

# SPP BA Operating Protocols

September 5, 2019

Version 4.0

SPP Operations

## Revision History

Date or Version Number	Author	Change Description	Comments
<b>1.0</b>	CBASC	Reformatted into Word template	
<b>June 26, 2013 1.01</b>	CBASC	Modifications throughout; added to end of Section 2	Incorporated feedback from CBASC members.
<b>July 10, 2013 1.02</b>	CBASC	Modifications throughout; added Generation and Communication sections	Previous comments incorporated and changes accepted
<b>July 24, 2013 1.03</b>	CBASC	Modifications throughout based on member feedback	Some previous comments incorporated and some previous changes accepted
<b>September 16, 2013 1.04</b>	CBASC	All changes accepted for first draft	
<b>April 23, 2014 1.05</b>	CBASC	Updated to remove historical references	
<b>April 20, 2016 2.0</b>	BAOC	Clarified who provides frequency meter details to SPP; changed weekly meetings from required to ‘as needed.’	
<b>July 21, 2017 3.0</b>	BAOC	Removed the requirement for all Participants to supply frequency meter validation data to the BA Admin each year. Only those providing frequency measurements for ACE will continue to provide meter validation each year. Removed some of the tie line meter data requirements that now exist in the Required Data Specifications document.	

<b>Date or Version Number</b>	<b>Author</b>	<b>Change Description</b>	<b>Comments</b>
September 5, 2019	BAOC/SPP Staff	Removed items that are addressed in other documents such as the SPP BA Emergency Operating Plan and Required Data Specifications (RDS), etc. Updated references to the RTBM/GDO and RUC desks to RTBM/RUC.	

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## 1 - Introduction

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This document contains elements agreed upon by Participants (signatories to Attachment AN of the SPP Integrated Marketplace Tariff) supporting the operational requirements of the SPP Balancing Authority (BA). This document is not meant to identify those elements already required of Participants in their role as NERC-registered entities, such as Transmission Operators (TOPs) or Generator Operators (GOPs). Other documents, such as, but not limited to, the SPP Integrated Marketplace Protocols, NERC Reliability Standards, SPP Operating Criteria, Required Data Specification for the SPP Reliability Coordinator and SPP Balancing Authority (RDS) and the SPP BA Emergency Operating Plan, etc. may identify additional obligatory elements not identified as part of this document. This document is not intended to be comprehensive.

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## 2 - Tie Line Data

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Each Participant who has one or more Tie Line with an SPP Adjacent Balancing Authority, or has the Tie Line metering and telemetry responsibilities for a Tie Line shall provide the following information to SPP. SPP and Participant shall agree on the Tie Lines, including pseudo ties, for which the respective Participant is responsible. (For additional information, reference Section 5.1 of the Attachment AN). A Participant will notify SPP of any changes or modifications (including exit information) 45 days in advance of incorporating such changes that impact the SPP BA Area boundary. Annual verification of the required Tie Line information by Participants must be received before March 1<sup>st</sup> of each year.

### **Participant Tie Line Data for Primary, Secondary, and Alternate Meters**

- SPP Adjacent BA
- Station Name that is in SPP BA for Tie Line (for example: Substation A)
- Tie Line name as agreed upon with SPP Adjacent BA (if applicable)
- Station Name that is in the SPP Adjacent BA for the Tie Line
- Voltage Level at the Interconnection

- Physical location of the Station that is in the SPP Adjacent BA (for example: street address and GPS coordinates, if available)
- Physical location of the Station that is in the SPP BA (for example: street address and GPS coordinates, if available)
- Meter location; Station Name where the interconnection meter is located.
- Meter owner
- Meter ICCP Object IDs: MW, MVAR, MWHIN, MWHOUT
- ICCP Pathway (if another ICCP source is included in the path).
- Date placed in service (if after 03/01/2014)
- If this is a MWh meter, is this meter automatically or manually read in addition to the hourly data sent to Participants? At what periodicity?
- Meter type (for example: manufacturer and model number)
- Date of last calibration
- Is a Data Quality indicator included in the data sent via ICCP? Data Quality of the RTU or meter to member SCADA; the data quality of the member to SPP will be inherent.

**NOTE:** SPP will review this data with each Participant and with each SPP Adjacent Balancing Authority, as well. SPP will verify the pertinent details of the Tie Line meter information with the Participant, including the primary, secondary, and alternate Tie Line metering source for each Tie Line associated with the Participant.

### **Participant Real Time Data**

Participant shall ensure that the Tie Line megawatt (MW) metering from a common, agreed upon primary metering source is provided to the SPP control center via ICCP

The Participant shall take timely action necessary to verify Tie Line metering equipment accuracy and/or performance of any suspect Tie Line data and take actions to restore data accuracy as quickly as possible. If SPP suspects inaccuracies or malfunction of Tie Line meters, SPP shall inform the Participant, who shall take actions, as necessary, to restore data accuracy as quickly as practical.

Each Participant shall ensure the installation of common metering equipment where Dynamic Schedules or pseudo-ties are implemented between SPP and an Adjacent Balancing Authority where applicable to account for the delivery of the output of units located external to the SPP BAA or to serve remote load physically external to the SPP BAA. Any metering changes that affect the data exchange for a Dynamic Schedule or pseudo-tie shall be communicated by the Participant to SPP at least 45 days in advance to accommodate the necessary changes.

For all other tie line meter data requirements and expectations, refer to the SPP BA Required Tie Line Meter Information section of the RDS document.

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## **3 – Frequency Measurement Data**

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Select Participants, those who provide frequency data for SPP's ACE, shall supply SPP with frequency measurement data from locations agreed to by SPP and the Participants. Participants shall provide frequency measurements, via ICCP, to the SPP control center and ensure accurate frequency measurements from these location(s) with appropriate data quality indication. Select Participants will be responsible for the installation and maintenance of independent frequency metering equipment capable of supporting SPP's 99.95% availability requirement. Those select Participants will provide additional information to SPP as identified below. (For additional information, reference Section 5.2 of the Attachment AN).

### **Select Participant Data**

1. Station Name/Meter Location
2. Primary meter ICCP Object IDs (Hz)
3. ICCP pathway, if another source is included in the path
4. Physical location of the meter (i.e., street address and GPS coordinates, if available)
5. Meter type (i.e., manufacturer and model number)
6. Date of last calibration
7. Data Quality indicator (suspect quality, for instance)
8. Verification that frequency meter is configured for, at least, six (6) second scan rate.

Select Participants shall perform annual calibration checks against a common reference of its time error and frequency devices that are used by SPP in its ACE calculation. Annual checks shall be performed during the calendar year beginning January 1 and ending December 31. No period between subsequent annual checks shall exceed 15 months, however. Select Participants will provide changes, modifications (including exit information) 45 days in advance of incorporating any changes that impact the SPP BA ACE Calculation. Verification of calibration check for the previous year by Select Participants must be received before February 1<sup>st</sup> of each year.