Dynamic Pricing in Competitive Retail Markets

Key Operational Requirements for Retail Suppliers

MADRI Working Group

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ConEdison Solutions
An Energy Services Company

What is Dynamic Pricing?

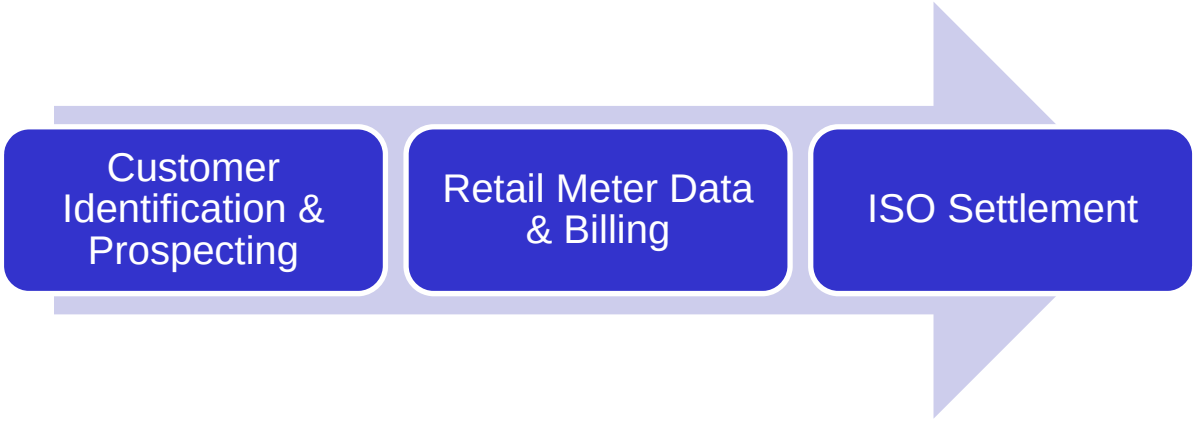
- Dynamic Pricing is often defined as any retail pricing structure that recognizes the inherent fluctuations and uncertainty in wholesale energy pricing.

Examples of Dynamic Pricing

- **Demand Response**
- **Peak Load Management**
- **Real Time Pricing**
- **Time of Use Rates**
- **Critical Peak Pricing/ Critical Peak Rebates**
- **Net metering**

Operational Requirements

- For dynamic pricing to be successful, retail and wholesale processes must be seamlessly integrated
- Many dynamic pricing options require monetization of retail customer behavior at the wholesale level
- Retail suppliers must be able to accurately capture retail customer consumption and demand patterns via wholesale settlement reporting



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Operational Requirements

Customer Identification & Prospecting

- Suppliers must be able to identify customers' metering capabilities
  - EDC should post meter population info, such as number of interval meters by rate schedule
  - Smart meter deployment schedules
  - Meter type ID should be included on customer lists, via HU transaction and on enrollment confirmation
  - Net metering indicator

- Suppliers need complete and detailed historical usage data in order to accurately price new customers
  - Interval data available via EDI and secure web portal
  - Current and future PLC values (NITS and capacity)
  - Large data repositories can also help retail suppliers refine pricing assumptions and conduct analysis to support new product offerings

Operational Requirements

Retail Meter Data & Billing

- Retail meter data
  - Monthly interval data available via EDI and/or secure web portal
  - Real time access to smart meter data
  - EDI updates for NITS and PLC values
  - If provided, on/off peak usage buckets should match ISO definitions
  - Accurate net metering information for both summary and interval metered customers

- Suppliers also require flexible billing options to enable dynamic pricing and other innovative pricing structures
  - Bill ready, EDC consolidated billing
  - Multiple line items on bill, with option of separate billing page
  - The creation of an economically viable EGS consolidated billing option will also enable more innovative products

Operational Requirements

ISO Settlement

- ISO settlement reporting must recognize customer's actual consumption
  - EDC meter data management and settlement reporting systems must capture hourly data
  - With the deployment of smart meters, these processes must also be expanded into residential and mass market segments
  - Settle to actual hourly consumption instead of using load profiles
  - For net metered customers, net excess generation (i.e., negative consumption) must be accounted for properly

- Example of current challenges:
  - EDC data management infrastructure is lagging behind smart meter deployment
  - Current protocols in some EDCs do not accurately account for net metered consumption

Operational Requirements

- Net Metering Example:
  - PJM scheduling system does not accept negative values (similar issue in ISO NE)
  - For net metered customers, some EDCs revert negative consumption values to “zero” for ISO settlement reporting
  - Suppliers are either:
    - Unable to offer full net metering credit to customers, or
    - Face financial losses at wholesale level
- Solution:
  - Negative consumption should be netted against positive values for the supplier’s other accounts, OR
  - Utilize PJM meter data correction and resettlement process to adjust the load submitted during initial settlement

Regulatory Considerations

- Utility smart meter deployment plans should include enhancements to meter data management and wholesale settlement systems

- State policies to implement dynamic pricing (TOU rates, critical peak pricing plans, etc.) should look to the competitive retail market for solutions:
  - Open RFP to solicit wide range of program designs
  - Competitive solicitation to select program supplier

- Cost recovery policies should recognize the societal benefits of systems enhancements that enable dynamic pricing and other innovative pricing structures

Conclusion

- Dynamic and innovative pricing requires well designed retail and wholesale data management processes:

1. Retail suppliers must be able to easily identify customer metering capabilities.
2. Suppliers need complete, accurate and timely retail meter data.
3. Wholesale settlement reporting must accurately capture customers' retail consumption.