

Southwest Power Pool
JOINT TWG/ESWG MEETING
July 3, 2013
Web Conference – Little Rock, AR

• Summary of Action Items •

1. TWG and ESWG approved including the High Priority Incremental Load Study loads and NTCs in the base case ITP10 models.
2. TWG approved using 3 futures as part of the 2015 ITP10.
3. TWG approved including all HVDC ties and lines with an executed Transmission-Transmission Interconnection Agreement on both ends and modeling only confirmed transmission service in the base case.

Southwest Power Pool
JOINT TWG/ESWG MEETING
July 3, 2013
Web Conference – Little Rock, AR

• M I N U T E S •

Agenda Item 1 – Administrative Items

TWG Chair Noman Williams called the meeting to order at 8:02 a.m. The following TWG members were in attendance (Attachment 1a – Attendance) or represented by proxy (Attachment 1b – Proxies):

Mo Awad, Westar Energy, Inc.
Scott Benson, Lincoln Electric System
John Boshears, City Utilities of Springfield
John Fulton, Southwestern Public Service Company
Joe Fultz, Grand River Dam Authority
Travis Hyde, Oklahoma Gas & Electric
Randy Lindstrom, Nebraska Public Power District
Jim McAvoy, Oklahoma Municipal Power Authority
Matt McGee, American Electric Power
Nathan McNeil, Midwest Energy
Nate Morris, Empire District Electric
Michael Mueller, Arkansas Electric Cooperative Corporation
Alan Myers, ITC Great Plains
John Payne, Kansas Electric Power Cooperative
Jason Shook, GDS Associates representing ETEC
Aaron Smith, proxy for Dan Lenihan representing Omaha Public Power District
Tim Smith, Western Farmers Electric Cooperative
Mike Swearingen, Tri-County Electric Cooperative, Inc.
Noman Williams, Sunflower Electric Power Corporation
Brian Wilson, proxy for Harold Wyble, Kansas City Power & Light

The following ESWG members were in attendance or represented by proxy:

Randy Collier, City Utilities of Springfield
Kip Fox, American Electric Power
Leon Howell, Oklahoma Gas & Electric
Alan Myers, ITC Great Plains
Kurt Stradley, Lincoln Electric System
Mike Swearingen, Tri-County Electric Cooperative, Inc.
Greg Sweet, Empire District Electric
Bruce Walkup, Arkansas Electric Cooperative Corporation
Michael Watt, Oklahoma Municipal Power Authority
Bennie Weeks, Southwestern Public Service Company

The following stakeholders and staff were also in attendance:

Jonathan Abebe, Clean Line Energy Partners, LLC
Kelsey Allen, SPP Staff
Jason Atwood, Ventyx
Ted Bell, SPP Staff

Bryce Bowie, SPP Staff
Roy Boyer, Southwestern Public Service Company
Jerry Bradshaw, City Utilities of Springfield
David Charles, Basin Electric Power Cooperative
Elizabeth Coffield, SPP Staff
Tom DeBaun, Kansas Corporation Commission
Olu Fagbemi, Burns and McDonnell
Juliano Freitas, SPP Staff
Cary Frizzell, SPP Staff
Steve Gaw
Noumvi Ghomsi, Missouri Public Service Commission
Tony Gott, Associated Electric Cooperative, Inc.
Amber Greb, SPP Staff
Kirk Hall, SPP Staff
Jody Holland, SPP Staff
Barry Huddleston, Clean Line Energy Partners, LLC
Jon Iverson, Omaha Public Power District
Don Le, Lone Star Transmission, LLC
William Leung, Nebraska Power Review Board
Antoine Lucas, SPP Staff
Bob Lux, SPP Staff
Chris Matthes, American Electric Power
Clayton Mayfield, SPP Staff
Pat McCool, Kansas City Power & Light
Rosemary Mittal, SPP Staff
Gimod Olapurayil, ITC Great Plains
Tim Owens, Nebraska Public Power District
Dona Parks, Grand River Dam Authority
Debbie Prater, Oklahoma Corporation Commission
Katherine Prewitt, SPP Staff
Mike Proctor, Liaison to SPP RSC
Scott Rainbolt, American Electric Power
Ronda Redden, Oklahoma Gas & Electric
Jeff Rooker, SPP RE
Moses Rotich, SPP Staff
Robert Safuto, Customized Energy Solutions, LTD
James Sanderson, Kansas Corporation Commission
David Sargent, Southwestern Power Administration
Anita Sharma, American Electric Power Oklahoma Transmission Company, Inc.
Jon Shipman, Omaha Public Power District
Todd Tadych, Duke America Transmission Company, LLC
Keith Tynes, GDS Associates representing ETEC
Alex Watkins, SPP Staff
Kyle Watson, Entergy Services, Inc.
Patrick Wilkins, Tres Amigas
Mitchell Williams, Western Farmers Electric Cooperative

Kirk Hall, SPP staff, noted there was a quorum for the TWG to conduct business, and Juliano Freitas, SPP staff, also stated the ESWG had obtained a quorum.

Agenda Item 2 – 2015 ITP10 Futures and Assumptions

Jody Holland, SPP staff, gave a presentation (Attachment 2 – 2015 ITP10 Scope Discussion) to the stakeholders discussing the key concepts staff needs approval on to continue work on the 2015 ITP10

Assessment. The presentation highlighted three key items: High Priority Incremental Load Study (HPILS) loads and NTC modeling, Futures, and inclusion of HVDC ties and line. Both TWG and ESWG members discussed each of the key items in detail before making a motion on each concept.

HPILS Load and NTC Modeling

Jody Holland raised the question to stakeholders regarding including the loads and NTCs that may result from the HPILS in the base case. Jody mentioned 4 possibilities related to including the HPILS loads and NTCs. Jody noted that the loads being proposed in the 2015 ITP10 would be the 50/50 probability found in the HPILS. Members then discussed the problems with including these incremental loads. Some members voiced concern over the uncertainty of the loads being analyzed in the HPILS and viewed the uncertainty of the loads as a concern also regarding including any NTCs issued from the study. The timing of the loads was also an uncertainty that concerned some members. Those opposed to including the HPILS inputs suggested a sensitivity to include the HPILS loads and NTCs. Staff stated that the results of inclusion of HPILS in the base case and assessing HPILS as a sensitivity would most likely yield different results. John Payne, KEPCo, stated that his apprehension resulted from not seeing the large amounts of load growth and the uncertainty that it existed. John Fulton, SPS, stated that he is seeing a backlog of oil and gas loads that are asking for service and that he cannot connect the loads quickly enough. Mike Swearingen, Tri-County Electric Cooperative, and Mitch Williams, Western Farmers, stated they are seeing similar situations to John Fulton. Members concerned over the inclusion of HPILS loads and NTCs agreed that their concerns would decrease if they received confirmation that the HPILS loads would be applied to the 2014 series of MDWG models. John Fulton also explained to the group that they have studied uncertainties as part of the ITP assessments in the past. High wind futures studied in the ITP10 and ITP20 assessments were also uncertain, but there were projects driven from those assumptions with some uncertainty involved.

Alan Myers made a motion for the TWG to approve the staff recommendation to include the HPILS loads and NTCs in the base case of the 2015 ITP10. John Fulton seconded the motion. The motion passed with 13 for, 3 against, and 1 abstention with 17 of 19 voting members present.

Nate Morris voted against the motion due to the following:

The results of the HPILS study are total unknowns, including these types of speculative loads/results seems to counter previous and present planning efforts, NTC's to be issued for projects that are weighted towards near-term in-service dates will most likely be unable to be recalled due to the pressing timeline inherent to these types of loads, and the types of loads to be considered will most likely not have equal concentration at the 10 yr horizon. Empire as well as other members voiced support for conducting the HPILS study apart from the ITP10, reviewing the initial results, and then making the determination of whether such results should be included in the ITP10.

Mo Awad abstained during the vote for the following reasons:

- 1. The oil load is exploratory in nature and is being handled separately in the HPILS study.**
- 2. We will be issuing NTCs for load that may or may not be in-service by the time the study is completed.**
- 3. It is more appropriate to let the HPILS handle the additional load outside the scope of ITP10.**
- 4. It is too early to approve the inclusion when HPILS is still in preliminary stages. Westar would rather wait till the study is complete to decide on inclusion in the ITP10.**

Kip Fox made a motion for the ESWG to approve the staff recommendation to include the HPILS loads and NTCs in the base case of the 2015 ITP10. Kurt Stradley seconded the

motion. The motion passed with 6 for, 3 against, and 0 abstentions with 9 of 11 voting members present.

Randy Collier voted no for the following reason:

City Utilities of Springfield votes no on approval of the ITP10 scope. City Utilities has a concern about incorporating the High Priority Incremental Load Study (HPILS) into the ITP10 scope at this time. There are many unknowns about HPILS at this time and City Utilities is not comfortable agreeing to incorporate HPILS into the ITP10 scope until more data (results) from the HPILS process is available. City Utilities believes that special study results should be evaluated independently, rather than forced into the existing planning processes.

Leon Howell voted no for the following reason:

The HPILS will use the load forecast high load scenario that assumes a 90/10 weather event as a proxy for petroleum sector load growth. Since there is no correlation between a high weather event and petroleum sector load, using the HPILS load for the ITP10 will misrepresent the amount of load given a 50/50 weather event. OG&E includes the expected load growth from the petroleum sector in its load forecast. Including the higher load due to weather as a proxy for additional petroleum load in the ITP10 is potentially overstating or double counting petroleum load since the expected petroleum load is already included in the load forecast.

Futures

Antoine Lucas, SPP staff, spoke about the 2nd concept which is based on the number of futures in the 2015 ITP10. Antoine stated that ESWG had previously supported and approved 3 futures as part of the 2015 ITP10, but the ESWG did realize that there could be a viewpoint that Future 2 and Future 3 could yield similar result. He also noted staff currently had budgeted resources for only 2 futures and the additional cost for analysis of a 3rd future had been estimated by staff to be between \$625k. Mo Awad asked for an explanation between Future 2 and Future 3. ESWG Chair Alan Myers, ITC Great Plains explained the difference between Future 2, which is a decrease in base load capacity, while Future 3 is meant identify projects that benefit the footprint based on an increase of input prices. Randy Lindstrom, NPPD, asked the ESWG member why these futures are the correct futures. Kip Fox, AEP, noted the different possibilities that may affect base load in Future 2 such as restricted water or low hydro or additional EPA regulations. Kip also noted that much of the transmission upgrades approved lately have been to allow gas generation to hit the market and an increase in gas prices such as that in Future 3 would affect it as well. John Fulton also spoke up regarding the viability of Future 3 due to regulation on extraction methods for gas as well as global market influence on gas exports raising the cost.

Randy Lindstrom made a motion to endorse the three futures as described by the ESWG with a 50% weighting for projects identified in Future 1 in the final portfolio. Jason Shook seconded the motion. The motion passed unanimously.

According to the scheduled meeting the joint call was scheduled to end at 10:00 a.m. However, both the ESWG and TWG agreed to extend the call to continue working through the 2015 ITP10 concepts.

HVDC Ties and Lines

Jody Holland discussed previous conversation between staff and stakeholders on the inclusion of Tres Amigas HVDC tie and the Clean Line HVDC transmission lines in the base case of the 2015 ITP10. Jody asked the group for additional opinions on whether to include these projects in the base case model. As an update to the members, Barry Huddleston, Clean Line, provided information on the progress of the transmission-transmission interconnection agreements for Plains & Eastern. Clean Line expects to have an executed interconnection agreement for its Plains & Eastern HVDC line with SPP by September 2013 and an interconnection agreement with TVA by 2nd quarter of 2014. Members then discussed the merits

of including the Plains & Eastern line. Members agreed that Tres Amigas should be included due to its executed interconnection agreements with WECC and SPP. John Fulton also asked staff to explain how modeling confirmed transmission service across HVDC ties is consistent with the new Integrated Marketplace. Jody explained that modeling confirmed transmission service is how previous ITP studies and the EIS market treat HVDC ties and is the expected method for the upcoming Integrated Marketplace. Staff is still researching how the Integrated Market will handle the HVDC ties to confirm.

Travis Hyde made a motion to approve the staff recommendation which states that the 2015 ITP10 base case model will include HVDC ties and lines with an executed transmission-transmission interconnection agreement (both sides) and flow across HVDC ties and lines will include only confirmed transmission service. Jim McAvoy seconded the motion, which passed unopposed.

Seeing no other business the joint meeting was adjourned at 10:37 a.m., and the TWG continued on with their scheduled call.

Respectfully Submitted,

Juliano Freitas
Secretary



**Southwest Power Pool, Inc.
JOINT TWG/ESWG WEB CONFERENCE**

July 3, 2013

Conference Call

• A G E N D A •

8:30-10:00 a.m.

- 1. 2015 ITP10 Futures and Assumptions Staff (90 min)

Call will continue from 10:00 a.m. to 11:00 a.m. with the ESWG signing off

TRANSMISSION WORKING GROUP

10:00 a.m. – 11:00 a.m.

- 1. AQITF Proposed Business Practice (Action Item) Jim McAvoy/Jody Holland (45 min)
- 2. BPR-035 Revision Staff (5 min)

TWG Net Conference	7/3/2013			
Company	Last Name	First Name	Email	Comments
Clean Line Energy	Abebe	Jonathan	jabebe@cleanlineenergy.com	
Southwest Power Pool	Allen	Kelsey	kallen@spp.org	
Ventyx	Atwood	Jason	jason.atwood@abb.ventyx.com	
Southwest Power Pool	Bell	Ted	tbell@spp.org	
Lincoln Electric System	Benson	Scott	sbenson@les.com	
Southwest Power Pool	Bowie	Bryce	bbowie@spp.org	
Xcel Energy	Boyer	Roy	roy.d.boyer@xcelenergy.com	
City Utilities of Springfield	Bradshaw	Jerry	jerry.bradshaw@cityutilities.net	
Basin Electric Power Cooperative	Charles	David	dcharles@bepc.com	
Southwest Power Pool	Coffield	Elizabeth	lcoffield@spp.org	
Kansas Corporation Commission	DeBaun	Tom	t.debaun@kcc.ks.gov	
Burns & McDonnell	Fagbemiro	Oluwabusola	ofagbemiro@burnsmcd.com	
Southwest Power Pool	Freitas	Juliano	jfreitas@spp.org	
Southwest Power Pool	Frizzell	Cary	cfrizzell@spp.org	
	Gaw	Steve	RSGaw1@gmail.com	
	Ghoms	Noumvi	noumvi.ghoms@psc.mo.gov	
Associated Electric Cooperative, Inc.	Gott	Tony	tgott@aeci.org	
Southwest Power Pool	Greb	Amber	agreb@spp.org	
Southwest Power Pool	Hall	Kirk	khall@spp.org	
Clean Line Energy	Huddleston	Barry	bhuddleston@cleanlineenergy.com	
Omaha Public Power District	Iverson	Jon	jiverson@oppd.com	
Lone Star Transmission, LLC	le	don	don.le@lonestar-transmission.com	
Nebraska Power Review Board	Leung	William	bleung@bjleung.com	
Southwest Power Pool	Lux	Robert	blux@spp.org	
American Electric Power	Matthes	Chris	camatthes@aep.com	
Kansas City Power & Light Company	McCool	Pat	patrick.mccool@kcpl.com	
Southwest Power Pool	Mittal	Rosemary	rmittal@spp.org	
ITC Great Plains, LLC	Olapurayil	Gimod	golapurayil@Itctransco.com	
Nebraska Public Power District	Owens	Tim	tjowens@nppd.com	
Grand River Dam Authority	Parks	Dona	dparks@grda.com	

Kansas Electric Power Cooperative, Inc.	Payne	John	jpayne@kepco.org	
Oklahoma Corporation Commission	Prater	Debbie	d.prater@occemail.com	
Southwest Power Pool	Prewitt	Katherine	kprewitt@spp.org	
	Proctor	Mike	mproctor910@sbcglobal.net	
American Electric Power	Rainbolt	Scott	skrainbolt@aep.com	
Southwest Power Pool	Rooker	Jeff	jrooker.re@spp.org	
Customized Energy Solutions, LTD	Safuto	Robert	rsafuto@ces-ltd.com	
Kansas Corporation Commission	Sanderson	James	j.sanderson@kcc.ks.gov	
Southwestern Power Administration	Sargent	David	dave.sargent@swpa.gov	
SOUTHWEST POWER POOL	SHANK	CAITLIN	cxs0613@spp.org	
AEP Oklahoma Transmission Company, Inc.	Sharma	Anita	asharma@aep.com	
Omaha Public Power District	Shipman	Jon	jeshipman@oppd.com	
Duke-American Transmission Company, LLC	Tadych	Todd	ttadych@atcllc.com	
East Texas Electric Cooperative, Inc.	Tynes	Keith	keith.tynes@gdsassociates.com	
Entergy Services, Inc.	Watson	Kyle	kwatso2@entergy.com	
	Wilkins	Patrick	pwilkins@tresamigasllc.com	
Western Farmers Electric Cooperative	Williams	Mitchell	m_williams@wfec.com	

ITP10 Scope Discussion



Helping our members
work together to
keep the lights on...
today and in the future

ITP10 Issues – Discussion Points

- **HPILS loads & NTC modeling**
- **Futures**
- **HVDC ties and lines**
- **Renewable Mandates, Goals, & Other**
- **Additional key scope items**

HPILS Loads and NTC Modeling

- **Base Case Modeling Assumptions**
 - No HPILS loads, no NTCs
 - No HPILS loads, include NTCs
 - Include HPILS loads, no NTCs
 - Include HPILS loads and NTCs
- **Load forecast assumes 50/50**
- **Staff Recommendation**
 - Include HPILS loads and NTCs

Futures

- **ESWG supports 3 futures**
 - **Business As Usual**
 - **Decreased Base Load Capacity**
 - **Increase Input Prices**
- **TWG vote needed**
- **Staff budgeted for 2 futures**
 - **Additional future cost ≈ \$625k**

HVDC Ties and Lines

- **Base Case modeling assumptions**
 - No Tres Amigas or P&E
 - Include Tres Amigas, no P&E
 - Include both Tres Amigas and P&E
- **Flow across DC ties**
 - Confirmed service
 - Market to Market flow
- **Staff's Recommendation**
 - Include HVDC ties and lines with a signed T-to-T IA (both ends)
 - Model confirmed transmission service

Renewable Mandates, Goals, and Other

- Plan for renewable Mandates, Goals, and Other
- Plan for renewable Mandates only

- Staff Recommendation
 - Plan for renewables Mandates, Goals, and Other

Additional Key Scope Items

- **Members expressed displeasure with approving portions of the scope**
- **Other expressed concerns**
 - **Weighting**
 - **Consolidation of projects by futures**
 - **Staging**
 - **Load Pocket Analysis**
 - **Constraints**
- **Staff Recommendation**
 - **Approve futures and data inputs**