



Synchronous Reserve Deployment Task Force (SRDTF) Monthly Progress Report

January 24, 2022

Synchronous Reserve Deployment

The [Synchronous Reserve Deployment Task Force \(SRDTF\)](#) was founded in March 2021 to address potential improvements of two main aspects – a controlled deployment of synchronized reserves and energy price alignment with these actions. A more controlled deployment of synchronized reserves will improve system reliability during and after a reserve deployment event. The SRDTF reports to the Operating Committee (OC).

Issue Status

1. SRDTF participants were engaged in education about synchronized reserve deployment.
2. SRDTF identified Interests, developed Design Components and Solution Options for each Component, and Packages as part of the Consensus Based Issue Resolution (CBIR) process.
3. Two packages were developed: Package A, PJM IRD and Package B, IMM.
4. A non-binding poll/survey was conducted to determine support for existing packages.

Target Completion

The first phase of SRDTF is expected to be completed by April/May 2022 depending on FERC filing approval.

Progress Update

The SRDTF [Problem Statement](#) and [Issue Charge](#) were brought forward by PJM Interconnection and approved by the Operating Committee on March 11, 2021.

The first meeting of the SRDTF was held on April 8, 2021. The Opportunity Statement, Issue Charge, Work Plan and meeting schedule were presented. An overview of how to sign up for the roster and email distribution list was also provided. The education was provided covering key work activities listed below:

- a. Reviewed education on what synchronized reserves are and how PJM measures performance. This includes both PJM actions and expected Member actions during a synchronized reserve event.
- b. Reviewed education on synchronized reserves practices, how PJM deploys reserves in Real Time Operations, and how PJM's Control Center handles synchronized reserve events.
- c. Provided education on synchronized reserve deployment and measurement practices used by other ISOs and RTOs.
- d. Provided education on how the implementation of long term SCED changes will affect options around synchronized reserve events (5-minute dispatch review).
- e. Reviewed education on unit response statistics during spin events.



At the April 30, 2021 meeting, education continued and covered key work activities listed below:

- a. Provided education on upcoming Reserve Price Formation changes and how these changes will affect synchronized reserve clearing, pricing and events.
- b. Presented information on reserve deployment during recent spin events in 2021.
- c. Provided education on real time dispatch during synchronized reserve events.

At the April 30, 2021 meeting, SRDTF began following the CBIR process: interest identification, development of design components and the corresponding status quo.

At the June 3, 2021 meeting, SRDTF continued interest identification, development of design components and the corresponding status quo. SRDTF began the solution options identification at the June 3, 2021 meeting. An education on review of Dispatch Operations in Emergency Reserve Events was also provided.

At the July 1, 2021 meeting, SRDTF continued following the CBIR process: review solution options for each component and develop packages. PJM presented their proposed package utilizing Intelligent Reserve Deployment (IRD). PJM also presented a proposed Synchronized Reserve performance evaluation method using IRD. IMM provided an education on IMM Synchronized Reserve Deployment options.

At the August 6, 2021 meeting, SRDTF continued following the CBIR process: review design components and priorities, solution options for design components, and packages. PJM presented a proposed Synchronized Reserve performance evaluation method using IRD that included modified slides from the last meeting. IMM presented IMM's proposed package. The facilitator reviewed SRDTF survey questions during the meeting. The purpose of the survey was to determine support for packages.

At the August 30, 2021 meeting, SRDTF continued following the CBIR process: review interests, design components, solution options for design components, and packages; compare packages to interests and importance ratings. IMM presented details on the IMM's package for deploying synchronized reserves during a spin event. PJM presented a comparison of PJM and IMM proposed packages. IMM presented additional clarifying details on the IMM proposal and compared with PJM's approach. The facilitator discussed details of the upcoming survey. A third package was proposed by CP Power at the end of the meeting. PJM's package was modified around aggregation of individual unit response in settlements for Demand Response. As a result of this modification to PJM's package, the third package from CP Power was withdrawn.

At the September 22, 2021 meeting, SRDTF reviewed a final version of SRDTF matrix that contained two packages: PJM IRD and IMM. PJM also presented IRD timeline. The facilitator reviewed SRDTF survey results during the meeting. The survey was conducted on September 1, 2021 through September 15, 2021. The survey was sent to SRDTF and OC distribution lists. The number of survey participants were 140. One of the survey questions was "Which package do you prefer"?

Package A, PJM IRD received 75% support

Package B, IMM received 9% support



Prefer both equally received 0% support

Status Quo received 16% support

The survey results were posted with September 22, 2021 meeting materials on [PJM's website](#).

Operating Committee

At the October 7, 2021 meeting, OC reviewed a first read of SRDTF proposed packages. Ilyana Dropkin, PJM, provided a summary of the Synchronized Reserve Deployment Stakeholder Initiative. Mike Zhang, PJM, provided a first read of the PJM's package that was developed in the SRDTF. Siva Josyula, IMM, provided a first read of the IMM package that was developed in the SRDTF.

At the November 4, 2021 OC meeting, PJM's solution package received an endorsement over the status quo and over IMM's solution package. However, the IMM's package didn't pass the vote for the endorsement over the status quo and over PJM's package.

Markets & Reliability Committee

At the November 17, 2021 MRC meeting, Mike Zhang, PJM, provided a first read of the PJM's package that was developed during SRDTF.

At the December 15, 2021 MRC meeting, Ilyana Dropkin, PJM, provided a second read of the PJM's package that was developed during SRDTF. PJM's solution package received an endorsement over the status quo.

Next Steps:

- **MC Endorsement - January 26, 2022**