



## Delivering an Automated Solution for Managing PJM Demand Response Programs

### DR Hub Automation Tool

#### Objectives

- Improve business processes and increase efficiency through automation
- Build an in-house, long-term scalable solution that provides more transparency in the overall process
- Leverage existing hardware and technology used by the utility's other production systems
- Modernize, streamline, and simplify the solution, including integration with the utility's and PJM's systems

One of **Rubicon Associates' major clients** is a leading utility that serves electric and natural gas customers in the northeastern US as a **member of the PJM Interconnection**.

The utility has a team of experts that manages various operations involving wholesale billing, credit, and settlement to enable electric deregulation and to support energy efficiency programs.

- One such program is **PJM's DR program** which enables providers to offer end-use customers the ability to reduce their usage in exchange for compensation from PJM's wholesale markets.
- The participating providers must meet certain requirements to qualify for wholesale payments.

The utility's team plays a vital role and is required to validate PJM DR program registrations and settlements in its zone through PJM's DR Hub. The utility used a third-party vendor to assist with performing the tasks manually. After conducting an assessment, the team determined that an automated tool managed in-house was essential and engaged **Rubicon Associates to develop the DR Hub Automation Tool**.

Prior to using the DR Hub Automation Tool, a single registration would require about 10 minutes of users' time and a single settlement claim would require 15 minutes. On a busy day, there could be hundreds of such tasks.

## | Challenges

### Manual validation of PJM DR registrations and settlement claims

- Requires manual login, download, and review of PJM tasks
- For each task, need to perform further searches in PJM and retrieve data
- Requires complex spreadsheets with external links and macros
- Long running queries needed to obtain verification data and comparison
- Decisions and status for each task need to be tracked manually

## | Customer Benefits



Removed dependency on third party and eliminated associated costs



Significant reduction in overall process time



Improved accuracy and less error-prone due to automation



Enhanced visibility and accountability



Reduced the need for manual querying of data and troubleshooting

## | Solution

The Rubicon team leveraged its PJM subject-matter-experts, the technology development team, and a proven combination of Agile and WaterFall methodologies to develop a DR Hub Automation Tool that:

- ✓ Automatically retrieves and compares the DR registrations and claims data from PJM's and the utility's systems
- ✓ Provides results in GUI as well as batch files indicating if each registration and claim should be accepted or denied
- ✓ Maintains auditability for the assessments and a comprehensive, time-based process log for user and system activities
- ✓ Allows for user access and role-based authorization management capabilities

## | Efficiency

With the DR Hub Automation Tool, the time to process 500 settlement claims went from over **100 hours** to about **10 minutes**.



### ABOUT US

Rubicon Associates, LLC is a Minority-Owned Business (MBE) offering highly specialized business and technology solutions to energy companies in power and natural gas sectors.

To learn more, visit [www.rubicon-associates.com](http://www.rubicon-associates.com)

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