent with the Operating Agreement, Schedule 6, section 1.5.8(m)(1), Appendix A contains the following information:

1. Number of baseline projects;
2. Each baseline project's identification number, which is the number used for all baseline upgrades associated with the baseline project;
3. The baseline project's reliability driver;
4. The baseline upgrade identification number, as applicable;
5. A description of each baseline project and/or upgrade;
6. The Transmission Owner designated responsibility for the construction of the baseline project/upgrade;
7. The PJM Transmission Owner Zone in which the baseline project/upgrade will be located;
8. The anticipated in-service date for the baseline project/upgrade;
9. The date the Transmission Owner actually energized the baseline project/upgrade;
10. The status of the baseline project/upgrade (e.g., "planning" or "in-service");
11. The date the PJM Board approved the baseline project/upgrade; and
12. Links to documents posted by PJM on its website detailing the reasons for the Immediate-need Reliability Projects.

Appendix B, included with this filing, provides a status update of the 23 Immediate-need Reliability Projects carried over from the 2022 Informational Report.⁷ The 23 baseline projects

⁷ In preparing this Informational Filing, PJM reviewed the previously reported baseline upgrades that are included in this Appendix B. For those projects that are "on hold" or in the "engineering and procurement" phase and have anticipated in-service dates five years or greater from Board approval, Appendix B - Column M provides a short description of the reason for the delay. PJM has not updated the anticipated in-service date for baseline upgrades b3011.1, b3011.6, b3012.1, b3017.1 b3017.2, and b3017.3 because these upgrades were identified to address generation deactivation notices, which notices have since been withdrawn. For baseline upgrades b3011.1, b3011.6 and b3012.1, PJM has found that those upgrades are no longer needed to address reliability violations in the 2022 RTEP, and PJM anticipates canceling those upgrades in 2023. With regard to baseline upgrades b3017.1, b3017.2 and b3017.3, PJM is continuing to reevaluate the need for the upgrades due to overlap with the interconnection process.

comprise 43 baseline upgrades. Of the 43 baseline upgrades, nine (9) baseline upgrades⁸ were placed in-service and will not be included in future Informational Filings.⁹

Finally, as noted in the January 2022 Informational Filing, any projects previously reported in its informational filings that qualified as exempt pursuant to Schedule 6, section 1.5.8(n) (Lower Voltage Facilities Exemption), (o) (Form 715 Project Exemption)¹⁰ or (p) (Substation Equipment Exemption) will continue to be reported in Appendix B until they are energized or canceled. Once energized or canceled, they will be removed from future report as well.

II. CORRESPONDENCE AND COMMUNICATION

Correspondence and communications with respect to this filing should be sent to, and the parties request the Secretary to include on the official service list, the following:

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⁸ The nine (9) baseline projects/upgrades placed in service include: b1696.1, b2626, b2652, b2978, b3026, b3108.1, b3108.2, b3108.3 and b3320.

⁹ It is noteworthy that two baseline projects associated with the Transource 9A Project include: b2752 (b2752.8 and 2752.9) and b2970 (b2970.1, b2970.2, b2970.3 and b2970.4). These two baseline projects continue to be on hold because they are associated with the Transource 9A Project, which is the subject of federal court litigation regarding the state siting approval process.

¹⁰ The Transmission Owner Form No. 715 planning criteria exemption was deleted from the PJM planning process, effective January 23, 2020. *See PJM Interconnection, L.L.C.*, 170 FERC ¶ 61,049 (2020) (accepting PJM's revisions to delete section 1.5.8(o) from Schedule 6 of the Operating Agreement).

III. CONCLUSION

PJM respectfully requests that the Commission accept this informational filing as responsive to its reporting requirement as set forth in the Operating Agreement, Schedule 6, section 1.5.8(m)(1) and the March 22 Order.

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the foregoing document on those parties on the official Service List compiled by the Secretary in these proceedings.

Dated at Audubon, Pennsylvania this 31st day January, 2023.

/s/ Pauline Foley

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Appendix A

PJM Immediate Need Reliability Projects (Excluded from Window) Approved by the PJM Board in 2022

Project Count	Project	Project Driver	Upgrade ID	Description	Designated Entity for Construction	PJM Transmission Owner Zone	Anticipated In-Service Date	Actual In-Service Date	Need-by Date	Project Status	PJM Board Approval Date	Immediate Need Reason
1	b3707	Operational Performance	b3707.1	Reconductor approximately 0.57mi of 115kV Line #1021 from Harmony Village to Greys Point with 768 ACSS to achieve a summer emergency rating of 237MVA. The current conductor is 477 ACSR.	Dominion	Dominion	4/28/2022	4/25/2022	6/1/2022	In Service	2/16/2022	https://www.pjm.com/-/media/committees-groups/committees/teac/2022/20220208/20220208-item-11b-reliability-analysis-update.ashx
			b3707.2	Reconductor approximately 0.97mi of 115 kV Line #65 from Rappahanock to White Stone with 768 ACSS to achieve a summer emergency rating of 237MVA. The current conductor is 477 ACSR.	Dominion	Dominion	5/31/2022	4/25/2022	6/1/2022	In Service	2/16/2022	
2	b3717	Generator Deactivation	b3717.1	Install a series reactor on Cheswick-Springdale 138 kV line	DL	DL	12/31/2024		12/31/2024	Planning	10/4/2022	https://www.pjm.com/-/media/committees-groups/committees/teac/2022/20220906/item-02---generation-deactivation-notification-update.ashx
			b3717.2	Transmission Line Rearrangement: · Replacement of four structures and reconductor DLCO portion of Plum-Springdale 138 kV line. · Associated communication and relay setting changes at Plum and Cheswick.	DL	DL	12/31/2024		12/31/2024	Planning	10/4/2022	
3	b3718	Baseline Load Growth Deliverability & Reliability	b3718.1	Install one 500/230kV 1440MVA transformer at a new substation called Wishing Star. Cut and extend 500 kV Line #546 (Brambleton-Mosby) and 500 kV Line #590 (Brambleton-Mosby) to the proposed Wishing Star substation. Lines to terminate in a 500 kV breaker and a half configuration.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	https://www.pjm.com/-/media/committees-groups/committees/teac/2022/20220712/item-08---dominion-northern-virginia-area-violations---need-statement.ashx
			b3718.2	Install one 500/230 kV 1440 MVA transformer at a new substation called Mars near Dulles International Airport.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.3	Construct a new 500 kV transmission line for ~ 3.5 miles along with substation upgrades at Wishing Star and Mars. New right-of-way will be needed and will share same structures with the line. New conductor to have a minimum summer normal rating of 4357 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.4	Reconductor ~0.62 miles of 230 kV line #2214 (Buttermilk-Roundtable) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.5	Reconductor ~1.52 miles of 230 kV line #2031 (Enterprise-Greenway-Roundtable) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.6	Reconductor ~0.64 miles of 230 kV line #2186 (Enterprise-Shellhorn) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.7	Reconductor ~2.17 miles of 230 kV line #2188 (Lockridge-Greenway-Shellhorn) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.8	Reconductor ~0.84 miles of 230 kV line #2223 (Lockridge-Roundtable) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.9	Reconductor ~3.98 miles of 230 kV line #2218 (Sojourner-Runway-Shellhorn) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.10	Reconductor ~1.61 miles of 230 kV line #9349 (Sojourner-Mars) to achieve a summer rating of 1574 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.11	Upgrade 4-500 kV breakers (total) to 63kA on either end of 500 kV Line #502 (Loudoun-Mosby)	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.12	Upgrade 4-500 kV breakers (total) to 63 kA on either end of 500 kV Line #584 (Loudoun-Mosby)	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	
			b3718.13	Cut and loop 230 kV Line #2079 (Sterling Park-Dranesville) into Davis Drive substation and install two GIS 230 kV breakers.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	

Appendix A

PJM Immediate Need Reliability Projects (Excluded from Window) Approved by the PJM Board in 2022

Project Count	Project	Project Driver	Upgrade ID	Description	Designated Entity for Construction	PJM Transmission Owner Zone	Anticipated In-Service Date	Actual In-Service Date	Need-by Date	Project Status	PJM Board Approval Date	Immediate Need Reason
			b3718.14	Construct a new 230 kV transmission line for ~3.5 miles along with substation upgrades at Wishing Star and Mars. New right-of-way will be needed and will share same structures with the 500 kV line. New conductor to have a minimum summer normal rating of 1573 MVA.	Dominion	Dominion	6/1/2025		6/1/2025	Planning	10/4/2022	

Appendix B
Status Update of PJM Immediate-need Reliability Projects Included in 2022 Informational Filing

Project Count	Project	Upgrade ID	Information	Description	Designated Entity for Construction	PJM Transmission Owner Zone	Anticipated In-Service Date	Actual In-Service Date	Need-by Date	Project Status	PJM Board Approval Date	Delayed Reason
1	b1696	b1696.1	This project is to address a short circuit criteria violation driven by a board approved project (b1696) and replaces an existing Transmission Owner circuit breaker.	Replace the Idylwood 230 kV '25112' breaker with 50 kA breaker	Dominion	Dominion	8/31/2022	8/1/2022	6/1/2017	In Service	12/7/2016	
		b1696.2	This project is to address a short circuit criteria violation driven by a board approved project (b1696) and replaces an existing Transmission Owner circuit breaker.	Replace the Idylwood 230 kV '209712' breaker with 50 kA breaker	Dominion	Dominion	12/30/2026		6/1/2017	Under Construction	12/7/2016	Site plan approval was delayed until May 5, 2020. Dominion anticipates completion of work by end of 2026.
2	b2626	b2626	Immediate need due to Dominion Transmission Planning Criteria - End of Life Criteria Violation	Rebuild the 115 kV Line No.34 (Skiffes Creek - Yorktown) and the double circuit portion of 115kV Line No.61 to current standards with a summer emergency rating of 353 MVA at 115 kV. Rebuild the 2.5 mile tap line to Fort Eustis as Double Circuit line to loop line No.34 in and out of Fort Eustis station to current standard with a summer emergency rating of 393 MVA at 115 kV. Install a 115 kV breaker in line No.34 at Fort Eustis station.	Dominion	Dominion	12/31/2022	12/1/2022	12/31/2018	In Service	7/29/2019	
3	b2652	b2652	Immediate need due to Dominion Transmission Planning Criteria - End of Life Criteria Violation	Rebuild Greatbridge - Hickory 115 kV Line #16 and Greatbridge - Chesapeake E.C. to current standard with summer emergency rating of 353 MVA at 115 kV.	Dominion	Dominion	10/15/2022	10/15/2022	12/1/2021	In Service	10/15/2015	
4	b2752	b2752.8	This project is to address a short circuit criteria violation by replacing an existing Transmission Owner circuit breaker.	Replace the Conastone 230kV '2322 B5' breaker with a 63kA breaker	BGE	BGE	12/31/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval
		b2752.9	This project is to address a short circuit criteria violation by replacing an existing Transmission Owner circuit breaker.	Replace the Conastone 230kV '2322 B6' breaker with a 63kA breaker	BGE	BGE	12/31/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval
5	b2759	b2759	This project is needed to address Dominion Form 715 criteria for aging infrastructure.	Rebuild Line #550 Mt. Storm – Valley 500kV	Dominion	Dominion	12/31/2023		6/1/2016	Under Construction	2/14/2017	The U.S. Forest Service (USFS) required a complete Environmental Assessment (EA). Based on the EA, the USFS required access road construction in the George Washington Forest, which necessitated working around time of year restrictions for threatened and endangered species.
6	b2933	b2933	This project is needed to address PSEG Form 715 criteria for N-1-1 load loss criteria	Third Source for Springfield Rd. and Stanley Terrace Stations	PSEG	PSEG	12/31/2024		6/1/2018	Under Construction	10/18/2017	Project delay was due to municipal resistance and objections
		b2933.31	This project is needed to address PSEG Form 715 criteria for N-1-1 load loss criteria	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Front Street - Springfield)	PSEG	PSEG	12/31/2024		6/1/2018	Under Construction	10/18/2017	Project delay was due to municipal resistance and objections
7	b2935	b2935	This project is needed to address PSEG Form 715 criteria for N-1-1 load loss criteria	Third Supply for Runnemedede 69kV and Woodbury 69kV	PSEG	PSEG	5/30/2023		6/1/2018	Under Construction	10/18/2017	Project delay was due to municipal challenges impacting the project routing
		b2935.1	This project is needed to address PSEG Form 715 criteria for N-1-1 load loss criteria	Build a new 230/69 kV switching substation at Hilltop utilizing the PSE&G property and the K-2237 230 kV line.	PSEG	PSEG	5/30/2023		6/1/2018	Under Construction	10/18/2017	Project delay was due to municipal challenges impacting the project routing
		b2935.2	This project is needed to address PSEG Form 715 criteria for N-1-1 load loss criteria	Build a new line between Hilltop and Woodbury 69 kV providing the 3rd supply	PSEG	PSEG	5/30/2023		6/1/2018	Under Construction	10/18/2017	Project delay was due to municipal challenges impacting the project routing
8	b2970	b2970	This project is to address multiple Generation Deliverability, Base Case Analysis, and N-1-1 Thermal violations on the Ringgold 230/138 kV transformers #3 and 4 in the immediate need timeframe.	Ringgold - Catocin Solution	APS	APS	6/1/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval

Appendix B
Status Update of PJM Immediate-need Reliability Projects Included in 2022 Informational Filing

Project Count	Project	Upgrade ID	Information	Description	Designated Entity for Construction	PJM Transmission Owner Zone	Anticipated In-Service Date	Actual In-Service Date	Need-by Date	Project Status	PJM Board Approval Date	Delayed Reason
		b2970.1	This project is to address multiple Generation Deliverability, Base Case Analysis, and N-1-1 Thermal violations on the Ringgold 230/138 kV transformers #3 and 4 in the immediate need timeframe.	Install two new 230 kV positions at Ringgold for 230/138 kV transformers.	APS	APS	6/1/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval
		b2970.2	This project is to address multiple Generation Deliverability, Base Case Analysis, and N-1-1 Thermal violations on the Ringgold 230/138 kV transformers #3 and 4 in the immediate need timeframe.	Install new 230 kV position for the Catoctin 230 kV line at Ringgold.	APS	APS	6/1/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval
		b2970.3	This project is to address multiple Generation Deliverability, Base Case Analysis, and N-1-1 Thermal violations on the Ringgold 230/138 kV transformers #3 and 4 in the immediate need timeframe.	Install one new 230 kV breaker at Catoctin substation.	APS	APS	6/1/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval
		b2970.4	This project is to address multiple Generation Deliverability, Base Case Analysis, and N-1-1 Thermal violations on the Ringgold 230/138 kV transformers #3 and 4 in the immediate need timeframe.	Install new 230 / 138 kV transformer at Catoctin substation. Convert Ringgold-Catoctin 138 kV Line to 230 kV operation.	APS	APS	6/1/2022		6/1/2020	On Hold	12/5/2017	Tied to Transource 9A Project which is awaiting state siting approval
9	b2978	b2978	This project is to address ongoing high voltages on the EHV system in the Dominion Carson area under light load conditions	Install 2-125 MVAR STATCOMs at Rawlings and 1-125 MVAR STATCOM at Clover 500 kV Substations	Dominion	Dominion	2/27/2022	2/4/2022	5/31/2021	In Service	2/13/2018	
10	b3011	b3011.1	This project is to address generator deliverability thermal violation due to Davis Besse, Perry and Beaver Valley 1&2 deactivation	Construct new Route 51 substation and connect 10 138 kV lines to new substation	APS	APS	6/1/2021		6/1/2021	On Hold	7/31/2018	Upgrade was found to be no longer needed to address reliability violations in the 2022 RTEP. PJM anticipates canceling the upgrade in 2023.
		b3011.6	This project is to address generator deliverability thermal violation due to Davis Besse, Perry and Beaver Valley 1&2 deactivation	Upgrade remote end relays for Yukon –Allenport – Iron Bridge 138 kV line	APS	APS	6/1/2021		6/1/2021	On Hold	7/31/2018	Upgrade was found to be no longer needed to address reliability violations in the 2022 RTEP. PJM anticipates canceling the upgrade in 2023.
11	b3012	b3012.1	This project is to address thermal violations due to generator deactivation - DAVIS BESSE 1, PERRY 1, BEAVER VALLEY 1, BEAVER VALLEY 2	Construct two new 138 kV ties with the single structure from APS's new substation to DUQ's new substation. The estimated line length is approximately 4.7 miles. The line is planned to use multiple ACSS conductors per phase.	APS	APS	6/1/2021		6/1/2021	On Hold	7/29/2019	Upgrade was found to be no longer needed to address reliability violations in the 2022 RTEP. PJM anticipates canceling the upgrade in 2023.

Appendix B
Status Update of PJM Immediate-need Reliability Projects Included in 2022 Informational Filing

Project Count	Project	Upgrade ID	Information	Description	Designated Entity for Construction	PJM Transmission Owner Zone	Anticipated In-Service Date	Actual In-Service Date	Need-by Date	Project Status	PJM Board Approval Date	Delayed Reason
12	b3017	b3017.1	This project is to address generator deliverability thermal violation due to Davis Besse, Perry and Beaver Valley 1&2 deactivation	Rebuild Glade to Warren 230 kV line with hi-temp conductor and substation terminal upgrades. 11.53 miles. New conductor will be 1033 ACSS. Existing conductor is 1033 ACSR.	PENELEC	PENELEC	6/1/2025		6/1/2021	On Hold	7/31/2018	Anticipated in-service has not been updated because upgrade was identified to address generation deactivation notice. Deactivation notice was withdrawn. While the upgrade was no longer needed to address reliability violations, PJM is continuing to reevaluate the need for the upgrade due to overlap with the interconnection process.
		b3017.2	This project is to address generator deliverability thermal violation due to Davis Besse, Perry and Beaver Valley 1&2 deactivation	Glade substation terminal upgrades. Replace bus conductor, wave traps, and relaying.	PENELEC	PENELEC	6/1/2025		6/1/2021	On Hold	7/31/2018	Anticipated in-service has not been updated because upgrade was identified to address generation deactivation notice. Deactivation notice was withdrawn. While the upgrade was no longer needed to address reliability violations, PJM is continuing to reevaluate the need for the upgrade due to overlap with the interconnection process.
		b3017.3	This project is to address generator deliverability thermal violation due to Davis Besse, Perry and Beaver Valley 1&2 deactivation	Warren substation terminal upgrades. Replace bus conductor, wave traps, and relaying.	PENELEC	PENELEC	6/1/2025		6/1/2021	On Hold	7/31/2018	Anticipated in-service has not been updated because upgrade was identified to address generation deactivation notice. Deactivation notice was withdrawn. While the upgrade was no longer needed to address reliability violations, PJM is continuing to reevaluate the need for the upgrade due to overlap with the interconnection process.
13	b3026	b3026	This project is to address generator deliverability violation in the immediate need timeframe.	Re-conductor the entire 230 kV Line No.274 (Pleasant View – Ashburn – Beaumeade) using a higher capacity conductor with an approximate rating of 1572 MVA.	Dominion	Dominion	7/1/2022	7/1/2022	6/1/2021	In Service	10/2/2018	
14	b3108	b3108.1	This project is to address Operational Performance issue	Install 100 MVAR reactor at Miami 138 kV substation	Dayton	Dayton	12/31/2021	12/13/2021	12/20/2021	In Service	7/29/2019	
		b3108.2	This project is to address Operational Performance issue	Install 100 MVAR reactor at Sugar creek 138 kV substation	Dayton	Dayton	12/31/2021	3/18/2022	6/1/2019	In Service	7/29/2019	
		b3108.3	This project is to address Operational Performance issue	Install 100 MVAR reactor at Hutchings 138 kV substation	Dayton	Dayton	12/31/2021	5/11/2022	6/1/2019	In Service	7/29/2019	
15	b3115	b3115	This project is to address issue due to generator deactivation - Three Mile Island 1	Provide new station service to control building from 230 kV bus (served from plant facilities presently).	ME	ME	12/29/2023		9/30/2019	Engineering Procurement	7/29/2019	Project schedule was revised in January 2021 to reflect new construction schedule with updated scope based on detailed engineering, which included removing interconnection metering located at Generator, FE relaying from power plant to separate control building, and removing bus PTs
16	b3124	b3124	This project is to address issue due to generator deactivation - Bruce Mansfield	Separate metering, station power, and communication at Bruce Mansfield 345 kV station	ATSI	ATSI	5/1/2023		12/31/2020	Engineering Procurement	12/3/2019	
17	b3223	b3223.1	This project is to address thermal, voltage and load loss violations in the Northern Neck area	Install a 2nd 230kV circuit with a minimum summer emergency rating of 1047 MVA between Lanexa and Northern Neck Substations. The 2nd circuit will utilize the vacant arms on the double-circuit structures that are being installed on the Line #224 (Lanexa-Northern Neck) End-of-Life rebuild project (b3089).	Dominion	Dominion	12/31/2023		6/1/2023	Engineering Procurement	12/9/2020	
		b3223.2	This project is to address thermal, voltage and load loss violations in the Northern Neck area	Expand the Northern Neck terminal from a 230kV, 4-breaker ring bus to a 6-breaker ring bus.	Dominion	Dominion	12/31/2023		6/1/2023	Engineering Procurement	12/9/2020	Real Estate negotiations have impacted Dominion's ability to purchase the property and apply for rezoning.

Appendix B
Status Update of PJM Immediate-need Reliability Projects Included in 2022 Informational Filing

Project Count	Project	Upgrade ID	Information	Description	Designated Entity for Construction	PJM Transmission Owner Zone	Anticipated In-Service Date	Actual In-Service Date	Need-by Date	Project Status	PJM Board Approval Date	Delayed Reason
		b3223.3	This project is to address thermal, voltage and load loss violations in the Northern Neck area	Expand the Lanexa terminal from a 6-breaker ring bus to a breaker-and-a-half arrangement.	Dominion	Dominion	12/31/2023		6/1/2023	Engineering Procurement	12/9/2020	Multiple outages are delaying Dominion's ability to complete the reconfiguration work in this area.
18	b3246	b3246.1	This project is to address load drop violations in the Manassas area	Convert 115 kV Line #172 Liberty-Lomar and 115 kV Line #197 Cannon Branch-Lomar to 230 kV to provide a new 230 kV source between Cannon Branch and Liberty. The majority of 115 kV Line #172 Liberty-Lomar and Line #197 Cannon Branch-Lomar is adequate for 230 kV operation. Lines to have a summer rating of 1047 MVA/1047 MVA (SN/SE)	Dominion	Dominion	12/31/2024		6/1/2023	Engineering Procurement	2/10/2021	Coordination of project schedules and outage sequencing with two other utilities, two additional customers, as well as other Dominion projects in the area, required extending energization to December 2024. This project was also affected by extended material lead times that also contributed to pushing out the energization date.
		b3246.2	This project is to address load drop violations in the Manassas area	Perform substation work for the 115 kV to 230 kV Line conversion at Liberty, Wellington, Godwin, Pioneer, Sandlot and Cannon Branch.	Dominion	Dominion	12/31/2024		6/1/2023	Engineering Procurement	2/10/2021	Coordination of project schedules and outage sequencing with two other utilities, two additional customers, as well as other Dominion projects in the area, required extending energization to December 2024. This project was also affected by extended material lead times that also contributed to pushing out the energization date.
		b3246.3	This project is to address load drop violations in the Manassas area	Extend 230kV Line #2011 Cannon Branch – Clifton to Winters Branch by removing the existing Line #2011 termination at Cannon Branch and extending the line to Brickyard	Dominion	Dominion	12/31/2024		6/1/2023	Engineering Procurement	2/10/2021	Line #2011 cannot be removed from Cannon Branch before the b3246.1 upgrades are complete as it could result in a 300 MW load drop.
		b3246.4	This project is to address load drop violations in the Manassas area	Perform substation work at Cannon Branch, Brickyard and Winters Branch for the 230kV Line #2011 extension.	Dominion	Dominion	12/31/2024		6/1/2023	Engineering Procurement	2/10/2021	Line #2011 cannot be removed from Cannon Branch before the b3246.1 upgrades are complete as it could result in a 300MW load drop.
		b3246.5	This project is to address load drop violations in the Manassas area	Replace the Gainesville 230kV 40kA breaker "216192" with a 50kA breaker.	Dominion	Dominion	4/21/2023		6/1/2023	Engineering Procurement	2/10/2021	
19	b3319	b3319	This project is to address thermal violations due to Cheswick deactivation	Add forced cooling to increase the normal rating of the Brunot Island-Carson (302) 345 kV High Pressure Fluid Filled (HPFF) underground cable circuit	DL	DL	12/31/2024		6/1/2022	Engineering Procurement	9/22/2021	The Q4 2024 in-service target is mainly based on the supply chain procurement cycle of 345kV high pressure, fluid-filled (HPFF) cable for this project.
20	b3320	b3320	This project is to address thermal violations due to Avon Lake 9 and 10 deactivation	Replace the CT at Don Marquis 345 kV	AEP	AEP	6/1/2022	8/15/2022	6/1/2022	In Service	12/8/2021	
21	b3321	b3321	This project is to address thermal violations due to Morgantown 1 and 2 deactivation	Rebuild Cranes Corner-Stafford 230 kV line	Dominion	Dominion	12/31/2025		6/1/2022	Engineering Procurement	12/8/2021	Rebuilding this line requires approval of a Certificate of Public Convenience and Necessity (CPCN) before commencing construction. Based on the number of projects pending in the CPCN queue, the application date was delayed. The CPCN application is now scheduled to be filed in April 2023 and a final CPCN order is anticipated by January 2024. Construction is expected to begin following issuance of an order granting a CPCN.
22	b3332	b3332	This project is to address thermal violations due to Indian River 4 deactivation	Rerate the 23076 Steel-Milford 230 kV line	DPL	DPL	12/31/2023		6/1/2022	Engineering Procurement	9/22/2021	Project in-service date was delayed at the time of acceptance of construction responsibility (1/4/22) to reflect a more realistic in-service date following high level initial review of scope.
23	b3335	b3335	This project is to address thermal violations due to Pedriktown and Newark deactivation	Reconductor a 0.76 mile portion of the Croydon-Burlington 230 kV line	PECO	PECO	6/1/2023		6/1/2022	Planning	12/8/2021	Project in-service date was delayed at the time of acceptance of construction responsibility (1/4/22) to reflect a more realistic in-service date following high level initial review of scope.