Landscape for Dynamic Pricing in PPL Electric Utilities

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PPL Electric has in place all of the elements necessary for a robust dynamic pricing environment.

- Interval metering installed for all customers.
  - Started in 2002.
  - 1.4 million end-points in place since 2004.
- Meter data management capable of storing, summarizing, and analyzing interval data.
  - Implemented in 2006. 3 years of storage.
  - Implementing a data warehouse. 6 years of storage.
- Capability to bill dynamic pricing rates or to provide that information to EGSs for billing.
  - PA EDI exchange being supplemented by data portal.
- Settlement systems that perform hourly settlement for multiple suppliers and allow wholesale costs to be directly reflected in retail prices.
- Data and analytical tools available to customers via secure website and Green Button.
- Supports net metering.

# Participation of PPL Electric customers in dynamic pricing programs.

- 2002 – 2009: Generation rate caps in place
  - Virtually no shopping
  - On-peak/off-peak residential TOU pilot programs
  - Summertime-only transitioned to year-round
  - 25 customers ramping up to 600 customers

- 2010 – present: Post rate caps
  - Robust shopping: 75% of all load/42% of all customers
  - On-peak/off-peak TOU offered to Residential and Small C&I default service customers (20,000 at its peak)
  - RTP is default for Large I&C (i.e., < 500kW)
  - EGSs increasingly offering dynamic pricing

Increasing requests for MIU data suggest increased EGS offerings.
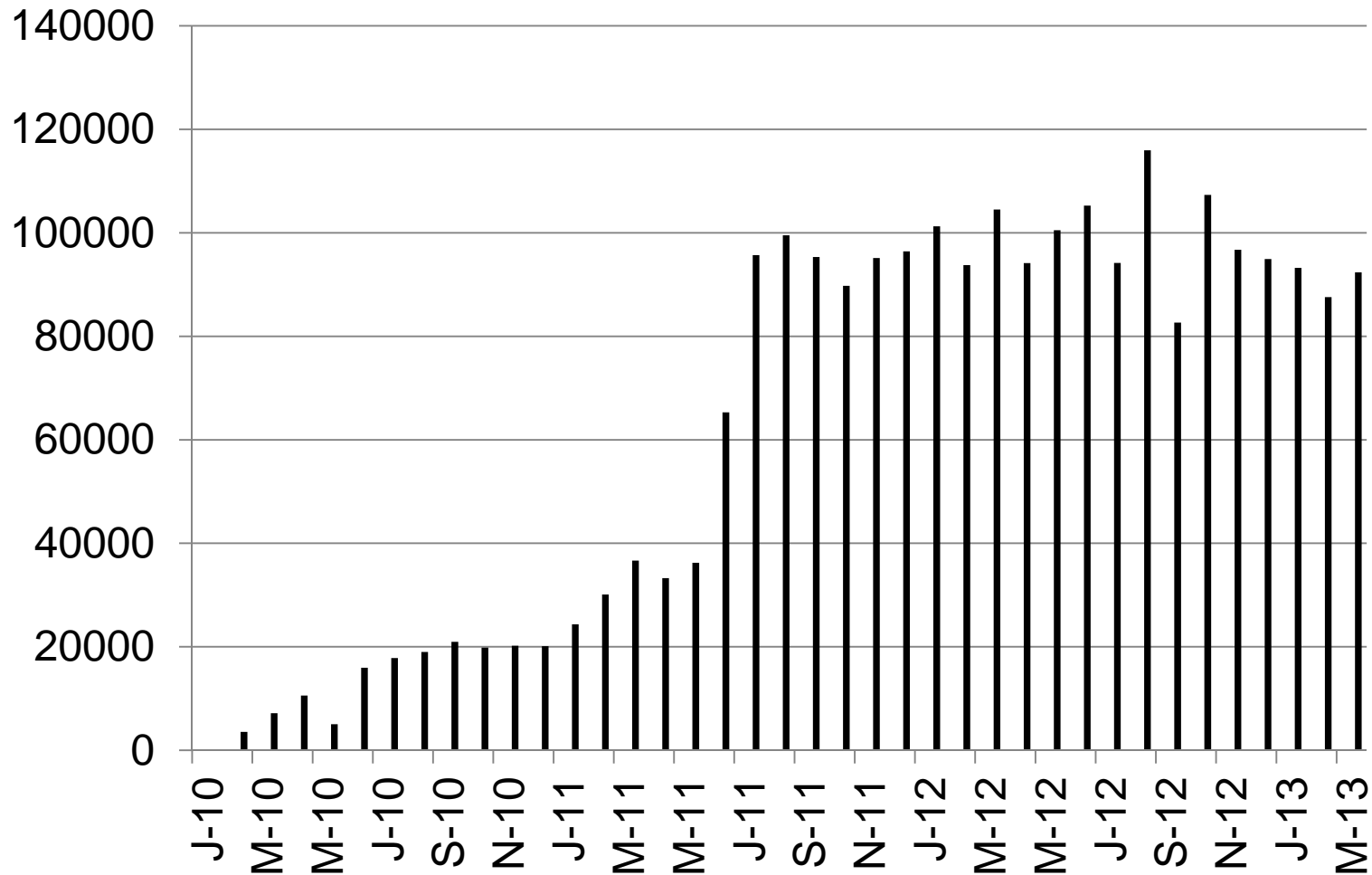
What else is needed?

- ## Data warehouse
  - To permit data access and analytics outside of the production environment

- ## Supplier Portal
  - To accommodate increasing requests for interval data

- ## Market reflective default service
  - Post-5/2015 default service will reflect either RTP (large customers) or 90-day contracts (small customers)
  - Eliminate obligation for DSP to provide TOU

- ## Net metering reforms
  - No netting of distribution charges
  - Same cashout provisions for default and competitive supply
  - 2-meter net metering

Supplier portal

- Secure web environment that permits EGSs to "pull" data as required.

- EDI remains in place and billing transactions that "push" data are still triggered by meter reads.

- Rules regarding access to and availability of customer data are those established by the PA PUC and the same for the portal and EDI.

- Data available via portal:
    - Bill image (only available to EGS currently serving)
    - Monthly usage
    - ICAP and NITS   (available to registered EGSs with valid PPL account #)
    - Interval usage
    - Eligible Customer List
    - EGS administrative functionality

What is possible? VCharge

- Over 100 residential thermal storage customers in the Stroudsburg area.

- Sophisticated controls on storage systems permit charging to optimize:
  - Charging cost,
  - Participation in ancillary services market, and
  - Comfort.

- VCharge serves as EGS (to serve energy at RTP) and CSP (to access ancillary services market).

- PPL Electric metering and settlement facilitate RTP billing.