



PR20120001-Crediting Process Member Impacting Project Overview

v3.7

Table of Contents

Table of Contents	2
Executive Summary	4
Business Impact	4
Users Impacted	4
Business Functions Impacted	5
Technical Impact	5
SPP Systems/Areas/Processes Impacted	5
Anticipated Member Systems/Processes Impacted	5
Member Requirements	5
Testing	6
Training	8
Implementation/Back-out Plan	8
Summary of Timeline	8
Assumptions	9
Risks	9
Additional Documentation	9
Communication Plan	9
Next Steps	9
FAQs	11

Version Control

Version	Date	Author	Change Description
1.0	2/28/12	D. Giessmann	Initial Draft to introduce project
2.0	8/10/15	C.Jennings	Updated for member impacts, vendor and project schedule changes
2.1	9/11/15	C.Jennings	Corrected project schedule and noted start of production processing
2.2	10/13/15	C.Jennings	Updated to include MP Testing information and CBT posting.
2.3	11/13/15	C.Jennings	Updated the communication and testing information as well as dates in the schedule.
3.1	02/7/16	C.Jennings	Updated for latest schedule changes for development and testing.
3.2	03/6/16	C.Jennings	Updated information on technical documentation and project folder Updated dates for unstructured member testing.
3.3	04/04/16	C.Jennings	Updated testing section for clarity and timing.
3.4	08/22/16	C.Jennings	Updated testing section for new testing needs and timing. Updated processing and production start dates.
3.5	09/19/16	C.Jennings	Updated FAQs, EIS Portal testing and migration dates
3.6	09/27/16	C.Jennings	Updated Unstructured Member Testing schedule and Detail XML Report Information. No structural change to the reports were made, only sign convention
3.7	10/11/16	C.Jennings	Updated Unstructured Member Testing schedule; clarified when the report sign-convention would be modified
<u>4.0</u>	<u>11/16/16</u>	<u>C.Jennings</u>	<u>Updated schedule, milestones and noted upcoming Lessons Learned</u>

Executive Summary

The Z2 Credit Stacking Process project will deliver a process for analyzing the stack list of long-term and short-term transmission service requests that impact creditable upgrades under the tariff.

Following is a high-level view of the processes and steps the project has undergone to process the historical data and provide a system for ongoing processing:

- 1) Development of the Z2 system and processes has been ongoing since 2014
- 2) Collection of data from entities was needed to verify the data SPP already had or supplement where gaps existed. This effort concluded in late 2015
- 3) Perform historical data processing covering 2008-2016 to calculate credits and charges. This process has been conducted over the past six months
- 4) File Waivers with FERC to allow for processing of data past the one year limit in the Tariff and to allow for a payment plan of five years in duration
 - a. Waiver for allowing processing past one year limit in Tariff has been approved
 - b. Waiver for allowing a payment plan has been submitted and is awaiting approval. The requested date by SPP is 10/01/16
- 5) Provide technical specifications and sample files to stakeholders prior to the delivery of invoices
- 6) Sample XML and XSD for Detail XML Output was provided on 8/22/16
- 7) Sample XML and XSD for Historical Input Data will be provided the week of 8/29/16
- 8) Publish preview files for stakeholder and MOPC review/approval in the October 2016 meetings
- 9) Schedule through remainder of project
 - a. Provide Historical Summary Reports no later than 9/22/16
 - b. Members elect to participate in the Z2 Payment Plan in early October
 - c. October MOPC 10/11/16 – 10/12/16
 - d. SPP processes Z2 Credits for Historical Period and current month (September) into Transmission Settlements, posting 11/03/16
 - d.e. [Lessons Learned requested in November, 2011](#)

Business Impact

The tariff (in Attachment Z2) requires that customers who fund upgrades as a result of direct assignment from service requests receive credits for any subsequent transmission service sold that is enabled by the upgrade. The impact of the subsequent service is analyzed in a stack as each service is confirmed. SPP will implement a new system and associated process (es) used to perform the analysis. The general documentation of this process was developed by the Crediting Process Task Force.

Users Impacted

From Attachment Z2 and the Crediting Process Task Force whitepaper, parties that may be eligible to receive transmission service credits include:

- Transmission Customer that has been assessed costs and/or charges in excess of the normally applicable transmission access charges assessed pursuant to Schedules 7 and 11 or Schedules 9 and 11.
- Generator Interconnection Customer that has funded the engineering and construction cost of Network Upgrades required to provide such interconnection service
- Project Sponsor that has funded upgrades through the Project Sponsorship provisions set out in Tariff Attachment J.

Parties funding transmission service credits include:

- Long-Term Transmission Service Customers who are subsequent users may pay amounts over and above normally applicable transmission service charges in order to fund credits.

- Transmission Service Customers paying Schedule 11 zonal and region-wide charges that will be adjusted to include funding of credits.
- Transmission Owners' Point-To-Point revenues will be reduced by the credit amount provided for subsequent use by the Point-To-Point transactions.

Business Functions Impacted

Members that shadow settle will need to modify their systems to account for the new data. Those wanting to shadow settle with the new Z2 detailed XML will also need to adjust their systems for the new files.

Technical Impact

The XML and XSD needed for shadow settling will be provided to stakeholders via the CWG's **Marketplace Technical Specifications** folder. These documents were originally made available in September 2015. In February 2016, SPP determined that the specifications required updates so the previously published specifications were removed; a link to the updated specifications was provided via the CWG Exploder the week of 8/22/16. The specifications are now available in the [Future Tech Specs](#) folder (a sub-folder of the Marketplace Tech Specs folder on SPP.org).

SPP Systems/Areas/Processes Impacted

- Transmission Service Studies
- Operations – Tariff Administration and AFC Support
- Operations – Modeling and Data Integrity
- Regulatory Policy
- Transmission Settlements

Anticipated Member Systems/Processes Impacted

- Transmission Shadow Settlements
- Invoicing
- Monthly Excel summaries

Member Requirements

As a result of adding Z2 processing, new billing determinants will be added to the existing Transmission Settlements Miscellaneous Charge type. Stakeholders will need to test these changes and possibly change their system software accordingly. Stakeholders that want to Shadow Settle the Z2 charges will need to use the new XML and XSD to develop their systems accordingly. The new sample XML for the Monthly and Daily XML as well as new XSD was provided in August 2016 for stakeholders to use. The new detailed Z2 XML and XSD was provided the week of 8/22/16.

Legacy Transmission Portal functionality transition to the Marketplace Portal

With the required setup and configuration of TO and TC LSAs in the Marketplace Portal for Z2, SPP will utilize this opportunity to create synergy by transitioning all Transmission Owner, Transmission Customer, and remaining Meter Agent upload and download functions from the existing Legacy Transmission Portal to the Marketplace Portal. These functions are as follows:

Upload:

- MVAR Data (Meter Agent functionality)
- Coincident Peak (NITS)
- Direct Assignment
- Schedule 12
- Monthly Assessment (although this function is currently being managed through email)

Download:

- Statements (Daily/Monthly)
- Summaries and Pre-Summaries
- Schedule 2
- Invoices
- Payout Files
- Netting Statements
- Settlement Calendar

Once LSAs have been configured as part of the Z2 project they can then setup all users, in both MTE and PROD, who currently have access to the Legacy Transmission Portal. Updated LSA and Portal User Guides will be provided prior to external testing in MTE which will occur between 10/24 and 11/04. Migration to Production is scheduled to occur on 11/08.

Please note that these functions will remain 100% operational in the Legacy Transmission Portal in parallel to the Marketplace Portal until ~~the end of the year (2016)~~ mid to late January 2017.

Testing

As a result of the large volume of data generated by the Z2 process and used as input to the calculations, a change to using the Marketplace Portal for the publication of data/invoices was needed. All Z2 affected entities will need to participate in unstructured testing to validate their ability to access the Marketplace Portal and to download files. This testing includes Members who wish to shadow settle for Z2 Transmission Settlements.

Unstructured Testing for TC/TO and GI Customer testing will be conducted in the Member Test Environment (MTE) from September 7th through October 28th.

This testing will be conducted in two parts:

- Part one focuses on the ability to access the Marketplace Portal and retrieve a Transmission Settlement Statement begins 9/7/16.
- Part two focuses on testing the ability to download sample Daily and Monthly Z2 XML for shadow settlement purposes. The date to begin this testing is 9/7/16. Sample XML was provided the week of 8/22/16.
- Part three focuses on testing the CSS Monthly Input and Output Detail Report filtering using the User Interface. This testing will take place from 10/17/16 through 10/28/16 in MTE.

Testing is encouraged for TCs, TOs and GI Customers due to the Z2 crediting activity being added to the Transmission Settlement Statement and, Invoice as well as the addition of the new XML Detail Report for those wanting to shadow settle. This testing phase is unstructured and is an option to TCs, TOs and GI Customers. SPP will be providing suggested test cases, but will not be issuing test scenario documentation, or scorecards to be returned to SPP.

Testing Assumptions:

- TCs, TOs, and GI Customers are set up in the Marketplace Portal

- TCs, TOs and GI Customers wanting to shadow settle have downloaded sample XSD and XML files

Any issues discovered during the Unstructured Member Testing should be submitted via RMS using the Z2 Quick Pick.

Documents provided in support of Z2

The following documents are available in the [Z2 Credit Stacking](#) project folder and/or the [Future Marketplace Tech Specs](#) folder.

- Monthly XML Detail (Introduction and 11 Reports), plus the XSD
 - INTRODUCTION
 - T.C. UPGRADE REPORT
 - T.O. PTP REVENUE REALLOCATION SUMMARY REPORT
 - T.O. NITS REVENUE REALLOCATION SUMMARY REPORT
 - T.O. PTP REVENUE REALLOCATION BY UPGRADE REPORT
 - T.O. BILLABLE TSR ACTIVITY REPORT
 - T.O. CHARGE TYPE ACTIVITY REPORT
 - T.C. ACTIVITY DETAIL BY UPGRADE REPORT
 - T.C. BILLABLE TSR ACTIVITY REPORT
 - T.C. BILLABLE TSR CHARGE TYPE ACTIVITY REPORT
 - T.C. STUDY TSR ACTIVITY REPORT
 - T.C. STUDY TSR CHARGE TYPE ACTIVITY REPORT
- Reports Definition document along with the reports listed above to provide insight on the reports
- Historical Summary report in pdf format providing a breakdown of Z2 Credits by Entity by Upgrade by Year by Month
- Input data utilized for the historical calculations. This data will be provided via Globalscape for the historical period and then via the Marketplace Portal going forward. An NDA will need to be completed prior to access being granted to this data
- Implemented sign convention for the Charge Type Activity Reports listed below. In general, Credit Charge Types will appear as negative and charges will appear as positive. This change will be logged with the “Known Issues” for Z2. Please reference that report for details.
 - T.O. CHARGE TYPE ACTIVITY REPORT
 - T.C. BILLABLE TSR CHARGE TYPE ACTIVITY REPORT
 - T.C. STUDY TSR CHARGE TYPE ACTIVITY REPORT
- Implemented sign convention for Z2 Misc Adj Charge Types may be either positive or negative. This change will be logged with the “Known Issues” for Z2. Please reference that report for details.
- The sign convention changes will be effective only for the reports downloaded through the Portal User Interface. Historical reports zipped and posted in the file share were created with the data as absolute values.
- A document guide for the Detail XML Reports can be found in the CWG Z2 Project folder at this link: <https://www.spp.org/spp-documents-filings/?id=20945>
- Suggested MP Testing Z2 Crediting Process test cases can be found in the CWG Z2 Project folder at this link: <https://www.spp.org/spp-documents-filings/?id=20945>

Training

A training CBT is available in the LMS for Stakeholders to educate themselves about the Z2 process. The CBT was posted on August 31, 2015. Notification was sent to the MOPC distribution list as well as anyone that attended the education sessions in May 2015.

Implementation/Back-out Plan

Project implementation will consist of SPP deploying software release(s) into Production following standard SPP processes. Notifications via the regular CWG change notification process will be provided as migrations are planned for MTE and Production. If significant problems occur, the software will be backed out of production following SPP processes and notifications will be provided.

Summary of Timeline

Start Date	End Date	Responsible Party	Action	Status/Notes
3/9/12	3/9/12	Project Manager	Publish initial Member Impacting Project Overview	Complete
3/12/12	3/12/12	Project Team	Draft Scope document for internal review	Complete
1/13/15	3/13/15	Project Team	Update Requirements (based on CPTF white paper and interviews with stakeholders/RTWG Chair and Co-Chair)	Complete
4/27/15	1/30/16	Project Team	Engage vendors	Complete
5/4/15	9/23/15	SPP	Functional Design	Complete
6/1/15	2/10/16	SPP	Technical Design	Complete
8/23/16	8/23/16	SPP	Release XSD and Technical Specifications	Complete
8/22/16	NA	TOs, TCs, GIAs	TOs, TCs, GIAs shadowing make coding changes to shadow settle	In process
6/29/15	10/1/16	SPP	Development & Unit Test/FAT	Complete
8/11/15	10/21/16	SPP	SAT/Integration Testing	In process Complete
9/22/16	10/15/16	SPP	End-to-End Test	In process Complete
9/7/16	10/28/16	MPs	Unstructured TO, TC, GIA Testing	In process Complete
9/22/16	9/22/16	SPP	SPP delivers Summary Credit Reports to affected entities	Complete
TOs, TCs, GIAs Determined	TOs, TCs, GIAs Determined	TOs, TCs, GIAs	MPs who are shadowing test in MTE	
04/04/16	06/10/16	SPP	Deployment to Production Environment*	Complete
9/22/16	Early October	TOs/TCs/GIA	Elect payment plan	Complete

10/11/16	10/12/16	MOPC	MOPC reviews historical values and provides guidance to SPP	In process <u>Complete</u>
11/03/16		SPP	SPP produces invoices for Z2	<u>Complete</u>
<u>11/16</u>	<u>11/16</u>	<u>CWG</u>	<u>CWG Complete Lessons Learned</u>	
12/31/16 <u>01/17</u>	12/31/16 <u>01/17</u>	SPP	Legacy Transmission Portal decommission	

*Note: System is ready for production processing to begin. Historical processing is ongoing.

Assumptions

Stakeholders will have provided updated upgrade costs for inclusion in the Z2 processing before start of historical processing by 8/14/15. Time frame for delivery was extended to 1/29/16.

Risks

- Complete input data has not been provided by some stakeholders.
- Changes to the Direct Assignment charges for any Attachment Z2 affected entity will result in delays for completion of the historical processing.
- Delays by FERC to approve SPP's waiver requests could delay the processing of crediting information through the Transmission Settlements system and issuing of credits.

Additional Documentation

Additional documentation may be found in the CWG [Z2 Credit Stacking](#) project folder.

Communication Plan

Project communication and information will be posted to the SPP Change Working Group Project Documentation folder. This MIPO will be updated upon change or with new information, a redline version posted to the project documentation folder, and the CWG notified.

Updates on project status and schedule are communicated at regular meetings of the RTWG, CWG, and MOPC and the SUG has been provided a project overview. Additionally, the Crediting Process Task Force (CPTF), which is a sub-group of the RTWG, is performing audit steps in conjunction with SPP Staff on the development of the system and the RTWG's Payment Plan Task Force is addressing the timing of financial impacts.

If there are questions concerning this process or project, please log an RMS ticket using the "Z2" quick pick.

Next Steps

Action	Assignee	Status & Due Date
Unstructured Member Testing	TOs, TCs, GIAs	9/07/16 — 10/28/16
Unstructured Member Testing for Z2 Output Detail XML and Input Data Reports	TOs, TCs, GIAs	10/17/16 — 10/28/16
<u>Complete Lessons Learned</u>	<u>TOs, TCs, GIAs</u>	<u>November 2016</u>

Action	Assignee	Status & Due Date
<u>Closeout project</u>	<u>SPP Staff</u>	<u>In Process, 11/25/16</u>

FAQs

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

Question: I have already completed an NDA with SPP. Do I need to fill out an NDA to access the Z2 Reports?

Answer: If you have not completed the Z2 specific NDA, then yes. This NDA covers data that was not previously available and is confidential in nature.

Question: I am trying to find the link or the NDA form that we need to complete in order to access the Z2 summary report for revenue credits and charges.

Answer: An NDA is not required to access your Historical Data Summary Reports. It is only needed for accessing the Historical Summary Input Data. This data will reside on GlobalScape and Marketplace through November and then only on the Marketplace Portal.

Question: Where can I find the link to the NDA and after completing the NDA, who do I send it to?

*Answer: Click the following link on SPP.org: [Engineering & Planning > Maps and Models > SPP Transmission Map Requests](#)
Complete the Addendum Z2 Transmission Input Data and, if needed, an SPP NDA
Email the completed documents to Ginny Webster at gwebster@spp.org*

Question: How do I get access to the Marketplace Portal?

Answer: Local Security Administrators (LSAs) must grant access to historical summary reports and the detail XML placed in a file share on the Marketplace Portal for download. A certificate is required to grant such access, but there are no additional requirements.

As of September 1, 2016, SPP has migrated all TC and TO LSAs from the EIS portal to the Marketplace Portal in both testing and production environments. However, the EIS portal will remain functional temporarily for those with such access. We request that LSAs begin setting up and administering users for settlement and Z2-specific portal roles required for your company.

If your company has not had access to the EIS portal but will be involved in the Z2 settlement process, some steps are necessary to gain access to the Marketplace Portal. If not submitted previously, you are required to submit an LSA Form accessible at <https://www.spp.org/spp-documents-filings/?id=25197>. Once SPP has received and verified your LSA Form, we will request certificate information for each LSA. When LSA certification is complete, the LSA must set up users' permissions in the Marketplace Portal.

Question: I downloaded the file on the Globalscape EFT Server and am unable to open the file with Short_Term TSR information.

Answer: Try opening the file with Microsoft Access.