

Member Impacting Project Overview:

MSS 2.10 Release

Version 1.10

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Version Control

Version	Date	Author	Change Description
1.0	03/10/2017	Kirk Anderson	Initial Draft
<u>1.1</u>	<u>05/01/2017</u>	<u>Kirk Anderson</u>	<u>Updated to include testing information as well as update release dates</u>

1. Executive Summary

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

MSS 2.10 is the first Member facing/impacting release following the Enhanced Combined Cycle (ECC) Project. This releases consists of MPRR116 – Settlement Area Tie-Line Meter Data and RR82 – Modification of Make-Whole Payment Grace Period along with various other system enhancements as detailed herein.

1.1. RR0002_MPRR116

Current Protocols allow 5-minute submission for Resources and load, but do not allow 5-minute submission for tie-line meters. By allowing meter agents to submit in 5-minute intervals for Resources, load, and tie-lines, meter agents will be able to calculate top down load on a 5-minute interval instead of on an hourly basis profiled down. The meter agent can choose to submit 5 minutes or hourly for the intervals. This MPRR Allows optional submittal of 5-minute Settlement Area tie-line data consistent with the option to submit 5-minute data for Resources and Load.

This MPRR also clarifies what happens to missing tie line data. State Estimator will be substituted for any missing tie line data instead of using zero.

1.2. RR82

MPRR 207 allowed for the staggered start of a combination of dependent units in order to correctly model start-up time between resources due to physical (e.g. shared startup transformer capacity) or regulatory constraints (e.g. emission limitations prohibiting simultaneous startups) which can't all be started simultaneously by SPP Market Operations. This MPRR was discussed at the January MWG meeting, with the Impact Analysis showing the resulting cost to be \$500k-\$600k. During the January 2015 MWG meeting, several alternatives to modify MPRR 207 were discussed by the group and SPP staff. One alternative for a short-term solution is the increase in the make-whole payment grace period for commitments from one hour to two hours. This alternative would alleviate most of our issues with cost recovery for concurrent unit starts.

RR82 changes the make-whole payment grace period for Staggered Start Resources from one hour to two hours, adds an attestation requirement for these Resources, and only allows Resources registered prior to the approve effective date of the revision request to be considered Staggered Start Resources.

1.3. Additional Defects/Enhancements in this release:

In addition to the implementation of the MPRRs noted above, the following member facing/member impacting defects or enhancements are addressed in this release.

- #03-1835 – Settlement Area rolled up Meter Data
 - MP Requested enhancement to provide an additional Meter Report option via the Portal. The request is to provide a calibration summary report to the market participant with the top down load for the Settlement Area.

- #03-705 – Add last updated timestamp for multiple BSS Profiles for same OD

- Multiple MPs have requested enhancement to add a date/last updated time stamp to BSS Profiles to assist in determining which profiles need to be validated when multiple profiles have been submitted for a single OD.
- #03-1007 – Expand FERC EQR request limit from 7 days to 1 month
 - Request for the FERC EQR data to be a month long, instead of the current 7 days.
- #03-944 – MP requested enhancements to the EQR report
 - MP requested enhancements to EQR Report
- #03-1931 - Remove XML and HTML options from Meter Data MP Reports Report View dropdown
 - Currently, on the Marketplace Portal: Settlements>Meter Data>Meter Data MP Reports there are 3 options for Report View. HTML, XML and Tabular. HTML and XML are not currently supported. We are removing these options to avoid confusion for the users.
- #03-1901 – Modification of RtStartUpEligFlg
 - Going forward, Members will see a change to the number of intervals that are populated for the determinant RtStartUpEligFlg. Currently, only one interval per RUC MWP eligibility period is captured, even though there may be multiple commitments. In order to be more transparent, this determinant will now produce a value for every RUC commitment in the RUC MWP eligibility period. By doing this, Members will be able to see which commitments are or are not eligible for recovery of start-up costs.

2. Business Impact

2.1. **Users Impacted**

All Market Participants that:

- Have resources designated as Staggered Start
- Utilize Bilateral Settlement Schedules
- Utilize the EQR Report

2.2. **Business Functions Impacted**

This change will impact the following departments across the organization:

- Settlements – Staging Database
- Ops Modeling and Model Coordination
- Registration

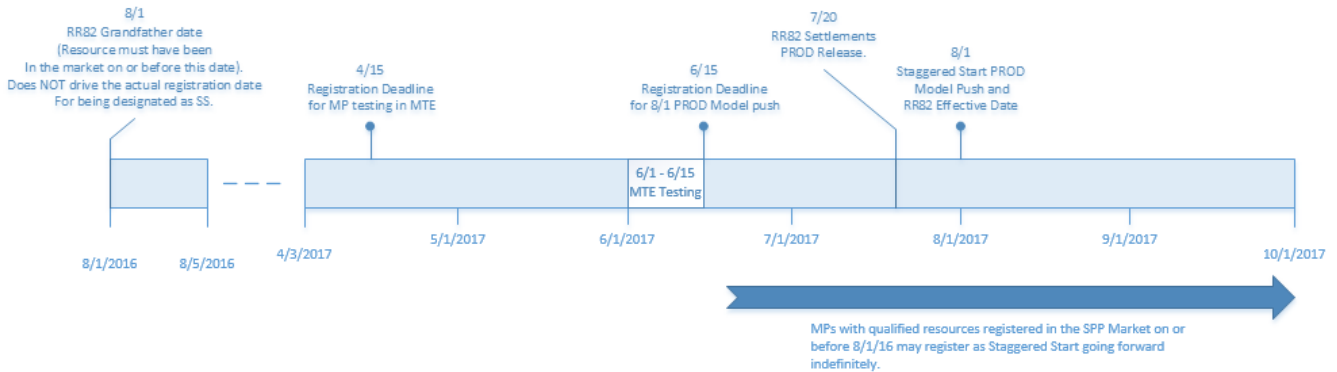
3. Technical Impact

3.1. **SPP Systems/Processes Impacted**

- *Centralized Modeling Tool (CMT) / Model Change Submission Tool (MCST) modeling system and appropriate documentation will be modified to include necessary configuration options associated with Staggered Start data for resources. Staggered Start modeling will be accomplished via separate documentation from MCST Modeling. SPP Staff modelers will input Staggered Start changes to CMT/MCST.*

- Market Participants will need to submit RMS tickets and identify registered resource asset they are requesting to be added as a staggered start resource.
- The registration deadline for Staggered Start resource information to be included in MTE testing is 4/15/17.
- The model Schedule during this period is as follows:

Date Model information is due	Date model will be effective
4/15/2017	6/1 (for MP Testing in MTE), PROD 8/1
<u>6/15/2017</u>	<u>PROD 8/1</u>



- Settlements UI/API/XML
 - Changes are detailed in Section 4.1 below.

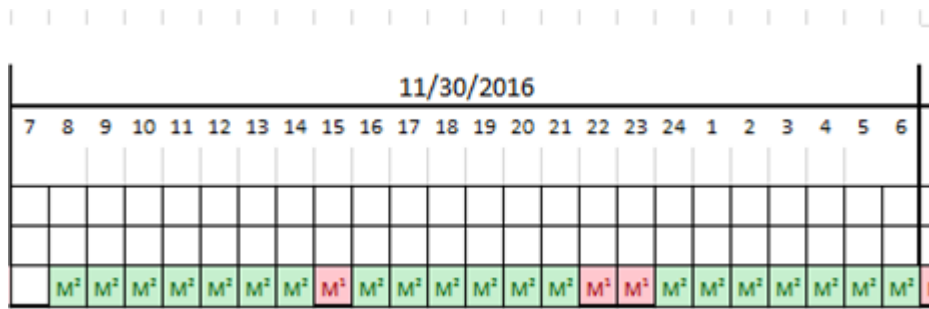
4. Member Requirements

Market Participants will need to update their systems and processes to account for the changes associated with the RRs, enhancements, and defects. They will have the opportunity to test changes to Settlement APIs in the MP-facing test environment (MTE). For more details on testing, reference the Testing section of this document, below.

4.1. Anticipated Member Systems/Processes Impacted

- Centralized Modeling Tool (CMT) / Model Change Submission Tool (MCST) modeling system and appropriate documentation will be modified to include necessary configuration options associated with Staggered Start data for resources.
 - Market Participants will need to submit RMS tickets and identify registered resource asset they are requesting to be added as a staggered start resource.
 - The registration deadline for Staggered Start resource information is 4/15/17.
- Settlements UI / API / XML
 - RR82 - Make-whole Payment Grace Period for Staggered Start Resources
 - MP system changes not required
 - RR0002_MPRR116 - Settlement Area Tie-Line Meter Data Submittal
 - MP system changes not required
 - The backend system will be modified to allow submission of tie-line meter data in 5-minute intervals in addition to hourly intervals.
 - #03-1835 – Settlement Area rolled up Meter Data
 - MP system changes are optional
 - New UI pages and API operations will be added for the rolled-up calibration report.

- #03-705 – Add last updated timestamp for multiple BSS Profiles for same OD
 - MP system changes required for applications using the BSS SearchContractsRequest API call
 - Two new elements, Submitted timestamp and last updated timestamp, will be added as new elements to the SearchContractsResponse API operation.
 - These changes will not be backwards compatible. Any systems using this API call will need to make changes to successfully consume the SearchContractsResponse payload.
- #03-1007 – Expand FERC EQR request limit from 7 days to 1 month
 - MP system changes not required
 - The backend system will be modified to allow participants to request up to one month of EQR data as opposed to seven days
- #03-944 – MP requested enhancements to the EQR report
 - MP system changes required for applications using the GetEqrData API call
 - New required elements will be added to the GetEqrDataResponse payload. Specific details regarding this changes will be included in the updated technical specifications published on SPP.org.
 - These changes will not be backwards compatible. Any systems using this API call will need to make changes to successfully consume the SearchContractsResponse payload.
- #03-1931 - Remove XML and HTML options from Meter Data MP Reports Report View dropdown
 - Currently, on the Marketplace Portal: Settlements>Meter Data>Meter Data MP Reports there are 3 options for Report View. HTML, XML and Tabular. HTML and XML are not currently supported. We are removing these options to avoid confusion for the users.
- #03-1901 – Modification of RtStartUpEligFlg
 - Going forward, Members will see a change to the number of intervals that are populated for the determinant RtStartUpEligFlg. Currently, only one interval per RUC MWP eligibility period is captured, even though there may be multiple commitments. In order to be more transparent, this determinant will now produce a value for every RUC commitment in the RUC MWP eligibility period. By doing this, Members will be able to see which commitments are or are not eligible for recovery of start-up costs.
 - Example:



Currently: Only one interval for RtStartUpEligFlg would be populated with a 1 or 0 at interval 8 since that is the start of the RUC MWP eligibility period (intervals 8 – 6).

- Going forward: RtStartUpEligFlg would be populated with a 1 or a 0 for intervals 8, 16, 24, one for each RUC commitment.

5. Testing

Testing Assumptions:

- All MPs should have already conducted connectivity testing to the appropriate Integrated Test Environment. This project timeline will not include connectivity testing.
- MP staff who are participating in the testing are trained on the systems they are testing.
- Project Liaisons will be responsible for coordinating testing at their company, and reporting back to SPP on testing progress or issues.

Member Testing will be conducted in MTE during the month of June. The following operating days will be posted to the MTE portal for verification by Market Participants: Initial Settlement Statements for Operating Days ~~April June 14-156, and April 11-13~~

During the MTE testing period, it is encouraged that meter agents submit meter data on behalf of their market participants. Resources that do not submit meter data will be substituted for State Estimator. Resources that are qualified to provide ancillary products should ensure they are entering offer parameters for those products.

~~Most of the Some~~ scenarios needed to test this release such as availability of the (Product Substitution, Ancillary Service Manual Override, Start Up Eligibility Clarification, and Self Commit Run Time Clarification EQR) will happen naturally. Specific items to be tested are as follows: with the exception of

1. Ancillary Service Overrides Make-Whole Payments as a result of Staggered Start resources.
SPP will try to apply this scenario to as many applicable Asset Owners as possible.
2. MPs should manually request EQR reports based on requested enhancements and validate results
3. MPs should submit Bilateral Settlement Schedule and validate all requested enhancements
4. MPs should submit 5-minute interval meter data and validate results including enhancement to rolled up Calibration report
5. MPs should verify that the RtStartUpEligFlg determinant now produces a value for every RUC commitment in the RUC MWP eligibility period.

After the first ~~five~~ three days (~~April 4-6~~) June 1-5 have posted, please notify SPP via the Request Management System (RMS) if any additional scenarios are needed. SPP will then create those scenarios and will be available on the last ~~three-10~~ posting days (~~April Jun 116-1315~~).

5.1. Operating and Effective Dates

Member Testing will be conducted in MTE during the month of June. The following operating days will be posted to the MTE portal for verification by Market Participants: Initial Settlement Statements for Operating Days June 1-15.

TBD

6. Training

~~N/A/TBD~~

7. Implementation/Back-out Plan

If it is necessary to back out the new functionality, SPP will utilize effective dating to turn off this new functionality.

8. Summary of Timeline

Date	Responsible Party	Action
2/1/17 – 4/ 19 5/17	SPP	Requirements, Design, Build
3/10/17	SPP	Publish MP Requirements via MIPO revision
3/10/17 – 4/15/2017	Member	MPs to submit RMS tickets and identify registered resource asset they are requesting to be added as a staggered start resource
4/15/2017	Member	Deadline for Staggered Start registration information
5/5/17 4/27/17	SPP	Publish MP specifications if necessary via MIPO revision
4/13/17 5/5/17	SPP	Publish MP Testing details via MIPO revision
6/15/17 – 6/29/17 (initial posting dates)5/18/17 – 6/15/17	Member	MP Testing phase <u>for Operating Days 6/8/17 – 6/22/17</u>
TBD if necessary	SPP / Member	MP Training
7/6/20 7/17	SPP / Member	Implementation

9. Project Assumptions

~~TBD-N/A~~

10. Risks

~~N/A/TBD~~

11. Additional Documentation

Updated documents detailed below will be provided on or before 4/27/17.

- [EQR Data Dictionary and Sample report](#)
 - [FERC EQR DATA Dictionary 03_22_17 sample report.xlsx](#)
 - [FERC EQR DATA Dictionary 03_21_2017.docx](#)
- The following API specifications will be updated in the "Settlements DEGs and WSDLs.zip"
 - Settlement Reports - Data Exchange Document.docx
 - EqrDataSchema_v1_2.xsd
 - Bilateral Schedules - Data Exchange Document.docx
 - BilateralCommonSchema_v1_3.xsd
 - BilateralSchedulesSchema_v1_3.xsd
 - Meter Data - Data Exchange Document.docx
 - MeterDataService_v1_3.wsdl
 - CalibrationReportSchema_v1_3.xsd
- In addition to updated API specifications, the "Integrated_Marketplace_Settlements_User_Interface_Guide.pdf" will be updated.

12. Communication Plan

12.1. Liaisons

There are no liaisons needed for this effort.

13. MIPO and Project Documentation

All project communication and information will be posted to the SPP Change Working Group Project Documentation folder. <http://www.spp.org/section.asp?group=3400&pageID=27> .

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.

14. FAQs

[Frequently asked questions will be added to the document as identified or necessary.](#)

Question	Origination	Answer

~~These FAQs are added to the RMS Knowledge Base. Frequently asked questions will be added to the document as identified or necessary, as well as adding to the RMS Knowledge Base, located here: https://spprms.issuetrak.com/Kb_ListByCategory.asp~~

15. 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".