

Table N3-TH-1a

PEG's North American Electric Utility Studies (2017-2024)

Date of Study	Industry (G, T, D, or combination)	Target Utility	PEG Client	PEG MFP Industry Trend	PEG's Benchmark Finding ¹	PEG's Recommended Productivity Factor ²	PEG's Recommended Stretch Factor ³	PEG's Recommended Inflation Measure
2024	Power Distribution	Toronto Hydro-Electric System	OEB Staff (current proceeding)	0.08% (2008-2022)	31% above (2025-2029)	0.10%	0.60%	70% GDPPI FDD/30% FWI AHE
2023	Power Distribution	ATCO Electric, FortisAlberta, ENMAX, EPCOR	Consumers' Coalition of Alberta	0.08% (2007-2021)	56% above (ATCO Electric), 17% below (ENMAX), 25% below (EPCOR), 23% below (FortisAlberta)	0.08%	ATCO Electric: 0.3%-0.6%, ENMAX: 0.15%-0.39%; EPCOR: 0.15%-0.39%; FortisAlberta: 0.15%-0.39%	35% Alberta FWI AHE/65% Alberta Core CPI
2022	Power Distribution	Hydro One Networks ³	OEB Staff	NA	23.2% above (2023-2027)	0.00%	0.45%	NA
2022	Power Transmission	Hydro One Networks ³	OEB Staff	-0.99% (1996-2019)	14.1% below (2023-2027)	PEG recommended that the O&M PFP trend of -0.12% be used rather than a TFP trend	0.15%	NA
2021	Power Transmission	Hydro-Quebec	AQCIE-CIFQ	-0.62% (1996-2019)	67% above (2017-2019)	Range of -0.62% to 0.19%	0.60% ⁴	NA
2020	Power Distribution	Hydro Ottawa	OEB Staff	0.27%	5% above (2021-2025)	0.0% (MFP) or 0.27% (OM&A)	0.30%	NA
2020	Combination of Power Generation, Transmission, Distribution	Hawaiian Electric	Hawaiian Electric	-0.46% (2003-2017)	NA	NA	NA	NA
2019	Power Transmission	Hydro One Networks	OEB Staff	-0.25% (1996-2016)	9% Above (2020-2022)	-0.25%	0.30%	NA
2019	Power Distribution	National Grid (Massachusetts Electric & Nantucket Electric)	Massachusetts Attorney General Office	0.33% (1997-2017 US)	NA	0.33% US	0.40%	NA
2019	Power Distribution	Toronto Hydro-Electric System	OEB Staff	NA	15.6% above (2020-2024)	0.00%	0.45%	NA
2019	Power Transmission	Hydro One Sault Ste. Marie ⁵	OEB Staff	-0.36% (1996-2016)	-12.35% below (2019-2022)	-0.36%	0.30%	NA
2018	Power Distribution	Hydro One Networks	OEB Staff	0.05%	23% above (2019-2022)	0.00%	0.45%	NA
2018	Power Transmission	Hydro-Quebec	AQCIE-CIFQ	NA	NA	0.2% (OM&A)	0.20%	Did not oppose Hydro-Quebec proposal to use CPI Quebec and Average Weekly Earnings
2018	Power Distribution	Hydro-Quebec	AQCIE-CIFQ	NA	NA	0.30%	0.20%	Cost weighted average growth of CPI Quebec and AWE or GDPPI and AWE
2017	Power Generation, Transmission, Distribution	Public Service of Colorado	Public Service of Colorado	0.50% non-fuel OM&A (1997-2016)	23.6% below (2018-2021) Non-fuel O&M expenses	0.50% (non-fuel OM&A)	NA	NA
2017	Power Distribution	Green Mountain Power	Green Mountain Power	-0.55% peer group (2007-2016)	MFP level 6.6% above peer group in 2016 ⁶	NA	NA	NA
2017	Power Distribution	NA	Lawrence Berkeley National Laboratory ⁷	0.45% (1980-2014)	NA	NA	NA	NA

Note: Recent work for OEB Staff in the Activities and Programs Benchmarking proceeding is not included in this table as PEG's work was not specific to just one utility and PEG did not have specific recommendations for ratemaking.

NA = Not applicable.

¹ Based on total cost unless otherwise specified (e.g., OM&A)

² Based on multifactor productivity unless otherwise specified (e.g., OM&A). Productivity factor recommendations exclude stretch factors.

³ Numbers provided are from the joint report between PEG and Clearspring.

⁴ PEG recommended a stretch factor adder of at least 0.1% should the Régie base X on productivity results for the full (1996-2019) sample period and an adder of at least 0.3% if X is based on results for the most recent fifteen years (2005-2019).

⁵ Results changed subsequent to report issuance.

⁶ Benchmarking work was undertaken using productivity level comparisons rather than econometric cost modeling.

⁷ PEG presented MFP trends for power distributors for multiple time periods, but did not describe a preference for a specific period. The MFP trend for the longest period has been presented.