

## Zonal Cost Allocation for Retaining Brandon Shores 1 & 2 Generators

### Reliability Problems

The following reliability problems would occur if the Brandon Shores units 1 & 2 retired prior to required baseline projects being completed:

- Overload of Five Rock – Rock Ridge 1 115 KV line
- Overload of Five Rock – Rock Ridge 2 115 KV line
- Overload of Rock Ridge – Colonial Pipeline 1 115 kV line
- Overload of Rock Ridge – Colonial Pipeline 2 115 kV line
- Overload of Colonial Pipeline – Glenarm 1 115 kV line
- Overload of Colonial Pipeline – Glenarm 2 115 kV line
- Overload of Chestnut Hill 7 – Frederick Road 7 115 kV line
- Overload of Chestnut Hill 8 – Frederick Road 8 115 kV line
- Overload of Doubs Transformer #3 500/230 kV
- Overload of Bethel – Riverton 138 kV line
- Overload of Dickerson – Dickerson H 230 KV line

In addition to the thermal overloads noted above, PJM also observed wide spread voltage deviation violations impacting the following Transmission Owners: BGE, PECO, Dominion, PECO, APS, ME and PPL

### Baseline Projects

As of the time of this posting, the anticipated reinforcements would be as follows:

Upgrade ID	Description	Cost Estimate (\$M)	Trans Owner	Status	Projected In Service Date
b3780.1	Peach Bottom North upgrades – substation work Add 3x 500 kV breakers to form a breaker-and-a-half bay.	76.63	PECO	EP	12/31/2028
b3780.2	Peach Bottom to Graceton (PECO) – New 500 kV transmission line New rating: 4503 MVA SN/ 5022 MVA SE	63.74	PECO	EP	12/31/2028
b3780.4	Peach Bottom to Graceton (BGE) – transmission work New rating: 4503 MVA SN/ 5022 MVA SE	38.8	BGE	EP	12/31/2028

b3780.5	Build Solley Road substation + Statcom. New STATCOM rating: 350 MVAR Add 4x 230 kV breakers bays.	239.6	BGE	EP	12/31/2028
b3780.6	Build Granite substation + Statcom. New STATCOM rating: 350 MVAR Add 4x 230 kV breaker bays.	198.6	BGE	EP	12/31/2028
b3780.7	Build Batavia Road substation. Add 4x 230 kV breaker bays.	127.8	BGE	EP	12/31/2028
b3780.8	Graceton 500 kV expansion Add 3x 500 kV breaker bays, 2x 500/230 kV auto transformer, 1x 500 kV caps. New transformer rating: 1559 MVA SN / 1940 MVA SE New capacitor rating: 250 MVAR	213.2	BGE	EP	12/31/2028
b3780.9	Graceton to Batavia Road 230 kV double circuit pole line New rating: 1331 MVA SN/ 1594 MVA SE	207.2	BGE	EP	12/31/2028
b3780.10	Install new Conastone capacitor. New capacitor rating: 350 MVAR	33.7	BGE	EP	12/31/2027
b3780.11	Brighton Statcom and capacitor New STATCOM rating: 350 MVAR New capacitor rating: 350 MVAR	229	PEPCO	EP	12/31/2028
b3780.12	Burchess Hill Cap New capacitor rating: 250 MVAR	12	PEPCO	EP	12/31/2027
b3780.13	Batavia Road to Riverside 230 kV reconductor New rating: 1941 MVA SN / 2181 MVA SE	57.3	BGE	EP	12/31/2027
b3781	Replace line drops to Doubs transformer 3. New transformer rating: 721MVA SN /862 MVA SE	0.8	APS	EP	11/21/2025
b3782	Adjust relay settings at Riverton substation on the Riverton-Bethel Tap 138 kV line.	0.078	APS	IS	5/23/2025

## Cost Allocation

Based on PJM's assessment of the contribution to the benefits expected to be derived from the facilities, the zonal percentage cost allocation for the period of 6/2/2025 until 12/31/2025 is in the following table. The cost allocation for this period will be updated at the end of 2025 to reflect the PJM annual cost allocation update and any changes to the projected in service date of required transmission upgrades listed in this report. Thereafter, the RMR cost allocation for the 2026 calendar year and beyond will be updated and posted annually before the start of the calendar year.

Full Name	Short Name	Allocation
Atlantic Electric	AEC	0.24%
American Electric Power	AEP	2.08%
Allegheny Power	APS	0.89%

American Transmission Systems, Inc.	ATSI	1.17%
Baltimore Gas & Electric	BGE	68.67%
Commonwealth Edison	ComEd	2.01%
Dayton Power & Light	Dayton	0.31%
Duke Energy Ohio and Duke Energy Kentucky	DEOK	0.48%
Dominion	Dominion	4.14%
Delmarva Power & Light Company	DPL	0.39%
Duquesne Light Company	DL	0.25%
East Kentucky Power Cooperative	EKPC	0.35%
Jersey Central Power and Light	JCPL	0.96%
Metropolitan Edison Company	ME	0.28%
Ohio Valley Electric Corporation	OVEC	0.01%
PECO Energy Company	PECO	0.81%
Pennsylvania Electric Company	PENELEC	0.27%
Potomac Electric Power Company	PEPCO	14.12%
PPL Electric Utilities	PPL	0.69%
Public Service Electric & Gas Company	PSEG	1.7%
Rockland Electric Company	RE	0.07%
Neptune Regional Transmission System, LLC.	NEPTUNE	0.11%