

# MEMO

**TO:** Lawrence Yangalay, Philadelphia Water Department  
**CC:** Lawrence Rich, Patricia Rogalski, Sam O'Connor  
**FROM:** Dominic McGraw  
**DATE:** January 3, 2025  
**SUBJECT:** Utility Escalation Factors for the Philadelphia Water Department

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## Background

This memo outlines PWD's utility cost escalation between FY25 and FY30. The Division of Energy & Climate Solutions (DECS), housed in the Office of Sustainability, purchases electricity, natural gas, and vehicle fuel on behalf of the City (including PWD). As such, DECS has information on how hedge purchases and rate cases impact future costs.

## Electricity

The City purchases electricity in a two-part process — supply and distribution. Electricity supply is purchased through a third party. This allows the City to hedge electricity costs by purchasing future electricity supply at fixed unit rates (\$/MWh). Current electricity hedges are in place covering a portion of delivery through FY26 as well as electricity from the City's executed solar electricity power purchase agreement (PPA) which came online in March of 2024. The PPA will serve as a 20-year hedge in electricity markets for future price increases.

Electricity supply costs decreased by 25% in FY24 as compared to FY23. This decrease was attributable to falling natural gas prices driven by increased domestic production and milder winter weather forecasts. Supply costs will increase 11% in FY25 as compared to FY24 to account for purchases from the Adams Solar PPA which is currently slightly more expensive than PECO hourly pricing which remains extremely cheap. The FY25 rate is still lower, however, than the FY23 rate so the City continues to receive favorable supply pricing.

Supply is also affected by capacity pricing in the PJM market. On July 30<sup>th</sup>, 2024, PJM released their new capacity prices for the period of June 1, 2025, to May 31, 2026. The PECO zone capacity price came in at \$270.35/MWD, a 378% increase over the 24/25 program year. This increase will result in a roughly \$2.2M annual increase for the Water Department. This cost increase can be mitigated, however, by reducing energy usage on days of high grid strain, identified as Red Days by the City's energy consultant, Enel X. For reference, electricity supply costs are approximately 80% of the Water Fund's total electricity costs.

The other portion of electricity costs, distribution, is provided by PECO. On December 12<sup>th</sup>, 2024, the PA Public Utilities Commission (PUC) approved an electric rate increase for PECO customers which included a 22.3% increase in annual operating revenue across multiple rate classes. This will result in an approximately \$650k increase in distribution charges annually starting in January of 2025.

The below table outlines the estimated year-over-year blended electric rate (supply and distribution) cost increases. The escalation rates are based on portfolio-wide averages of distribution rates and projected fixed supply rate changes.

<b>Year Transition</b>	<b>Escalation Rate</b>
FY24 to FY25	10.3%
FY25 to FY26	6.5%
FY26 to FY27	2.7%
FY27 to FY28	2.4%
FY28 to FY29	2.6%
FY29 to FY30	3.2%

### **Natural Gas**

The City currently has fixed rate purchases of natural gas for the majority of FY25 delivery and part of FY26 delivery. Projections for future escalation curves beyond hedges are primarily based on the forward NYMEX natural gas market and Winter Basis Strips from Transco Z6 (NNY) North. PWD's use is driven by operational needs as opposed to weather. As a result, PWD's annual usage is spread out throughout the year and therefore is not as heavily weighted towards more expensive winter natural gas prices. Calendar year market pricing was low in 2023 and early 2024 due to high storage levels and is expected to increase in 2026 and 2027 due to increases in US liquid natural gas exports.

Beyond natural gas commodity, the other portion of natural gas costs come from distribution services provided by PGW. The City's PGW rates have been increasing incrementally since January 2021, however we are not currently aware of any planned rate cases to significantly increase rates. Please see the table below for the estimated year-over-year blended natural gas rate (supply and distribution) cost increases.

<b>Year Transition</b>	<b>Escalation Rate</b>
FY25 to FY26	1.7%
FY26 to FY27	4.7%
FY27 to FY28	3.0%
FY28 to FY29	2.2%
FY29 to FY30	2.1%

### **Next Steps**

DECS will provide regular updates to PWD on the purchases and impacts to electricity and natural gas rates, as well as escalation projections. DECS will also continue to support municipal energy efficiency projects, as the best hedge against rising energy prices is reducing demand. Please feel free to reach out if there are any questions.