



Southwest Power Pool, Inc.
HOLISTIC INTEGRATED TARIFF TEAM
SPP Holistic Integrated Tariff Team Meeting
Dallas, TX
October 23, 2018

• M E E T I N G M I N U T E S •

1. Welcome & Introductions

A quorum was established. Wes Berger (Xcel) had proxy for Bill Grant and Jack Clark (NextEra) had proxy for Holly Carias.

2. Call to Order and Administrative Items

The meeting was called to order at 9:00AM. Mike Risan to be added to the minutes as being in the September 5, 2018 meeting on the phone. The draft minutes were unanimously approved with that edit. (Al Tamimi (SUNC) motion; Graham Edwards (SPP Director) second)

3. Stakeholder Group Presentations

a. GIITF Update

Al Tamimi (SUNC) Chair of the GIITF, provided an update on the current status of the GIITF. The update included GIITF recommendations on MOPC Action Item 282, Dispatch Methodology, ERIS Threshold, and Storage Rules. At the October MOPC, the GIITF was disbanded based on the completion of the original tasks in the charter of the group.

4. Issue 2 – Market/Operations Presentations

a. Product Options for SPP's IM (RFI 33)

Richard Dillon (SPP) discussed current market functions and those needed by the SPP Market in the future to ensure reliable delivery including energy, voltage, VAR support and frequency support.

b. Resource Flexibility Market Study ("Inertia Study") (RFI 32 & 75)

Gary Cate (SPP) provided an update on staff concerns related to wind intermittency in the real-time and operational resource adequacy. Cate reviewed an operational day in May 2018 that highlighted these issues. To deal with these issues staff has created an Uncertainty Response Team, has increased their focus on ramp products and plans for a 2019 Future Market Study.

c. MMU Market Perspectives

Keith Collins (SPP MMU) presented the SPP MMUs perspective of the SPP Market today and what the future looks like. Current market areas noted were a high level of self-commitments, high frequency of negative prices, wind generation being under scheduled in the day ahead market, real-time price volatility and high generation capacity with low retirements. Collins stated the MMU had these suggested recommendations; multi-day unit commitment product, development of ramping products, commitment flexibility, unit retirement rules and more accurate renewable accreditation in the planning models.

d. Golden Spread/Brattle

Hannes Pfeifenger (Brattle) discussed Brattles analysis on the development of additional ramping products for the SPP market. Hannes validated that Brattle agrees with the SPP MMU belief that ramping products should be developed and also agree with the suggested design. Hannes provided some additional recommendations that could provide additional benefits of developing ramping products.

Hannes also presented slides related to some NewGrid Topology Optimization software package that has recently been developed. Some case studies have been developed for SPP during the development of this package. In 19 of the 20 cases developed for SPP the software showed that a simple switching solution could have been deployed to solve the congestion issues.

5. RFIs

a. Curtailment Data (RFI 63)

Cate covered the VER curtailment data that has been previously presented in prior meetings. In this presentation Cate included

b. Energy Prices in Wind Rich Zones (RFI 73 & 79)

Dillon presented updated LMP data from the wind rich zones as compared to the North and South hubs. Dillon also confirmed that the recent convergence of prices is most likely due to recent transmission upgrades coming on line.

c. ARR Nomination Data (RFI 77 & 80)

Deferred until the November meeting due to time.

6. Review of High-level HITT Questions/ Solutions Document

Paul Suskie (SPP) presented the edited list of questions and staff analysis that has been reviewed in previous reviewed. Staff has included a list of stakeholder presentations that are related to each HITT issue.

In the November meeting the CAWG, City Utilities of Springfield and Southern Power are on the schedule to present to the HITT. For the December meeting, staff will develop a high-level straw man of the issues and potential options for the HITT to begin discussing.

7. Review/ Update of the RFI list and parking lot items

October 23 RFIs					
79	MMU Data on Hours of non-market Ramp	2	Mike Wise question: How much manually committed capacity does SPP see? Spikes, durations, range and distribution curve, etc.	MMU	
80	Self-Commitment & Base Load (Load)	2	Data on Self-Committed units vs. Base Load (Load)	MMU/Gary Cate	

8. Other Items

N/A

9. **Next Meetings**

2018 HITT Team Meetings

- November 6, 2018 - Dallas, TX
- December 5, 2018 – Little Rock

10. **2019 Meeting Dates**

2019 HITT Team Meetings

- January 23-24, 2019 - Dallas, TX
- February 28-March 1, 2019 – Dallas, TX
- April 3-4, 2019 – Dallas, TX
- April 25, 2019 – Dallas, TX

11. **Adjournment**

The meeting was adjourned at 2:45PM.



HITT Team Members Participating

Tom Kent, Chair (NPPD)
Rob Janssen (Dogwood Energy)
Shari Albrecht (KCC) - phone
Denise Buffington (Westar KCPL)
Jack Clark for Holly Carias (NextEra)
Jim Eckelberger (SPP Director)
Graham Edwards (SPP Director)
Wes Berger (Xcel SPS) for Bill Grant
Dennis Grennan (NPRB)
Brett Leopold (ITC)
Greg McAuley (OGE)
Mike Risan (BEPC)
Richard Ross (AEP)
Al Tamimi (Sunflower)
Mike Wise (GSEC)
Cindy Ireland (APSC) – CAWG Liaison

SPP Staff Attendance

Paul Suskie, Staff Secretary
Ben Bright
Don Shipley
Gary Cate
Luke Hill
Richard Dillon
Tessie Kentner - phone
Greg Sorenson (MMU)
Keith Collins (MMU)



Meeting Participants

Aaron Vander Vorst (Tradewinds)
Alan Myers (ITC)
Alfred Busbee (GDS Assoc)
Blaine Erhardt (BEPC)
Brian Johnson (AEP)
Calvin Daniels (WFEC)
Charles Hendrix (SPP)
Charles Locke (SPP)
Christine Aarnes (KCC)
Clifford Franklin (SEPC)
Dennis Reed (MWR Consulting)
Daria Diaz (LPSC)
Dirk Shulund (WAPA)
Ella Caillouette (NWE)
Eric Alexander (GRDA)
Eric Laverty (ACES)
Greg Garst (OPPD)
Holly Carias (NEER)
J.P. Maddock (BEPC)
Jack Madden (GDS Assoc)
Jason Mazigian (BEPC)
Jay Caspary (SPP)
Jeff Knottek (CUS)
Joe Fultz (GRDA)
Joel Dagerman (NPPD)
John Krajewski (NPRB)
John Stephens (CUS)
John Varnell (TNSK)
Jon Sunneberg (NPPD)
Justin Hinton (SPP)
Kass Portra (WAPA)

Kelly Andrejasich
Kenny Hale (CUS)
Larry Holloway (KPP)
Lisa Szot (Enel)
Malcolm Ainspan (NRG)
Marisa Choate (SPP)
Maurice Moss (CUS)
Matt Moore (GSEC)
Meena Thomas
Michaael Moffet (SEPC)
Michael Wegner (ITC)
Mo Awad (Westar KCPL)
Natasha Henderson_GSEC
Nicole Wagner (SPP)
Pablo Ruiz (Brattle)
Paul Malone (NPPD)
Ray Bergmeier (SEPC)
Robert Pick (NPPD)
Robert Safuto (CES)
Ron Thompson (NPPD)
Ruth Sakya (Xcel SPS)
Sam Enfield
Scott Bents (IUB)
Shawn Geil (KEPCo)
Steve Gaw (Wind Coalition)
Tim Hall (Southern Power)
Tom Christensen (BEPC)
Tyson Boatler (GSEC)
Will Vestal (SPP MMU)
Yohan Sutjandra (TEA)