Integrated Resource Plan

TVA'S ENVIRONMENTAL AND ENERGY FUTURE

TVA's Power Delivery Structure, Current and Proposed Rates

December 10-11, 2009

Overview

TVA has been working with its customers to design and implement a rate structure that supports its demand response objectives

- Customer collaboration is critical to success
- Changes to rates will be implemented incrementally (not overnight)
- These improvements continue TVA's legacy of providing low cost, reliable power

TVA Power Delivery Structure

The figure below illustrates the relationship between TVA, distributors, and end-use customers

- TVA operates generation and transmission assets to supply low-cost, reliable power to the Valley
  - TVA is both a retail and wholesale service provider
    - Retail – TVA directly serves 59 large industrial customers
    - Wholesale – There are 158 distributors within the service territory that serve residential, commercial, and industrial customers

- TVA is not a vertically integrated utility and does not have direct interaction with the majority of end-users

- The distributor community is made up of 158 independently operated companies

Changes to pricing must be handled under the terms and conditions of the Wholesale Power Contract, which requires TVA's interaction and cooperation with distributors.

TVA's Current Rate Structure

The current rate structure is based on "end-use" pricing

- Rates are designed at the end-use level (e.g., residential, small general service, and large manufacturing customer classes)
- Rates are flat throughout the year and do not represent the market value for capacity and energy
- A flat rate design does not support energy efficiency or demand response programs, as fixed costs are recovered on a volumetric basis
- However, TVA has introduced voluntary "overlays" that represent a shift from this flat pricing approach
  - Reliability-focused products in 2007 – 5 and 60 minute interruptible
  - Price responsive products in 2008 – Seasonal time of use (pilot), seasonal market days, real-time pricing (modifications)
  - Additional TOU products introduced in October 2009

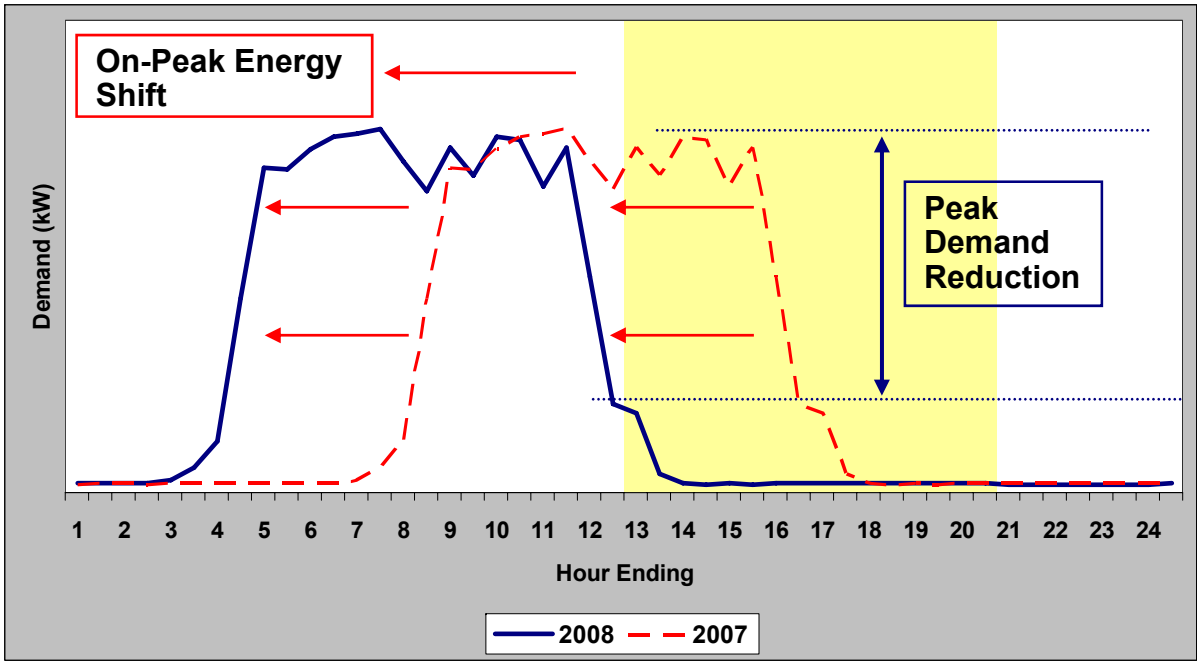
TVA's proposed approach to pricing is guided by the following principles:

- Revenue recovery – Recover all costs of providing services
- Efficient pricing signals – Prices should encourage energy efficiency and promote demand response
- Simplicity – Designs should be easy to understand and should minimize cost of implementation
- Stability – Structures and prices should be predictable and move gradually
- Minimize cost of service variances – Rates should recover costs equitably among classes and customers within classes

TVA's Optional Overlays to Current Rate Structure

Initial results have been encouraging. Example results from the 2008 Seasonal Time of Use (STOU) pilot are below:

- TVA conducted a pricing promotion during the summer of 2008, pricing capacity and energy for what TVA would otherwise purchase capacity and energy from a generator outside the Valley
- The customer to the right, who participated in this pilot, shifted on-peak energy and demand usage to off-peak hours and was credited for difference in costs (customer saved 24% relative to standard product bill)



- For all participating customers, the STOU pilot resulted in significant demand response (22% reduction in coincident demand)

Additional changes are planned over the next few years (detailed on following slides)

TVA's Motivation For Change

TVA's proposed rate changes will be aligned with Public Utility Regulatory Policy Act (PURPA) ratemaking standards and objectives from the 2007 Strategic Plan:

- Energy Policy Act 2005 – Modified standard adopted by TVA:
  - "TVA will initiate a rate change…with distributors of TVA power to assess in detail:
    1. benefits and costs of implementing a mandatory time-based rate schedule for large C&I
    2. benefits and costs of implementing advanced metering and communications technology to help the electric consumer manage energy use and costs
    3. other factors affecting the implementation of such structures as soon as feasible"

- Energy Independence Security Act 2007 – Standard which TVA must consider "rate design modifications to promote energy efficiency investments"

- Alignment with TVA's 2007 Strategic Plan
  - "TVA will develop a portfolio of products and pricing structures that more accurately reflect the costs of serving load at different times"
  - "Partner with distributors and directly-served customers to encourage conservation, promote energy efficiency, and reduce peak demand"

TVA's Execution of the Rate Change

The execution of rate changes will use a two-part approach:

- Wholesale Rate Redesign
  - Movement away from "end-use pricing"
  - Introduction of pricing differentials by season
  - Offer TOU option for distributors and end-use customers
  - Recognize infrastructure requirements, current status, and importance of gradualism
- Customers greater than 5 MW – pricing signals and other opportunities for cost savings

TVA's Execution of the Rate Change (Cont'd)

Wholesale Rate Redesign Timeline