



Holland Board of Public Works Avoided Costs

Introduction:

In accordance with the Public Utilities Regulatory Policies Act (PURPA), the Federal Energy Regulatory Commission (FERC) requires electric utilities to provide a utility’s estimated avoided energy and capacity cost data for public inspection. These estimated avoided costs are intended to represent an estimation of the associated average cost of an additional unit of energy or additional unit of capacity as well as an estimate of the rate Holland Board of Public Works (HBPW) would pay for energy from a Qualifying Facility (QF).

HBPW is located within the Midcontinent Independent System Operator (MISO) electric power market. Since energy purchases made by HBPW are transacted through the MISO market at the Commercial Pricing (CP) node CONS.MPPA, the average Locational Market Price (LMP) for that CP node will be used to estimate avoided energy costs. These estimated avoided costs are provided to assist PURPA determined QFs with the evaluation of the feasibility of projects. Estimated costs within this document are not intended to be an actual rate to be paid for energy purchases. Actual avoided costs (energy purchase rates) would be determined at the time of execution of an agreement with a QF.

Estimated Avoided Energy Costs:

The estimated avoided costs for energy are based on the average LMP at CP node CONS.MPPA for the last recorded full calendar year. Projections are then developed by calculating the future value of the average market price. The EIA projected Wholesale Price Index for Fuel and Power (3.3%) for 2017-2050¹ is used for the growth rate. Details of the calculation can be found below.

$$Estimated\ Avoided\ Cost = x * (1 + z)^n$$

Where:

- x* = 2018 Average Real Time LMP at CP node CONS.MPPA
- z* = EIA Projected Wholesale Annual Growth Rate (3.3%)
- n* = Projected Year - 2018

HBPW Estimated Market Based Avoided Cost 2019-2024 (\$/MWh) ²						
Year	Winter Non Peak Cost	Winter Peak Cost	Summer Non Peak Cost	Summer Peak Cost	Growth Rate (z)	Number of Periods (n)
2018 Avg. LMP (x)	\$33.79	\$34.28	\$28.06	\$41.72	0.0%	0
2019	\$34.91	\$35.41	\$28.99	\$43.10	3.3%	1
2020	\$36.06	\$36.58	\$29.94	\$44.52	3.3%	2
2021	\$37.25	\$37.79	\$30.93	\$45.99	3.3%	3
2022	\$38.48	\$39.03	\$31.95	\$47.51	3.3%	4
2023	\$39.75	\$40.32	\$33.01	\$49.08	3.3%	5
2024	\$41.06	\$41.65	\$34.09	\$50.70	3.3%	6

¹ EIA Projected Wholesale Price Index for Fuel and Power is taken from EIA 2018 Energy Outlook
² Per HBPW Rate Schedules: Winter is November 1st through April 30th, Summer is May 1st through October 31st, Peak is 10 am to 6 pm, and Non Peak is 6 pm to 10 am.

Estimated Avoided Capacity Costs:

As part of the regulations, FERC requires the availability of capacity plans for the next 10 years. HBPW does not currently project a requirement for additional generating capacity until beyond 2029. HBPW may add generating resources within this timeframe; however, these additions would most likely be added based on a strategic objective and not on the necessity of generating capacity. The need for future generating capacity is reviewed informally on an ongoing basis and formally every 5-7 years as part of HBPW's integrated resource planning efforts.