

Member Impacting Project Overview:

Settlements Release 1.2

Version 1.23

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Version Control

Version	Date	Author	Change Description
1.0	02/28/20	D. Boyer	Initial version
1.1	05/06/20	D. Boyer	<p>Updated to include 2 additional production defects related to issues with the FERC EQR reports.</p> <p>Updated to include additional details around MP Testing:</p> <ul style="list-style-type: none"> • RR266 Scenarios • Scenario Calendar Dates • Market MUI/API Test Cases • MP Testing Kickoff Net Conference
1.2	05/18/20	D. Boyer	Updated to include two additional clean-up RRs for the RR266 settlement calculation changes: RR397 and RR406.
1.3	06/12/20	D. Boyer	Updates to the FAQ section of the document.

Executive Summary

This release will included updates to the Settlement Management System (SMS) to include member-impacting enhancements for the following Revision Request:

- RR266 – JOU Combined Single Resource Modeling Post Settlement Share Allocation

In this document the term “members” refers to any and all stakeholders which could include Market Participants, Members, Customers, Transmission Owners, Vendors, etc.

Business Impact

RR266 – JOU Combined Single Resource Modeling post Settlement Share Allocation

The current design for Joint Operating Units (JOUs) that use the combined option has unintended consequences that were documented by the SPP Market Monitoring Unit (MMU) on March 30, 2015. There were two noted consequences for the combined option of the JOU design: 1) Resource that would have not been committed if they would have not been a JOU and 2) Economic inefficiency in regards to Make-Whole Payments for the start-up and no-load costs.

This enhancement will allow any Resource to elect, through a modeling option, to be a Combined Interest Resource (CIR). Resources that elect to use this option will run through the market clearing engine as a single Resource, and then post market revenue allocations will be dispersed to each share based on designated ownership percentages.

Several new bill determinants and two new charge types will be added to the settlement calculations in order to allocate the settlement dollars for units registered as CIRs based on their designated ownership percentages. Additionally, the RNU charge type will be modified to account for the two new charge types:

- Day-Ahead Combined Interest Resource Adjustment Amount (*DaCirAdjDlyAmt*)
- Real-Time Combined Interest Resource Adjustment Amount (*RtCirAdjDlyAmt*)

This revision request changes the Integrated Marketplace protocols and the SPP Tariff. The RR is available in the [Revision Requests](#) folder on spp.org. RR266 was approved by MWG on 07/10/2018 and by the SPP Board of Directors (BOD) on 07/31/2018. In addition to the settlement changes outlined in RR266, RR397 and RR406 provide additional clarification for the settlement calculations related to RR266. These RRs are also available in the [Revision Requests](#) folder on spp.org.

Other Enhancements and Defect Fixes

The following production defects will be included with this release but may be delivered in a subsequent patch to MTE during member testing:

Issue ID #	Impact	Issue Description
ITSETL-5390	Member Facing	In some cases, the price fields in the FERC EQR Reports come back blank instead of with zeros.
ITSETL-5431	Member Facing	Months that include daylight savings time changes (March and November) result in members being unable to pull the entire month of FERC EQR Data within a single request which is the normal process typically. The work around is to pull the time period prior to the DST change separately from the time period after the DST change.

Users Impacted

- MPs that currently have assets registered as Combined JOUs **must** re-register those assets by **04/15/2020**. The Combined JOUs option will no longer be available.
- MPs of an asset that elects to re-register as a CIR (Combined Interest Resource) by the registration due date of **04/15/2020** will be impacted as well.

Business Functions Impacted

- MP Registration
- Model Coordination
- Market System
- Settlement System
- Shadow Settlements

Technical Impact

SPP Systems/Processes Impacted

- New registration packets are currently available on the [SPP Portal](https://marketplace.spp.org/modeling/mcst) (marketplace.spp.org/modeling/mcst documentation) that include the new CIR option.
- Settlements system will be making changes to consume new modeling information for CIRs, in addition to the new bill determinants defined in RR266. Settlement calculations will be added to calculate the two new CIR charge types. The RNU charge type will also be modified to include the two new CIR charge types. There will also be modifications made to the EQR report logic to handle the new CIR charge types.

Anticipated Member Systems/Processes Impacted

MP Registration

All MPs who currently have assets with the JOU Combined Option will be required to re-register those assets.

For re-registration, MPs will use the MCST User Guide Appendix B located here: marketplace.spp.org/modeling/mcst documentation. For questions regarding re-registration, please utilize the RMS project quick pick.

Registration must be completed no later than Wednesday, April 15th in order to participate in this project and the planned testing period for a planned implementation date of August 1st of 2020.

Asset Owners / Market Participants

Asset Owner's with settlement locations that are registered as a CIR will receive new bill determinants as defined in RR266 on the settlement determinant reports and two new charge types on settlement statements. Market Participants with a CIR registered will see two new charge types on their settlement statements.

If choosing to register as a CIR, the designated asset owner will be responsible for submitting bid/offers and meter data. Asset Owners which were previously part of a Combined JOU and are not the designated asset owner, will no longer have access to the CIR bid/offer data or meter data.

Meter Agents

Meter Agents may be impacted if a settlement location they currently submit for is terminated as a result of it being registered as a CIR for which they are not the designated asset owner.

Shadow Settlement Systems

Members (or vendors) that plan to shadow the two new charge types will need to update their processes to consume the new bill determinants and calculate the two new charge types as defined in RR266.

Member Requirements

Settlements UIs/APIs

There are no WSDL/XSD changes associated with this release. However, the following UIs and APIs will include new CIR charge types and/or bill determinants.

- New bill determinants:
 - UI – AO Determinant Report
 - UI – EQR Data
 - API – GetDeterminantReport
 - API – GetEqrData
 - API – GetSettlementData

- New charge types:
 - UI – AO Statement
 - UI – MP Statement
 - API – GetStatement
 - API – GetSettlementData

The EQR FERC Formatted Report logic will be modified to merge the EQR CIR quantity and price records into the existing applicable EQR products for all CIR Asset Owners for a CIR Settlement location. This applies to the results returned in the following.

- UI – EQR FERC Data
- API – GetFercData

Markets UI/APIs

The following energy operations will become fully implemented with the introduction of resources flagged as a CIR:

- GetEnergyCIRInterestSetByDay
- PostEnergyCIRInterestSet

For additional information on the new operations, please refer to the [Marketplace Markets Web Service 32 \(Release 1.29\)](#) technical specs located on spp.org.

The Markets UI will be updated to support the ability to update the CIR percentages for a resource that registers with a CIR attribute. The CIR percentages can be updated as needed.

Testing

Member testing will include operating dates 06/01/2020 through 07/10/2020. Market Participants will need to ensure their CIRs are available for commitment in both DAMKT and RUC. Market Participants should submit/update data (bids/offer for markets, meter/bilateral schedules for settlements) in order to test specific scenarios. Otherwise, markets will use the last submitted data for offers and bids, and settlements will use state estimator for meter. A scorecard will be utilized to track scenario progress. Scorecards will be updated and published for the project weekly.

The following data will be provided in support of this testing:

- Settlement reports will be posted for Operating Dates 06/01/2020 – 07/10/2020.
 - The first operating day (06/01/2020) will post on Monday, 06/08/2020.
 - The last operating day (07/10/2020) will post on Friday, 07/17/2020.
- An accelerated calendar will be used in MTE so that the S53 posts 21 days after the operating date, and the S120 posts 35 days after the operating date with the last settlement posting in MTE occurring on 07/17/2020 for the following:
 - S7 posting for Operating Date 07/10/2020
 - S53 posting for Operating Date 06/26/2020
 - S120 posting for Operating Date 06/12/2020
- As a result of the accelerated calendar, BSS and Meter Data due dates are also shifted up for the S53 and S120. All due dates are listed on the settlement calendar posted to the MTE Portal.
- Market invoices will be posted weekly starting on 06/11/2020 and continuing through 07/17/2020.
 - Note that the first and last invoice produced during member testing will be for partial weeks, and the last invoice will be posted early to close out the member testing phase on Friday, July 17th.

For complete details on member submission due dates and settlement posting dates, reference the Settlements Release 1.2 Calendar posted on the MTE Portal: <https://marketplace-mte.itespp.org/pages/settlement-calendars>.

Testing Assumptions:

- All MPs should have already conducted connectivity testing to the Member Test Environment (MTE). This project timeline will not include connectivity testing.
MP staff who are participating in the testing are trained on the systems they are testing.

RR266 Settlement Scenarios

The following scenarios have been identified for testing of the market and settlement changes associated with RR266:

- Unstructured / Base Settlement Calculations
- Out-of-Merit Energy Calculations (De-commits, Manual De-selects)
- Day-Ahead Make-Whole-Payment Calculations
- Contingency Reserve Deployment Calculations (CR Deployment Failure)
- Real-Time Make-Whole-Payment Calculations

The scenario calendar below will be used to identify operating dates for each scenario:

JUNE

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

First OD: 6/1/20 (posted on 6/8/20)

Last OD: 7/10/20 (posted on 7/17/20)

Unstructured / Base Calculations
OOME Scenarios
DA MWP Scenarios
CR Deployment Scenarios
RT MWP Scenarios
Re-Test Scenarios As Needed

JULY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Market participants are responsible for reviewing the results of each scenario to understand the impacts to their organization prior to production implementation. There will be a two week period (06/29/2020 – 07/10/2020) at the end reserved for any scenario retesting that may be needed. **Market participants should notify SPP via RMS of any additional scenario testing desired as soon as possible to ensure it can be completed prior to the end of member testing.**

RR266 Markets Test Cases

In addition to verification of settlement results, the Designated Asset Owners of a CIR (Combined Interest Resource) should ensure they are able to update the percent ownership share of CIRs by submitting a resource offer in the MUI or via the API. RR266 Markets Test Cases can be found in the [project folder](#) and should be completed by the impacted parties and submitted via RMS to the project quick pick no later than July 17, 2020.

Issue Reporting

For errors or unexpected results during test execution which require SPP support, please provide error steps and details as soon as possible using the 'Project Inquires' Quick Pick and Subtype 1 of 'Settlements Release 1.2'. **SPP asks that participants report issues as soon as possible so they may be resolved in a timely manner.** Any issues identified will be listed and tracked in the Known Issue Log posted to the [project folder](#).

Member Testing Kickoff

The member testing kickoff call will be held on Monday, May 18th, at 2:00PM Central Time to review the RR266 scenarios being tested with this project. Registration for the net conference is available on the SPP calendar at the following link: <https://www.spp.org/events/calendar/settlements-release-12-rr266-mp-testing-kickoff-net-conference-20200518/>.

Training

Training for Settlements Release 1.2 will be delivered in two separate Virtual Instructor-Led Training (VILT) sessions. This course, titled Market Enhancements – Jointly Owned Units, is targeted for Market Participants and Asset Owners who will be impacted by changes from Revision Request (RR) 266 which modifies the market design for Jointly Owned Units. Specifically, resources registered under the Combined Resource option will need to consider whether they will register as an Individual Resource or as a Combined Interest Resource since the Combined Resource option will be retired. Subject matter experts will be available to answer questions during this session.

The sessions will be offered on the dates/times listed below:

- Thursday, March 26, 2020 2:00 p.m. – 3:00 p.m. CT
- Thursday, April 9, 2020 10:00 a.m. – 11:00 a.m. CT

Members can register for these sessions in the [SPP Learning Center \(LMS\)](#).

Note: Members and Market Participants must identify the appropriate personnel to attend this training. Though these sessions will aid understanding, each entity will be expected to certify performance readiness.

Summary of Timeline

Date	Responsible Party	Action
10/01/2019 – 04/10/2020	SPP	Requirements, Design, Build
02/27/2020	SPP	Publish MIPO
03/26/2020	SPP / Member	First MP Training Session for RR266
04/09/2020	SPP / Member	Second MP Training Session for RR266
04/15/2020	Member	Deadline for Model Re-registration
05/18/2020	SPP / Member	Testing Kickoff Meeting
06/01/2020 – 07/17/2020	SPP / Member	Member Testing in MTE (Member Test Environment)
07/18/2020 – 07/31/2020	SPP / Member	Cool Down Period prior to Production Implementation
08/01/2020	SPP / Member	Effective date of RR266 in Production

Project Assumptions

The member testing phase of this project assumes that during MP re-registration, which must be completed by April 15th, that an MP will re-register an asset as a Combined Interest Resource (CIR).

Risks

None identified at this time.

Additional Documentation

- MCST (Model Change Submission Tool) User Guide
 - This guide provides information on the tool that Market Participants use the submit model information to SPP.
- Integrated Marketplace Protocols
 - Provides Market Participants, Asset Owners, Meter Agents, and Shadow Settlement Vendors with the calculation details needed to shadow market settlement charges and credits (changes to this document are tracked via the SPP Revision Request process).
- Settlement User Interfaces Guide
 - This guide describes how to submit, and if applicable, approve input data, register for event notifications, view reports and Settlement results (e.g. invoices, statements) via UIs available in the Marketplace Portal.

Communication Plan

Monthly updates will be provided via written status report or presentation to CWG.

Liaisons

Project Liaisons are requested for this project. Liaison information should consist of the company's name, liaison name, email address, and phone number. Please submit liaison information via [RMS](#) to the project quick pick.

Project Liaisons are expected to perform the following functions:

- Review project documentation (including this MIPO) and provide feedback
- Identify impacts to their organization and engage the appropriate individuals (including any impacted vendors)
- Serve as the main point of contact between SPP and member organization
- Coordinate member implementation and testing efforts
- Represent the member's interests on the project team

MIPO and Project Documentation

All project communication and information will be posted to the SPP Change Working Group Project Documentation [folder](#) for Settlements Release 1.2.

This MIPO will be updated upon change or with any new information, and according to the Member Project Touch Points and Deliverables. With any update, a redline version will be posted to the project documentation folder, and the CWG will be notified.

Next Steps

Action	Assignee	Status & Due Date
<ul style="list-style-type: none"> MPs become familiar with RR266 Schedule resources to Test in June – July timeframe 	MPs	Now
<ul style="list-style-type: none"> MPs submit new registration packets if registering as a CIR (Combined Interest Resource) 	MPs	Complete
<ul style="list-style-type: none"> MPs impacted by RR266 register for the testing kickoff net conference 	MPs	Now Complete
<ul style="list-style-type: none"> MPs attend the RR266 testing kickoff net conference 	MPs	05/18/2020
<ul style="list-style-type: none"> MPs participating in testing submit bid/offers and meter data to the Member Test Environment (MTE) during member testing; verify settlement reports and invoices as they are posted. 	MPs	Operating Dates: 06/01/2020 – 07/10/2020
<ul style="list-style-type: none"> Impacted MPs complete and submit RR266 Markets MUI/API Test Cases via RMS project quick pick 	MPs	07/17/2020

FAQs

Frequently asked questions will be added to the document as identified or necessary.

Question	Answer
<p><u>What should meter data submissions in MTE be based upon? Should 'fake' meter data be submitted?</u></p>	<p><u>Any kind of meter data submissions will work for MTE. We do encourage members to submit meter data during member testing in order to verify everything is set-up correctly. What the meter values are based upon in MTE is up to the member. Some members chose to submit production like data, while others send 'test' or 'fake' meter data values. The settlement results may look unusual if using 'fake' meter data since it may not align with how the unit is being dispatched in MTE. Regardless, members will still be able to shadow the settlement calculations based on the values submitted. If no values are submitted for a given operating day, SPP will default to the state estimator values.</u></p>

More Information

At any time, members can ask questions or get more information by completing an RMS ticket using "Project Inquiries" Quick Pick and this project's subject option.


RMS link: <https://spprms.issuetrak.com/login.asp>.

If a new user ID is needed for RMS, click on that link and follow the directions for "Register Now".

Submit Request

Submit Request

Quick Pick: ▼

Submit Date:  mm/dd/yyyy

Time: : ▼

* Class: ▼ add

Request Status: ▼ ▼ add

This Request is used to submit an inquiry regarding current SPP Projects.

Do NOT change Request Type. Doing so will delay a response to your inquiry.

In *Subtype 1* select the appropriate project. Your selection ensures timely assignment of your inquiry to the appropriate project owner.

* Request Type: ▼ add

* Subtype 1: ▼ add

Subtype 2: ▼ add