CHP Working Group: PECO Capacity Reservation Rider

July 16, 2018
Background

- **Auxiliary Service Rider (ASR)**
  - Intended to price standby generating capacity
  - Included Supplementary, Backup, and Maintenance power rates
  - Created back when PA utilities provided fully bundled/integrated services
    - Customer-owned generation allowed PECO to avoid some systemwide generation costs
    - PECO no longer applies this generation-based paradigm to today’s unbundled service
    - PECO’s distribution capacity costs to serve the fully connected load remain unchanged
  - ASR was eliminated as of 1/1/2016 via PECO’s 2015 distribution rate case

- **Pilot Capacity Reservation Rider (CRR)**
  - Approved by PA PUC during PECO’s 2015 distribution rate case; Implemented 1/1/2016
  - Aims to fairly charge customers for their exclusive reservation of distribution capacity
    - I&E supportive of effort to avoid cross-subsidization of capacity costs
  - Applies to parallel-generating customers when their generation is off-line and to customers reserving capacity beyond their present demand for future growth/expansion

- **PECO’s 2018 Distribution Rate Case (ongoing)**
  - PECO’s CRR proposal is limited to minor wording changes (nothing substantive)
  - PECO currently has no customers on the CRR
    - CRR did not apply to “grandfathered” customers w/parallel generation online prior to 1/1/2016
    - PECO extended “grandfathering” to eight customers who submitted requests to PECO for parallel generation in 2015
PECO Pilot Capacity Reservation Rider

Applicable to commercial and industrial customers placing generation facilities with over 100 kW nameplate capacity online on or after 1/1/2016.

- Modifies customer’s minimum billing demand (examples on subsequent slides)
  \[
  \text{Min Billing Demand Under CRR} = \text{Min Billing Demand Under Prevailing Tariff Rate} \times (40\% \text{ of uncovered demand}) + \\
  \text{“CRR Level” applying to customer’s generation nameplate as follows:}
  \]
  - > 100 kW but <= 5,000 kW \quad – 60\% \text{ of generator nameplate rating}
  - > 5,000 kW but <= 10,000 kW \quad – 50\% \text{ of generator nameplate rating}
  - > 10,000 kW \quad – \text{Determined by negotiation (not < 40\%); Amount of reserved capacity reflects potential peak demand}

- Contracts may be negotiable based on Parasitic Load, Operational Flexibility, and/or Ability To Shed Load

- Minimum billed demand will be the greater of:
  - Registered demand, **OR**
  - CRR Level + 40\% of any load behind meter not covered by CRR
    (aka “Uncovered Demand”)
Calculating the CRR: Example 1

- Maximum Contract Load: 10,000 kW
- Generator Nameplate: 2,000 kW
- Uncovered Demand: 10,000 kW – 2000 kW = 8,000 kW
- CRR Level: 60% * 2,000 kW = 1,200 kW
- Min Billed Demand: 1,200 kW + (40% * 8,000 kW) = 4,400 kW

The CRR would therefore increase the customer’s minimum billed demand if the registered demand for that period was between 4,000 and 4,400 kW.

Minimum bill with CRR: 4,400 kW
Minimum bill without CRR: 4,000 kW

CHP Non-Outage Month Demand:
8,000 kW
8,000 kW * $4.77\(^1\) = $38,160
No CRR Impact

CHP Outage Month Demand:
10,000 kW
10,000 kW * $4.77\(^1\) = $47,700
No CRR Impact

\(^1\) $4.77 is PECO’s variable distribution charge per kW for Rate HT (High Tension Power) as of 6/1/2018.
Calculating the CRR: Example 2

- Maximum Contract Load: 5,000 kW
- Generator Nameplate: 4,000 kW
- Uncovered Demand: 5,000 kW – 4,000 kW = 1,000 kW
- CRR Level: 60% * 4,000 kW = 2,400 kW
- Min Billed Demand: 2,400 kW + (40% * 1,000 kW) = 2,800 kW

The CRR would therefore increase the customer’s minimum billed demand if the registered demand for that period was between 2,000 and 2,800 kW.

Minimum bill with CRR: 2,800 kW
Minimum bill without CRR: 2,000 kW

CHP Non-Outage Month Demand: 1,000 kW < Min Billed Demand of 2,800kW
2,800 kW * $4.77\(^1\) = $13,356

**CRR Impact:** (2,800 – 2,000) * $4.77 = $3,816

CHP Outage Month Demand: 5,000 kW
5,000 kW * $4.77\(^1\) = $23,850

**No CRR Impact**

\(^1\)$4.77 is PECO’s variable distribution charge per kW for Rate HT (High Tension Power) as of 6/1/2018.