



Transmission Cost Planner

As of November 16, 2023

A web-based tool for PJM members to analyze present transmission expenses and forecast future costs.

- Enhances efficiency of TCIC updates and supports continuous automation initiatives
- Provides cost forecasts for baseline and supplemental upgrades
- Offers zonal monthly billing forecasts, with a ten-year forward-looking capability

TC planner is for informational purposes only and PJM highly recommends reading the legal disclaimer

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Decline

Accept

Externally available web application

Minimizes manual tasks to reduce human error

Facilitates smoother data exchange both internally and externally

Improves data consistency and accuracy

Elevates overall user experience

Estimated Summary by Zone

Estimated Summary by Zone | RTEP Baseline and Supplemental Upgrades | Formula Rates

Future billing period: 12/1/2023 | Responsible zone: BGE | Search | Clear

Monthly Zonal Transmission Charges

View by \$ | View by \$/MW

[Links & References](#) | [XLS](#)

Charge Type	November 2023	December 2023	Incremental
RTEP Baseline Upgrades ⓘ	\$15,509	\$15,509	\$0
Constructed by local Transmission Owner ⓘ	\$15,325	\$15,325	\$0
Cost Allocation = 100% ⓘ	\$0	\$0	\$0
Cost Allocation < 100% ⓘ	\$15,325	\$15,325	\$0
Not Constructed by local Transmission Owner ⓘ	\$184	\$184	\$0
Supplemental Upgrades ⓘ	\$5,076,777	\$5,076,777	\$0
Total Transmission Charges	\$5,092,286	\$5,092,286	\$0

Network Service Peak Load

Network Service Peak Load ⓘ: 6,520.0 MW

Load Ratio Share ⓘ: 4.11%



TC Planner – Upgrades

RTEP Baseline and Supplemental Upgrades

Estimated Summary by Zone **RTEP Baseline and Supplemental Upgrades** Formula Rates

General Information Cost Allocation

Responsible zone * BGE

Search

Clear

Links & References | [XLS](#)

Upgrade ID ↑	Description ↓	TO ↓	Status ↓	In-Service Date ↓	Initial TEAC Date ↓	Latest TEAC Date ↓	Initial Cost Estimate (\$M) ↓	Latest Cost Estimate (\$M) ↓	Driver ↓	Board Approval Date ↓	% Complete ↓
b0002.1	Increase emergency rating of Windy Edge - Lakespring - Texas 115 kV	BGE	IS	01/01/2006			\$3.770	\$3.770	Baseline Load Growth Deliverability & Reliability	05/09/2005	1.00%
b0017.1	Replace four Roseland 230 kV breakers #BS3-4 #BS4-5 #BS5-6 #BS1-7 with 50KA	PSEG	IS	05/01/2005			\$1.400	\$1.400		05/09/2005	1.00%
s0001.1	Install three 230kV breakers at new Bagley 230/34.5kV distribution station	BGE	IS	12/07/2012	12/30/1899	02/22/2008	\$2.200	\$2.200			1.00%
s0001.2	Rebuild 5.9 miles Raphael Road - Bagley 230kV to double circuit	BGE	Cancelled	05/01/2020			\$8.500	\$8.500			0.01%
s0001.3	Upgrade Raphael Road 230kV substation to breaker/half	BGE	Cancelled	05/01/2020			\$9.000	\$9.000			0.05%
s0166.1	Split the Wagner 115 kV station to relieve fault levels	BGE	Cancelled	06/01/2013			\$0.000	\$0.000			0.00%
s0234.1	Install three 115kV breakers at Westport	BGE	Cancelled	12/31/2019	08/24/2010	08/24/2010	\$0.000	\$2.000			0.25%
s0382.1	Replace 17 230 kV breakers at Brandon Shores	BGE	UC	12/01/2025			\$7.500	\$7.500			0.52%
s0384.1	Install two single phase 500/230 kV transformers at Waugh Chapel substation as a result of a BGE spare equipment requirement (not a PJM PRA spare transformer)	BGE	IS	10/30/2014			\$10.900	\$14.700			1.00%
s0427.1	Replace seventeen breakers at Brandon Shores 230 kV substation	BGE	Cancelled	12/01/2017			\$7.500	\$7.500			0.00%
s0428.1	Add two breakers at Sandy Springs 230 kV substation	BGE	IS	06/01/2015			\$2.000	\$2.000			1.00%
s0429.1	Reconductor the High Ridge - Dorsey 115 kV circuit	BGE	Cancelled	06/01/2014			\$3.700	\$3.700			0.00%
s0430.1	Rebuild the Riverside 115 kV substation	BGE	Cancelled	06/01/2020			\$14.400	\$14.400			0.00%
s0650.1	Install two 115 kV breakers at Mt. Washington substation	BGE	IS	10/30/2014			\$2.000	\$6.500			1.00%



TC Planner – Upgrades/cost allocation

RTEP Baseline and Supplemental Upgrades

Estimated Summary by Zone | **RTEP Baseline and Supplemental Upgrades** | Formula Rates

General Information | **Cost Allocation**

Upgrade type: RTEP Baseline Upgrades | Future billing period: | Responsible zone: BGE | Search | Clear

[Links & References](#) | [XLS](#)

Upgrade ID ↑↓	TO ↓	Schedule 12 Location ↓	Schedule 12 Section ↓	Schedule 12 Allocation Type ↓	Allocation (Non-Load-Ratio-Share)	Allocation (Load-Ratio-Share)		November 2023	
								Annual Revenues ↓	Monthly Charges ↓
b0002.1	BGE	Appendix	(b)(i) Regional Facility	100% Solution-Based DFAX	BGE: 100.00%	AEC: 1.65% APS: 5.76% BGE: 4.11% Dayton: 2.12% DL: 1.71% DPL: 2.60% JCPL: 3.86% Neptune: 0.42% PECO: 5.40% PEPCO: 3.67% PSEG: 6.39%	AEP: 13.68% ATSI: 8.04% ComEd: 13.39% DEOK: 3.25% Dominion: 13.32% EKPC: 1.89% ME: 1.90% OVEC: 0.08% PENELEC: 1.78% PPL: 4.72% RE: 0.26%	\$353,290	\$15,325
b0017.1	PSEG	Appendix	(b)(i) Regional Facility	100% Solution-Based DFAX	PSEG: 100.00%	AEC: 1.65% APS: 5.76% BGE: 4.11% Dayton: 2.12% DL: 1.71% DPL: 2.60% JCPL: 3.86% Neptune: 0.42% PECO: 5.40% PEPCO: 3.67% PSEG: 6.39%	AEP: 13.68% ATSI: 8.04% ComEd: 13.39% DEOK: 3.25% Dominion: 13.32% EKPC: 1.89% ME: 1.90% OVEC: 0.08% PENELEC: 1.78% PPL: 4.72% RE: 0.26%	\$107,324	\$184

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Planning Formula Rates

[Estimated Summary by Zone](#) |
 [RTEP Baseline and Supplemental Upgrades](#) |
 [Formula Rates](#)

[Planning Formula Rates](#) |
 [Settlement Formula Rates](#)

[Add Planning Formula Rate](#) |
 Rate year: Jan 2023 - Dec 2023, Jun 2023 - May 2024 |

[Links & References](#) |
 [XLS](#)

Actions	Rate Year ¹ ²	Transmission Owner ¹	Responsible Zone ¹	Rate Attachment ¹	Carrying Value ¹	Useful Life ¹ ²	Carrying Charge ¹	Debt Cost ¹ ²	Preferred Stock Cost ¹ ²	Common Stock Cost ¹ ²	Tax Rate ¹	Post Tax WACC ¹ ²
	Jan 2023 - Dec 2023	AEP Appalachian Transmission Company, Inc.	AEP	H-20	\$94,772,000.00	37	13.95%	2.18%	0.00%	4.29%	26.14%	5.90%
	Jan 2023 - Dec 2023	AEP East Operating Companies & AEP East Transmission Companies	AEP	H-14, H-20	\$18,068,712,671.51	39	12.86%	1.95%	0.00%	5.41%	23.57%	6.90%
	Jan 2023 - Dec 2023	AEP Indiana-Michigan Transmission Company, Inc.	AEP	H-20	\$3,090,412,286.89	37	11.42%	1.73%	0.00%	5.68%	24.96%	6.98%
	Jan 2023 - Dec 2023	AEP Kentucky Transmission Company, Inc.	AEP	H-20	\$135,481,000.00	44	12.94%	1.69%	0.00%	5.63%	24.95%	6.90%
	Jan 2023 - Dec 2023	AEP Ohio Transmission Company, Inc.	AEP	H-20	\$4,623,659,000.00	35	15.26%	1.78%	0.00%	5.67%	21.18%	7.07%
	Jan 2023 - Dec 2023	AEP West Virginia Transmission Company, Inc.	AEP	H-20	\$2,107,545,000.00	38	11.12%	1.67%	0.00%	5.69%	26.10%	6.92%
	Jan 2023 - Dec 2023	American Transmission Systems, Inc.	ATSI	H-21	\$4,223,170,116.23	42	18.25%	1.57%	0.00%	6.21%	22.23%	7.43%
	Jan 2023 - Dec 2023	AMP Transmission, LLC		H-32	\$23,528,356.88	44	11.86%	0.00%	0.00%	0.00%	0.00%	0.00%
	Jan 2023 - Dec 2023	AMP Transmission, LLC	AEP	H-32	\$1,254,044.78			0.00%	0.00%	0.00%	0.00%	0.00%
	Jan 2023 - Dec 2023	AMP Transmission, LLC	ATSI	H-32	\$21,087,551.44			0.00%	0.00%	0.00%	0.00%	0.00%
	Jan 2023 - Dec 2023	AMP Transmission, LLC	Dayton	H-32	\$1,186,760.66			0.00%	0.00%	0.00%	0.00%	0.00%
	Jan 2023 - Dec 2023	Appalachian Power Company	AEP	H-14	\$3,650,164,000.00	41	11.09%	2.40%	0.00%	5.03%	23.50%	6.86%
	Jun 2023 - May 2024	Atlantic City Electric Company	AEC	H-1	\$1,649,072,774.71	35	9.78%	1.82%	0.00%	5.25%	28.11%	6.56%
	Jun 2023 - May 2024	Baltimore Gas and Electric Company	BGE	H-2	\$1,957,590,370.23	44	12.01%	1.72%	0.00%	5.62%	27.52%	6.86%

Action Required	Deadline	Who May Be Affected
Awareness	Dec. 2023	Anyone who uses the TCIC on PJM.com Project Status and Cost Allocation Page



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- TC Planner - <https://tcplanner.pjm.com/tcplanner>
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- TEAC Slides for TC Planner - <https://www.pjm.com/-/media/committees-groups/committees/teac/2022/20220712/item-11---tcic-automation.ashx>