Project/Program Title: Dynamic Load Shaping (DLS) Enhancement

Priority Number

Project Manager: Pat Valente

Project Engineer

Budget Reference: MXC1700

Project Number

Status: In Progress

Estimated Service Date: 2014

Work Plan Category

ERM Addressed

Work Description:
The Dynamic Load Shaping (DLS) system supports the preparation of Demand Analysis, which accompanies each rate filing, as well as other load research support activities.

This request covers the following enhancements to DLS:

- expansion of DLS front end to include kVar interval data
- linkage/migration of interval data (i.e., CECONY and NYPA load research) to Meter Data Management system (MDMS)
- creation of links between MDMS and DLS
- enhancement of MDMS front end customer/meter data set-up process to include load research requirements

Justification:

Alternatives/Risk of No Action:
The DLS project, completed in 2009, provided a platform for standardization of demand analysis and 8,760 hourly load shape development. The system relied on billing information from RESPIN, interval data from the Load Profile Data System (LPDS), assorted weather data and Demand Forecasting’s system loads. When completed, DLS was to replace the stand alone mainframe Load Survey System (LSS) with a SAS-based modular system.

At the time, LPDS was the interval data warehouse for all interval data, both rate-mandated (i.e., LTOD, MHP) and other data (i.e., load research, NYPA). With the growing number of customers (i.e., lowered threshold of MHP and Reactive Power to 500 kW) requiring interval metering for billing, MDMS has now become the warehouse for interval data for billing. This leaves customer interval meter data collected for other reasons in a separate warehouse even though this interval data otherwise conforms to the interval data structure for billing.

Non-financial Benefits (if applicable):
This DLS enhancement will eliminate many of the time consuming steps associated with multiple systems downloads for DLS. It will eliminate the need for training on difficult to navigate input screens associated with LPDS account/meter set-up. Equally important, it will
further standardize and centralize activities associated with customer interval data, which has analytic uses other than billing. It should also be noted that DLS is also a data warehouse for interval data that has gone through its VEE (validation, editing and estimation) processes.

**Technical Evaluation/Analysis:**
Since Demand Analysis requires analysis of all available customer interval data, this request covers the following enhancements to DLS:
- migration of customer non-billing interval data (i.e., CECONY and NYPA load research, customers with interval metering not currently used for billing) to MDMS
- creation of links between MDMS and DLS
- enhancement to MDMS front-end customer/meter data set up process to include load research requirements
- enhancement to DLS front end to include kVar interval data analyses

**Project Relationships (if applicable):**
The ultimate goal of Rate Engineering’s strategic systems replacement plan is an integrated system with ease of reporting and inquiries.

Key elements include:
- replacement of the mainframe Load Survey System with DLS, a SAS-based modular load research and sample design system
- replacement of RESPIN, the customer usage flat file mainframe system, with the Customer Usage System (CUS), a relational database
- integration of CUS, DLS and rate design/bill comparison pricing systems, specifically BillCalc

The ongoing updates and enhancements of CUS and DLS are critical to the success of this effort. Given the growth in interval data, there are increased demands on existing Rate Engineering staff to provide more timely and detailed customer usage analyses.

The need for consolidation of all interval data on one platform is also justified because of the standardized interval data format of load research. It is now consistent with other sources of interval data, including data from MHP customers and the Company’s AMI (Advanced Metering Infrastructure) program.
Estimated Completion Date:
12/2014

Status:
In Progress

Approved Budget Funding $350,000: ($000s)

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