Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

May 10, 2012

Crowne Plaza Kansas City Downtown

1301 Wyandotte Street, Kansas City, MO 64015

• SUMMARY OF ACTIONS TAKEN •

1. The ESWG approved the treatment of zonal peak load growth rates for use in the 2013 ITP20 Combined Policy future. The approach will utilize a pro rata application of the region wide reduction in load growth determined during the April 19th ESWG meeting.

Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

May 10, 2012

Crowne Plaza Kansas City Downtown

1301 Wyandotte Street, Kansas City, MO 64015

• MINUTES •

Agenda Item 1 – Administrative Items

Agenda Item 1a – Call to Order, Introductions

Chair Alan Myers (ITC Great Plains, LLC) called the meeting of the Economic Studies Working Group (ESWG) to order at 10:07 a.m., welcomed those in attendance, and asked for introductions (Attachment – Attendance List).

There were 24 in person participants and 16 web conference participants representing 12 of 13 members.

Agenda Item 1b – Receipt of Proxies

Tim Miller (SPP staff) received proxy statements (Attachment – Proxies).

Agenda Item 1c – Review of Agenda

Chair Alan Myers (ITC Great Plains, LLC) presented the agenda for review and asked for any additions or corrections. No changes were made to the agenda (Attachment – Agenda).

Agenda Item 1d – Future meetings

Chair Alan Myers (ITC Great Plains, LLC) led discussion of the group meeting schedule for the next four months. The August ESWG will take place during the same week as the Transmission Working Group and the first planning Summit of the year. The meeting will take place on August 23rd, 2012. Tim Miller (SPP staff) indicated scheduling efforts are currently underway for a joint meeting with the Midwest ISO Planning Advisory Committee (PAC) for renewed discussion of the joint ITP20 future (future 5).

Agenda Item 2 – Review of Past Action Items

Tim Miller (SPP staff) called the group's attention the action item list (Attachment – Action Items).

Agenda Item 3 – Consent Agenda

The Consent Agenda included the following requested Actions (Attachment -Consent Agenda):

a. Approval of Meeting Minutes – April 5, 2012
b. Approval of Meeting Minutes – April 19, 2012

Chair Alan Myers (ITC Great Plains, LLC) asked if there were any Consent Agenda Items to be removed, changed, or added. Corrections were noted to both sets of minutes and removed from the consent agenda:

a. Meeting Minutes – April 5, 2012: Roy Boyer's attendance was not recorded. (Attachment – Meeting Minutes – April 5, 2012)

The following motions was made:

> **A motion to approve the April 5 meeting minutes was made by Kip Fox (AEP) and seconded. The motion was approved unanimously.**

b. Meeting Minutes – April 19, 2012: The description of ESWG's action during the meeting was modified to clarify the decision made regarding peak load growth in the combined policy future. (Attachment – Meeting Minutes – April 19, 2012)

The following motion was made:

A motion to approve the April 19 meeting minutes was made by Paul Dietz (Westar) and seconded. The motion was approved unanimously.

Item 4 – 2012 Policy Survey

Juliano Freitas (SPP staff) presented a summary of the 2012 Policy Survey responses focused upon the renewable generation expectations based upon energy targets and mandates. The group discussed differences between the detailed, utility specific survey responses and a generic calculation by staff that reflected the application of the requirements to the utility loads. A memo, summarizing the context of each utility's responses was distributed to the group and direction was given for staff to utilize the surveyed numbers for the 2012 ITP20 resource plan. The group will allow for discussion of the memo at the next ESWG meeting. It was estimated that any further changes to the survey responses will have a minimal impact upon the generation resource expansion plan.

Agenda Item 5a – 2013 ITP20 Data review package introduction

Tim McGinnis (SPP staff) introduced the data review package that will include generator data that will be used in the 2013 ITP20. The group provided feedback regarding the format and data types represented in the workbook.

ACTION ITEM: Bennie Weeks (Xcel Energy) to provide staff with an update to the load factor previously provided in the demand and energy review for SPS.

ACTION ITEM: Staff to send the generator data review package to stakeholders for review.

Agenda Item 5b.i – 2013 ITP20 Resource Plan capacity margin calculations by zone

Tim McGinnis (SPP staff) presented draft resource plan calculations and methods for the calculation of the zonal capacity margins. The capacity margins will be finalized following the generator data review and will drive the build-out for each expansion plan for the 2013 ITP20 futures. Bennie Weeks (Xcel Energy) provided a copy of a recent FERC order related to the treatment of demand resources in load forecasts (Attachment – FERC Order)

Agenda Item 5b.ii – 2013 ITP20 Resource Plan potential unit technologies & parameters

Tim Miller (SPP staff) led discussion concerning the generator prototypes and supply side alternatives for used in the 2013 ITP20 resource plan. The group identified a key question: will the values and parameters for the prototype units be obtained from an outside consulting firm (this option will provide credence for regulating bodies) and/or estimated based upon publically available studies (this option will allow for greater flexibility for SPP studies and less budgetary commitments). Staff identified that expectations regarding the expansion plan are heavily influenced by current fuel prices.

ACTION ITEM: Staff to provide the fuel costs that will be utilized in the 2013 ITP20 to the ESWG.

ACTION ITEM: Staff to provide further information regarding the potential unit technologies and parameters; whether through a vendor or through research.

Agenda Item 5b.iii – 2013 ITP20 Resource Plan generator siting criteria

Tim Miller (SPP staff) briefly presented the siting rules to be used in the 2013 ITP20 resource plan build out. The group will review the siting rules and provide comment to staff.

ACTION ITEM: ESWG to provide feedback regarding the siting rules to staff; plan on finalizing generation siting in July, 2012.

Agenda Item 5c – 2013 ITP20 Future 4 "Combined Policy": load growth approach

Tim Miller (SPP staff) reviewed the progress the group has made in defining the peak and energy parameters for the Combined Policy future (future 4) of the 2013 ITP20. The group reviewed the treatment of the peak load for each individual zones and approved a treatment of zonal load growths based upon a pro-rata application of region wide growth in SPP to all zones in the model.

> **A motion to treat all of the zonal peak load growths based on a pro rata approach as applied to the SPP region was made by Kip Fox (AEP). The motion was approved unanimously.**

The group discussed the treatment of load shape and energy for this future and took an action item to pick up the discussion during the June ESWG meeting. Dr. Mike Proctor (Consultant to the RSC) created an approximation method that could be used to obtain an appropriate energy to staff for consideration at the next meeting and Roy Boyer (Xcel Energy) volunteered some time to discuss technology options.

Agenda Item 6 – SPP FERC Order 1000 Task Force update

Kip Fox (AEP) encouraged people to ask for a mark-up of the differences between the SPP and MISO JOA desires and recapped the current progress of the SPP FERC Order 1000 Task Force (SFOTF). Participants were notified of an upcoming joint meeting with Midwest ISO tentatively scheduled for July, 2012.

ACTION ITEM: Staff to notify the ESWG regarding the scheduling of a joint meeting with the Midwest ISO Planning Advisory Committee to continue discussion of the joint future.

Agenda Item 7 – Metrics Task Force update

Kip Fox (AEP) focused the group's attention on the benefit metric monetization progress being made by the Metrics Task Force (MTF). Three metrics received some attention:

- Regarding reduced capacity margin benefit will only occur once the actual limit has been changed through the appropriate process at SPP. This particular metric will be useful to the review but will not likely be utilized in the planning phase of the project.
- The allocation of benefits due to increased reliability will be determined based upon the cost allocation breakdown of the projects or some other ratio? How would this be calculated this in a net revenue service environment? If it is point to point it seams the allocation will be easier to capture.

The MTF and ESWG plan to provide an update to the Markets and Operations Policy Committee during the July meeting.

Closing Items

Chair Alan Myers (ITC Great Plains, LLC) requested if any other items merited discussion. The meeting was adjourned at 4:38pm.

Respectfully Submitted,

Tim Miller,

Secretary

ECONOMIC STUDIES WORKING GROUP

May 10, 2012

Crowne Plaza Kansas City Downtown

1301 Wyandotte Street, Kansas City, MO 64015

• A G E N D A •

10:00 am – 4:00 pm

2. Administrative items

   a. Call to Order, Introductions...Alan Myers (10 minutes)
   b. Receipt of Proxies .... Tim Miller (1 minute)
   c. Review of Agenda ....Alan Myers (5 minutes)
   d. Future meetings..Alan Myers (5 minutes)

3. Review of Past Action Items .... Tim Miller (5 minutes)

4. Consent Agenda (Approval Item)[1] ....Alan Myers (1 minute)

   a. Approval of Meeting Minutes – April 5, 2012
   b. Approval of Meeting Minutes – April 19, 2012

5. 2012 Policy Survey ....Juliano Freitas (1.5 hours)

6. 2013 ITP20 ....(3 hours)

   a. Data Review Package Introduction ....Tim McGinnis (30 minutes)
   b. Generation Resource Expansion Plan
      i. Capacity margin calculations by zone ....Tim McGinnis (30 minutes)
      ii. Potential unit technologies & parameters................................. Tim Miller (30 minutes)
      iii. Generation siting criteria.. Tim Miller (30 minutes)
   c. Future 4 “Combined Policy”: load growth approach (Approval Item)[1].... Tim Miller (30 minutes)

7. SPP FERC Order 1000 Task Force update ....Kip Fox (20 minutes)

8. Metrics Task Force update ~~(Approval Item)~~[1] ....Kip Fox (40 minutes)

9. Closing Items ....Alan Myers (10 minutes)

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[1] Background Materials Included

ECONOMIC STUDIES WORKING GROUP

Proxy Statements

May 10, 2012

Crowne Plaza Kansas City Downtown

1301 Wyandotte Street, Kansas City, MO 64015

place signature on a PDF Fil

proxy

Howell, Leon [HowellLC@oge.com]

Sent: Wednesday, May 09, 2012 11:29 AM

To: Tim Miller

Cc: Myers, Alan; Collins, Michael

Tim,
Please allow Mike Collins my proxy at the ESWG meeting on 5/10/12. I plan to listen in periodically throughout the day but will not have web access.
Leon

Southwest Power Pool, Inc.

ECONOMIC STUDIES WORKING GROUP MEETING

May 10, 2012

Crown Plaza Kansas City Downtown – Kansas City, MO

• ATTENDANCE LIST •

Name	Company
Randy Collier	City Utilities of Springfield
Tom Hestermann	Sunflower
Al Tamimi	Sunflower
Tim Miller	SPP Staff
Roy Boyer	Xcel Energy
Paul Dietz	Westar Energy
Kip Fox	AEP
Alan Myers	ITC Great Plains
Mike Collins	OGE
Wayne Galli	Clean Line
Steve Gaw	Wind Coalition
Mike Proctor	RSC Consultant
Kurt Stradley	LES
Tim Owens	NPPD
Walt Cecil	Mo PSC Staff
Matt Lind	Burns & McDonnell
Juliano Freitas	SPP Staff
Temujin Roach	PUC Texas
Deral Davis	Clean Line
Bill Reid	Climate Energy Project
Bennie Weeks	Xcel/SPS
Norman Williams	Sunflower

Southwest Power Pool

Southwest Power Pool, Inc.

ECONOMIC STUDIES WORKING GROUP MEETING

May 10, 2012

Crown Plaza Kansas City Downtown – Kansas City, MO

• ATTENDANCE LIST •

Name	Company
~~TRAVIS~~ TRENT CAMPBELL	OK C COMMISSION
KATHERINE PREWITT	SPP STAFF

Southwest Power Pool

Southwest Power Pool, Inc.

ECONOMIC STUDIES WORKING GROUP

May 10, 2012

Crowne Plaza Kansas City Downtown

1301 Wyandotte Street, Kansas City, MO 64015

• ATTENDANCE LIST •

Name	System
BRUCE WALKUP	AECC
~~TOM HESTERMANN~~ DAVID RIED	~~SUNFLOWER~~ OPPD
GREG SWEET	EMPIRE
MICHAEL WATT	OMPA
ADAM McKINNIE	MO PSC
BILL LEUNG	CONSULTANT
BRITTNEY MILLER	AR PSC
DAN LENIHAN	OPPD
JIM KRAJECKI	CES-LTD
JOSH ROSS	SPP STAFF
PAT MOSIER	AR PSC
SAM LOUDENSLAGER	SPP STAFF
TESSIE ~~KENTNER~~ KETNER	SPP STAFF
TIM McGINNIS	SPP STAFF
TOM DEBAUN	KCC
TONY GOTT	AECI

Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

April 5, 2012

Web Conference

• SUMMARY OF ACTIONS TAKEN •

1. The ESWG reviewed a summary of the 2012 Policy Survey, spending significant time on the renewable generation section. The group was not comfortable with the results and asked for the three items to be made available for further discussion:
    1. SPP members explanations of the difference between this and past survey responses for their company,
    2. clarified and redrafted instructions/questions renewable section of the survey, and
    3. the data from this and past surveys.

Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

April 5, 2012

Web Conference

• MINUTES •

Agenda Item 1 – Administrative Items

Agenda Item 1a – Call to Order, Introductions

Chair Alan Myers (ITC Great Plains, LLC) called the meeting of the Economic Studies Working Group (ESWG) to order at 8:30 a.m., welcomed those in attendance, and asked for introductions (Attachment – Attendance List).

There were 34 web conference participants representing 12 of 13 members.

Agenda Item 1b – Receipt of Proxies

Tim Miller (SPP staff) received proxy statements (Attachment – Proxies).

Agenda Item 1c – Review of Agenda

Chair Alan Myers (ITC Great Plains, LLC) presented the agenda for review and asked for any additions or corrections. The third item on the agenda was moved for earlier discussion to accommodate member schedules (Attachment – Agenda).

Agenda Item 1d – Upcoming ESWG Meeting Dates & Locations

Chair Alan Myers (ITC Great Plains, LLC) led discussion of the group meeting schedule for the next four months. The August ESWG will take place during the same week as the Transmission Working Group and the first planning Summit of the year.

Agenda Item 2 – Review of Past Action Items

Tim Miller (SPP staff) called the group's attention the action item list (Attachment – Action Items).

Agenda Item 3 – Consent Agenda

The Consent Agenda included the following requested Actions (Attachment -Consent Agenda):

a. Approval of Meeting Minutes – February 9, 2012
b. Approval of Meeting Minutes – March 8, 2012
c. Approval of Meeting Minutes – March 16, 2012

Chair Alan Myers (ITC Great Plains, LLC) asked if there were any Consent Agenda Items to be removed, changed, or added. The following motion was made:

> **A motion to approve the consent agenda by David Ried (OPPD) and seconded. The motion was approved unanimously.**

Agenda Item 4 – 2012 Policy Survey update

Josh Ross (SPP staff) presented a summary of the 2012 Policy Survey responses including both the impacts from EPA Regulations upon the generating fleet and the renewable generation expectations based upon energy targets and mandates. The group spent considerable time investigating the differences between this and past survey results and the intent of the survey and the consistency of the responses.

> **A motion to re-survey members to make sure that is was clear on the question asked. If they changed numbers from the previous survey provide an explanation**

of the difference between the numbers in this survey and the previous survey was made by Leon Howell (OGE) and seconded.

A friendly amendment to the motion was requested by Paul Dietz (Westar Energy). If wind renewable numbers have changed from the previous survey members will provide an explanation of the difference between the numbers in this survey and the previous survey. The amendment was accepted.

The motion, with the amendment, was approved unanimously.

The group reviewed the language of the survey during the meeting and provided input and edits to the instructions in order to make plain the intent of the survey.

ACTION ITEM: staff to complete the clarification and redraft of the instructions/questions for the renewable section of the survey and submit them to the ESWG for review in the next two days.

Agenda Item 7 – Metrics Task Force Progress on Benefit Metrics

Kip Fox (AEP) provided a brief update of the Metrics Task Force April 2nd meeting. Noting that some policy questions have arisen needing attention from the RARTF.

Closing Items

Chair Alan Myers (ITC Great Plains, LLC) requested if any other items merited discussion and requested that staff schedule a follow-up call for the remaining agenda items during the week of April 16.

Respectfully Submitted,

Tim Miller,

Secretary

Southwest Power Pool, Inc.

ECONOMIC STUDIES WORKING GROUP

April 5, 2012

Web Conference

• A T T E N D A N C E   L I S T •

Attendee	Company	Attendee	Company
Al Tamimi	Sunflower	Bill Reed	Climate Energy Project
Alan Myers	ITC Great Plains	Brett Hooton	SPP staff
Bennie Weeks	Xcel Energy	Dan Jones	SPP staff
Bruce Walkup	AECC	Jason Shook	GDS Associates
David Ried	OPPD	Jason Terhune	SPP staff
Greg Sweet	Empire	Josh Ross	SPP staff
Kip Fox	AEP	Juliano Freitas	SPP staff
Kurt Stradley	LES	Kirk Hall	SPP staff
Leon Howell	OGE	Michael Ray	SPP staff
Michael Watt	OMPA	Mitch Williams	WFEC
Paul Dietz	Westar	Noumvi Ghomsi	MO PSC
Randy Collier	City Utilities Springfield, MO	Roy Boyer	Xcel Energy
James Sanderson	KCC	Steve Gaw	Wind Coalition
Mike Proctor	Consultant	Tessie Ketner	SPP staff
Tim Miller	SPP staff	Tim Owens	NPPD
Antoine Lucas	SPP staff	Tom Hestermann	Sunflower
Bill Leung	Consultant	Walt Cecil	MO PSC
Roy Boyer	Xcel Energy		

ECONOMIC STUDIES WORKING GROUP

April 5, 2012

Web Conference

• A G E N D A •

9:00 am – 12:00 pm

2. Administrative items
   a. Call to Order, Introductions...Alan Myers (10 minutes)
   b. Receipt of Proxies .... Tim Miller (1 minute)
   c. Review of Agenda ....Alan Myers (5 minutes)
   d. Upcoming ESWG Meeting Dates & Locations ....Alan Myers (10 minutes)

3. Review of Past Action Items.. Tim Miller (5 minutes)

4. Consent Agenda (Approval Item)[1] ....Alan Myers (5 minutes)
   a. Approval of Meeting Minutes – February 9, 2012
   b. Approval of Meeting Minutes – March 8, 2012
   c. Approval of Meeting Minutes – March 16, 2012

5. 2012 Policy Survey update.. Josh Ross (30 minutes)

6. 2013 ITP20
   a. Future 4 "Combined Policy": Load Growth Approach (Approval Item)[1] . Tim Miller (30 minutes)
   b. Generation Resource Expansion Plan Approach & Timeline................. Tim Miller (30 minutes)
   c. Project Status .... Charles Cates (10 minutes)

7. Metrics Task Force Progress on Benefit Metrics..Kip Fox (30 minutes)

[1] Background Materials Included

Proxy Statements

ESWG proxy for April 5th ESWG Call

kmfox@aep.com [kmfox@aep.com]

Sent: Wednesday, April 04, 2012 10:41 AM

To: Myers, Alan; Tim Miller

Alan/Tim: I will be late to the ESWG call tomorrow due to internal issues. I would like to give Alan my proxy until I am able to join the call later in the meeting. Please allow this email as my transfer as my proxy to Alan for the meeting until I get on line.

Thanks, Kip
Kip Fox
American Electric Power Company

214-777-1063 office
8-777-1063 audinet
972-400-1384 cell

The information contained within is intended for specific individual and specific purpose, and is protected by law. If you are not the intended recipient, you should delete this message.

Proxi

Tamimi, Al [atamimi@sunflower.net]

Sent: Thursday, April 05, 2012 10:32 AM

To: Myers, Alan; Tim Miller

Cc: Hestermann, Tom [THestermann@sunflower.net]; Williams, Noman [NWilliams@sunflower.net]

I have to leave the meeting. Tom Hestermann has my proxy for the rest of the meeting.

Al Tamimi, Ph.D., P.E.
Planning Engineering Supervisor
Sunflower Electric Power Corporation
P.O. Box 1020
Hays, KS 67601
Office: 785-623-3336 / Cell: 785-656-0435
Email: atamimi@sunflower.net
SUNFLOWER ELECTRIC POWER CORPORATION

Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

April 19, 2012

Web Conference

• SUMMARY OF ACTIONS TAKEN •

1. The ESWG approved the load growth method for use in the fourth future of the 2013 ITP20. The Combined Policy Future. To determine the 2033 peak load level: a 1% reduction in (subtract one percent from) the average annual peak load growth rate from the Business as Usual peak load forecast from 2021 to 2033. See the chart (Attachment). The peak load growth used will be determined by a straight line connecting the end point load in 2033 with the beginning 2012 peak load point

Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

April 19, 2012

Web Conference

• MINUTES •

Agenda Item 1 – Administrative Items

Agenda Item 1a – Call to Order, Introductions

Chair Alan Myers (ITC Great Plains, LLC) called the meeting of the Economic Studies Working Group (ESWG) to order at 10:03 a.m., welcomed those in attendance, and asked for introductions (Attachment – Attendance List).

There were 18 web conference participants representing 9 of 13 members.

Agenda Item 1b – Receipt of Proxies

Tim Miller (SPP staff) received proxy statements. There were no proxies identified.

Agenda Item 1c – Review of Agenda

Chair Alan Myers (ITC Great Plains, LLC) presented the agenda for review and asked for any additions or corrections. The third item on the agenda was moved for earlier discussion to accommodate member schedules (Attachment – Agenda).

Agenda Item 2 – Metric Task Force Progress on Benefit Metrics

Kip Fox (AEP) gave a briefing on the Metrics Task Force progress, addressing each of the metric categories being considered with an update and call for questions. The Metrics Task Force will meet again on May 11th in Kansas City. The task force will provide a draft report to the ESWG in July 2012. The report will provide the ESWG with the substantial portion of the metric monetization completed; the ESWG will be given options for the metrics that pose greater difficulty.

Agenda Item 3 – 2013 ITP20

Agenda Item 3a – Future 4 "Combined Policy": Load Growth Approach

Tim Miller (SPP staff) presented two staff recommendations regarding the treatment of load in the fourth future of the 2013 ITP20. The group approved the treatment of SPP region-wide load growth (Attachment – 2013 ITP20 Future 4 Load Growth, slide 7) and asked staff for more information regarding the treatment of zonal load growth rates and the energy growth rate.

> **A motion to adopt the demand growth approach represented by a line from the 2012 peak load to the peak load of option 1 in 2033 was made by Paul Dietz (Westar Energy) and seconded. The motion was approved unanimously.**

ACTION ITEM: Staff will compile the peak demand and energy values from the load review survey and apply the pro rata approach for Future 4 as an example for the group's next discussion. Additionally, staff will include the following items for the May ESWG meeting in the summary of the peak demand and energy survey: peak demand, peak demand growth, annual energy, annual energy growth, annual load factor growth, application of a modest increase in load factor, and the derivation of load factor with energy held constant.

Agenda Item 3b – Generation Resource Expansion Plan Approach & Timeline

Tim Miller (SPP staff) provided and overview of the approach to the generation resource expansion plan and requested that the group prepare questions for the May ESWG meeting where the resource planning process will be discussed in depth.

Closing Items

Chair Alan Myers (ITC Great Plains, LLC) requested if any other items merited discussion. Greg Sweet (Empire District) requested the status of the ITP10 High Priority Study and the Policy Survey. The Strategic Planning Committee's approval of staff's recommendation to forego the High Priority study based upon the small number of retirements in the Policy Survey was discussed. The clarifications requested at the last meeting regarding the Policy Survey will be discussed at the May ESWG.

Respectfully Submitted,

Tim Miller,

Secretary

Southwest Power Pool, Inc.

ECONOMIC STUDIES WORKING GROUP

April 19, 2012

Web Conference

• A T T E N D A N C E   L I S T •

Attendee	**Company**
Alan Myers	ITC Great Plains
Bennie Weeks	Xcel Energy
Bruce Walkup	AECC
David Ried	OPPD
Greg Sweet	Empire
Kip Fox	AEP
Michael Watt	OMPA
Paul Dietz	Westar
Randy Collier	City Utilities Springfield, MO
Tim Miller	SPP staff
Bill Leung	Consultant
Dan Hartman	
Jason Shook	GDS Associates
Josh Ross	SPP staff
Juliano Freitas	SPP staff
Mitch Williams	WFEC
Roy Boyer	Xcel Energy
Tim Owens	NPPD

ECONOMIC STUDIES WORKING GROUP

April 19, 2012

Web Conference

• A G E N D A •

10:00 am – 12:00 pm

1. Administrative items
   a. Call to Order, Introductions...Alan Myers (10 minutes)
   b. Receipt of Proxies .... Tim Miller (1 minute)
   c. Review of Agenda ....Alan Myers (5 minutes)

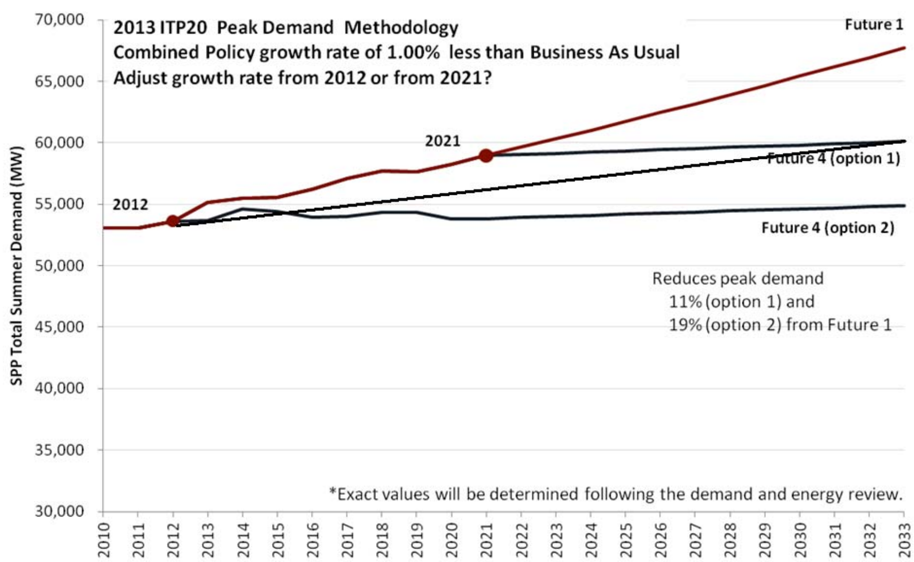
2. Metric Task Force Progress on Benefit Metrics ....Kip Fox (30 minutes)

3. 2013 ITP20
   a. Future 4 “Combined Policy”: Load Growth Approach (Approval Item)[1] . Tim Miller (30 minutes)
   b. Generation Resource Expansion Plan Approach & Timeline................. Tim Miller (30 minutes)

WebEx Document Viewer

SPP example – Peak Regional Demand

- **Which year should the load growth reduction start to apply?**



SPP | 7

MOTION: move that we adopt the line that begins in 2012 and ends in 2033 at the same spot as option 1.

Working Group Calendar 2012

Important Dates		Notes & Topics
Thu, Jan 5	ESWG Teleconference	Possibly meet in Denver (Xcel offices?) for some meeting(
Thu, Jan 12	ESWG - Dallas	
Tue, Jan 17	MOPC - Austin	
Thu, Feb 9	ESWG	
Tue, Feb 21	TWG	
Thu, Mar 8	ESWG	
Fri, Mar 16	ESWG - Teleconference	
#########	ESWG - Teleconference	
Mon, Apr 2	MTF - Dallas	
Thu, Apr 5	ESWG - Teleconference	
Tue, Apr 10	MOPC - Oklahoma City	ITP20 Scope
Tue, Apr 17	MTF - Teleconference	
Wed, May 2	CAWG - Dallas	
Wed, May 9	TWG - Kansas City	
#########	ESWG - Kansas City	ITP20 Resource Plan & Policy Survey
Fri, May 11	MTF - Kansas City	
#########	ESWG - Teleconference	ITP20 Resource Plan
Wed, Jun 13	CAWG - Dallas	
Thu, Jun 14	ESWG - Dallas	ITP20 Resource Plan
Wed, Jul 11	CAWG - Dallas	
Thu, Jul 12	ESWG - Dallas	MTF report & ITP20 Resource Plan (finalize)
Tue, Jul 17	MOPC	ESWG\MTF monetization of metrics for RCAR
Wed, Aug 8	CAWG - Dallas	
Tue, Aug 21	TWG - SPP offices	
#########	Planning Summit - SPP offices	
Thu, Aug 23	ESWG - SPP offices	ITP20 Model Review & Benchmarking - move to August 23
Wed, Sep 12	CAWG - Dallas	
Thu, Sep 13	ESWG - Dallas	ITP20 Models (finalize) & metrics for RCAR
Wed, Oct 3	CAWG - Dallas	
Thu, Oct 4	ESWG - Dallas	
Tue, Oct 16	MOPC	ESWG\MTF monetization of metrics for RCAR
Wed, Nov 7	TWG	
Thu, Nov 8	CAWG - Dallas	
Thu, Nov 15	ESWG - Dallas	ITP20 project requests
Wed, Dec 5	CAWG - Dallas	
Thu, Dec 6	ESWG - Teleconference	ITP20 Project feedback

January

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February

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March

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May

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June

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July

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August

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September

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

October

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

December

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Southwest Power Pool

ECONOMIC STUDIES WORKING GROUP

Pending Action Items Status Report

~~April 5~~May 10, 2012

ID	Action Item	Date Originated	Status	Comments
002	For discussion at the next meeting Alan Myers and staff will outline work items for the group and discuss ESWG responsibilities per the group's charter.	Aug 2, 2011 ESWG	In Progress ESWG & Staff	
015	SPP staff coordinate meetings between the ESWG and CAWG and present a list of proposed locations at the April 5, 2012 ESWG teleconference.	Jan 12, 2012 ESWG	In Progress Staff	
017	Staff will make the solved powerflow models for the EIPC scenarios available to the ESWG as soon as possible.	Feb 9, 2012 ESWG	In Progress Staff	Transmission to fix the constraints that in the EIPC models is being added. The EIPC has started putting a map together of the new transmission additions.
018	Staff will provide a straw-man scope for the study at the March ESWG meeting and have staff on hand to discuss the EPA Impact Assessment currently underway.	Feb 9, 2012 ESWG	~~In Progress Staff~~Complete	Study not being pursued per SPC.
021	Staff should coordinate with MISO staff regarding the details of the modeling not reflected in the joint futures variable spreadsheet and report back to the group. The reported data should include things such as forced outage rate of potential new capacity additions, treatment of mercury in the assessment, hurdle rates, etc. In addition, provide information regarding the drop dead date with MISO on these items.	Feb 9, 2012 ESWG	In Progress Staff	
022	Staff should provide examples of the usage of the 2.5% inflation rate in relation to real and nominal values and show correspondence or inclusion of growth rates.	Feb 9, 2012 ESWG	In Progress Staff	
024	Staff to follow up with AEP regarding DC tie modeling options and suggest changes to the scope.	Feb 9, 2012 ESWG	~~In Progress Staff/AEP~~Complete	Scope approved by MOPC

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026	Staff to develop and present the ESWG with a table showing the different scenarios and analyses conducted in the EPA Assessment. Specifically, the table should show which powerflow models were utilized and how the assessment utilizes or does not utilize the model scenarios 1 and 5 of the ITP Near Term process.	Mar 8, 2012 ESWG	Complete	See Action Item letter at April 5, 2012 ESWG
027	The ESWG directs the MTF to provide a substantial update to the ESWG so that a meaningful update can be provided to the MOPC in July, 2012	Mar 8, 2012 ESWG	In Progress MTF	
028	Staff will schedule a follow-up meeting for the ESWG to decide the method by which to consolidate the five transmission plans to one recommended plan.	Mar 8, 2012 ESWG	Complete	Mar 16th and Mar 18th, 2012 teleconferences
029	Roy Boyer (Xcel Energy) will bring a proposal to the follow-up ESWG meeting regarding the impact that Xcel expects to the SPS region due to the proposed Tres Amigas project	Mar 8, 2012 ESWG	Complete	Scope approved by MOPC
030	When presenting recommendations from Midwest ISO regarding this future, SPP staff will ensure that clarity is provided whether the recommendation is from Midwest ISO staff or the Planning Advisory Committee.	Mar 8, 2012 ESWG	In Progress Staff	Ongoing
031	Staff to complete the clarification and redraft of the instructions /questions for the renewable section of the 2012 Policy Survey and submit them to ESWG for review in the next two days	Apr 5, 2012 ESWG	Complete	
032	Staff will compile the peak demand and energy values from the load review survey and apply the pro rata approach for Future 4 as an example for the group's next discussion. Additionally, staff will include the following items for the May ESWG meeting in the summary of the peak demand and energy survey: peak demand, peak demand growth, annual energy, annual energy growth, annual load factor growth, application of a modest increase in load factor, and the derivation of load factor with energy held constant.	Apr 19, 2012 ESWG	Complete	In background materials for May 10, 2012 ESWG.

Policy Survey Update

ESWG

Juliano Freitas, SPP staff

May 10, 2012

SPP Southwest Power Pool

Policy Survey Introduction

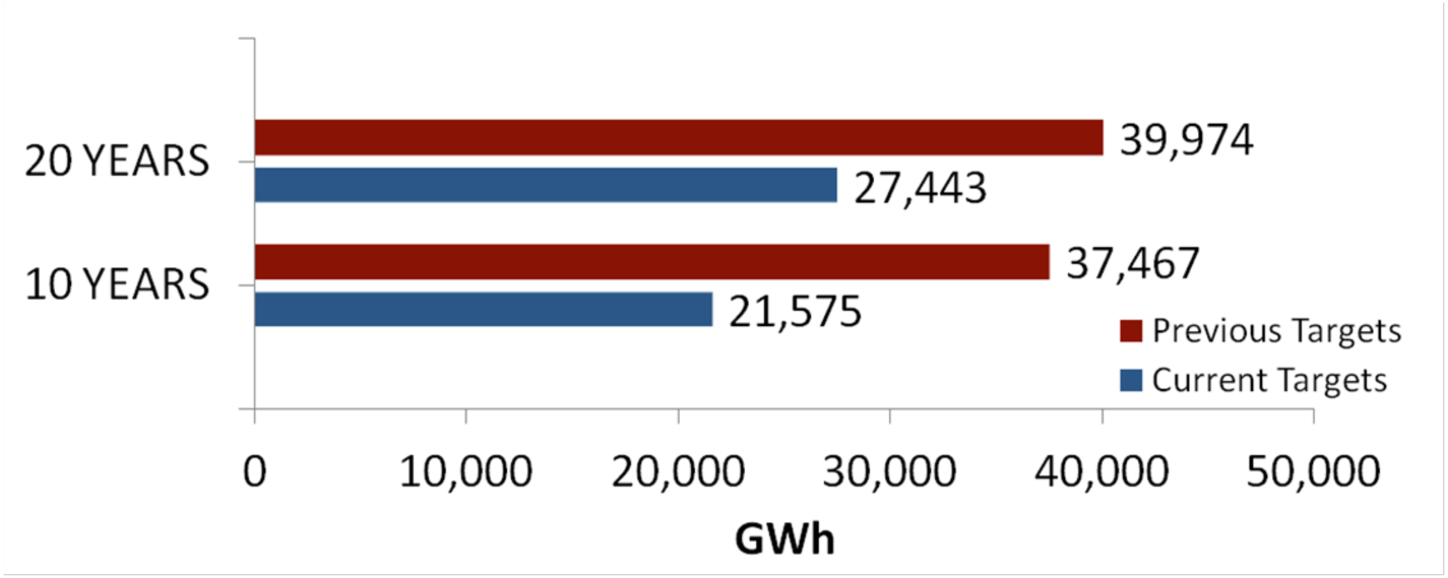
- **Survey focus: Business as Usual future**
  - Existing renewable generation
  - **Identify renewable goals and targets for each utility**
  - Identify impacts of EPA regulations

Objective

- Present the renewable generation numbers submitted by the members.
- Discuss the action to be taken about the difference between jurisdictional load and OATT load.

Comparison to Previous Surveys

Past Surveys indicated 2.7 GW more than current survey



Study	Capacity (MW)	Energy (GWh)
2013 ITP20 (2033)	7,363	27,443
2012 ITP10 (2022)	10,053	37,467
2010 ITP20 (2030)	10,712	39,974

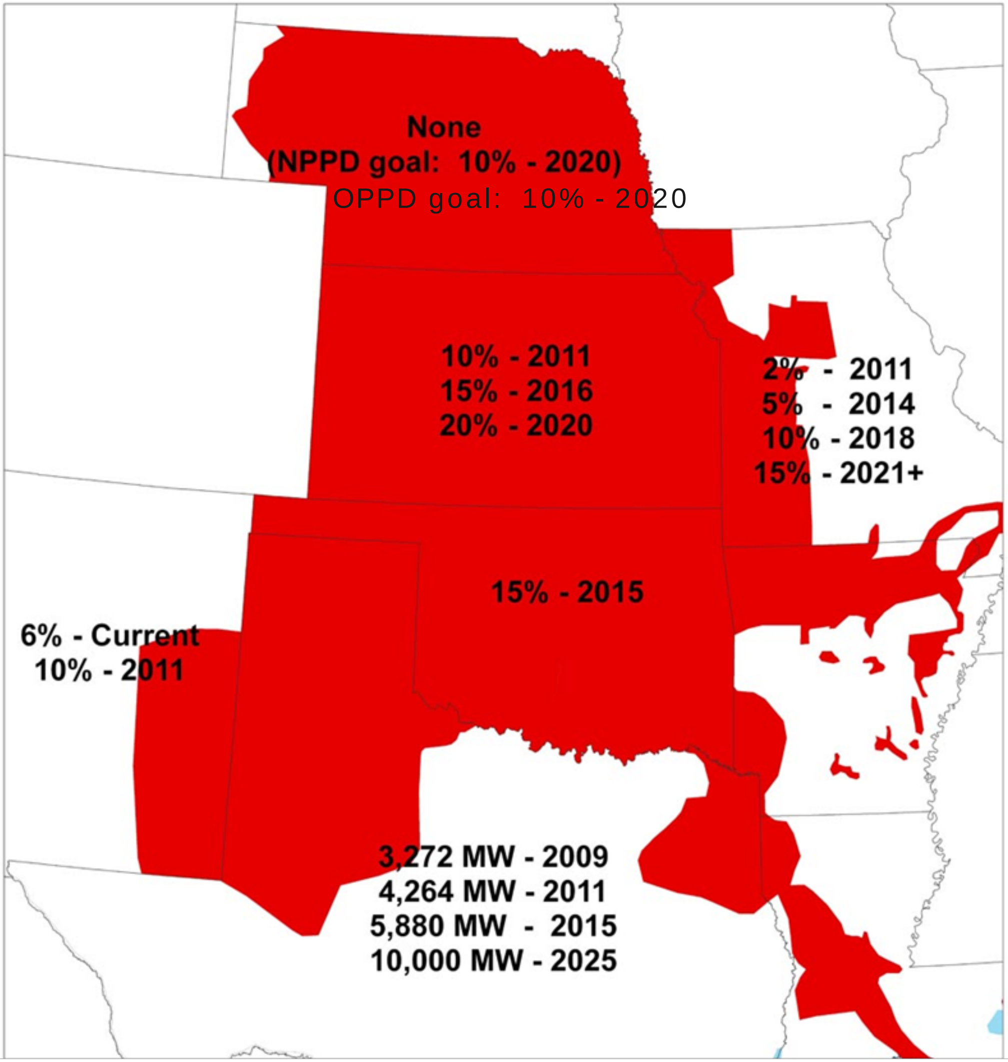
Comparison to Previous Surveys

- **Comparing the load and renewable generation forecast from the 2010 ITP20 and 2013 ITP20, SPP staff noticed that:**
  - **renewable generation growth (31% reduction)**
  - **does not follow load growth (15% reduction)**

	Study	Energy (GWh)	GWh Difference 2013/2010
RENEWABLE GENERATION	2013 ITP20	27,443	-31.34%
	2010 ITP20	39,974	
LOAD	2013 ITP20	256,499	-15.28%
	2010 ITP20	302,792	

Targets & Mandates

Renewable Portfolio Standards



Targets & Mandates

- **RPS derived from load review results (Native Load) compared to and mandates/targets in 2033.**

Area	Derived RPS Energy (GWh)	Mandate/Target (GWh)	Difference (GWh)
GMO	1,796	1,737	-3.2%
EMDE	1,119	1,314	+17.4%
KCPL*	3,299	3,420	+3.7%
MKEC	590	322	-54.7%
NPPD	1,703	1,767	+3.7%
OGE	5,403	5,000	-7.4%
OPPD	1,674	1,602	-4.3%
SUNC	651	322	-50.5%
WESTAR	6,668	3,854	-42.2%
WFEC	1,541	1,580	+2.5%

* Includes MO and KS

Targets & Mandates (Utilities in Texas)

- Texas RPS: 2015 – 5,880 MW, 2025 – 10,000 MW
- Oklahoma RPS – 15% (2015)
- New Mexico RPS – 10% (2011)

Area	State	Annual Energy (GWh)	Mandate/Target (GWh)	Mandate/Target (MW)	Ratio
AEP*	TX	12,685	1,241	332	9.78%
	OK	19,630	2,230	597	11.36%
SPS**	TX	22,330	401	309	1.79%
	NM	7,233	1,156	107	9.25%

* AR and LA not included

** OK is not included

Targets & Mandates

- Mandates/targets from survey were compared to expected RPS calculations based on load review results
  - Utilities with a difference greater than 20% were contacted to confirm the numbers provided
  - Utilities with big discrepancies between the previous ITP20 survey and the current survey were contacted to confirm the differences

Area	Difference (GWh)
MKEC	-54.7%
SUNC	-50.5%
WESTAR	-42.2%

Area	State	Ratio
AEP*	TX	9.78%
	OK	11.36%
SPS**	TX	1.79%
	NM	9.25%

* AR and LA not included

** OK is not included

Targets & Mandates

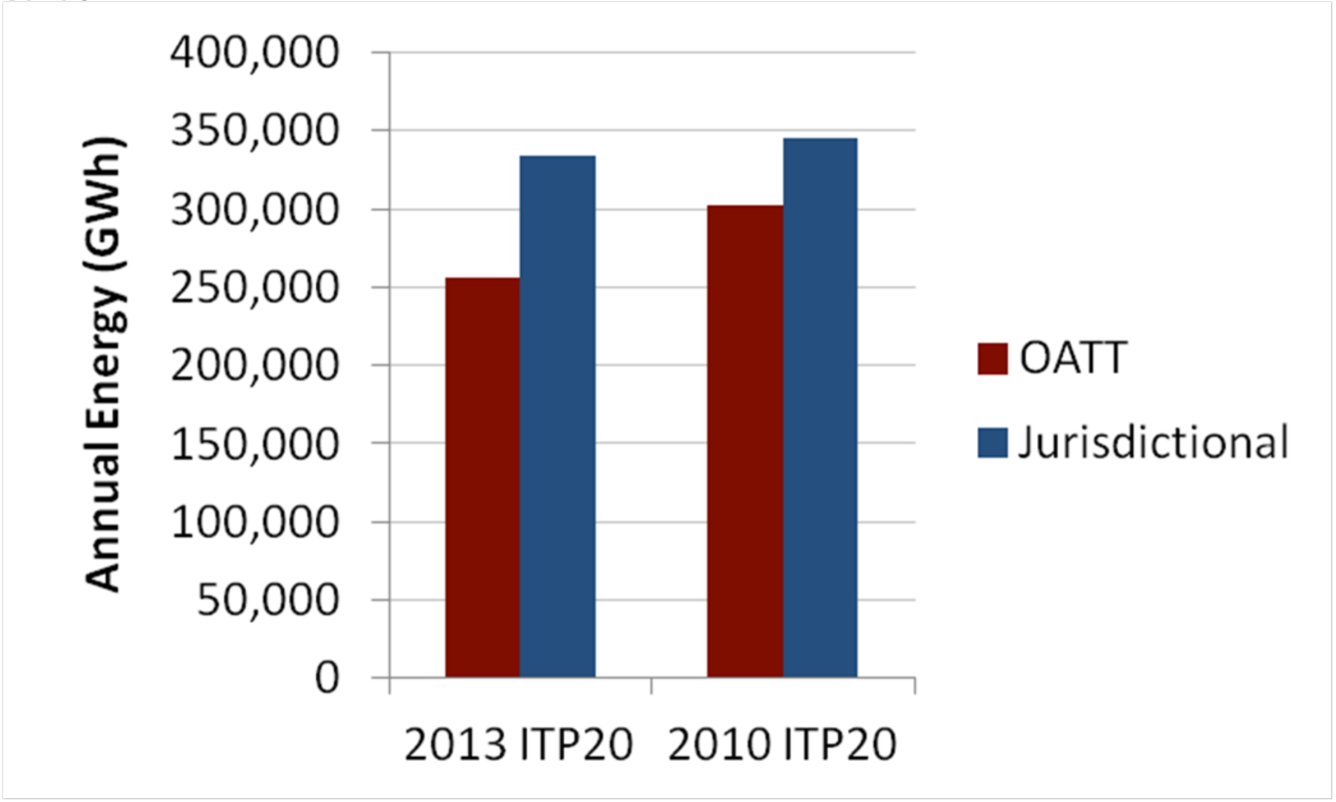
- Contacting our members we got the following justifications:
  - SPS (TX): based on Texas kWh sales that SPS uses internally to calculate Texas RPS requirements the % is at 5.5%. SPS confirmed the numbers submitted to SPP for Texas and New Mexico.
  - AEP: the number is based on agreements reached as part of a settlement for SWEPCO. It is not based on the Texas RPS capacity number which is being met by ERCOT. AEP confirmed the numbers submitted to SPP

Targets & Mandates

- Contacting our members we got the following justifications:
  - Westar: Kansas RPS standard is 20% of retail peak MW by 2020 instead of MWh. Westar confirmed the numbers submitted to SPP
  - MKEC/SUNC: Kansas RPS standard is 20% of retail peak MW by 2020 instead of MWh. Westar confirmed the numbers submitted to SPP

SPP Load

- The chart shows the SPP jurisdictional load and the portion of the jurisdictional load that is under the OATT.



SPP Load

- **The table below compares the OATT Load and the Jurisdictional Load by area.**

Area	Jurisdictional Load (GWh)	OATT Load (GWh)	Difference	State	RPS or Goal ?
AEP	61,555	48,233	-21.64%	AR, TX, LA,OK	Yes
CLECO	15,935	-	-	LA	No
City of Grand Island	1,094	-	-	NE	No
City Utilities of Springfield	3,957	3,957	0%	MO	Yes
EMDE	7,463	7,463	0%	MO	Yes
GRDA	7,853	7,853	0%	OK	Yes
GMO	11,974	11,974	0%	MO	Yes
Hastings Utilities	643	-	-	NE	No
Independence Power & Light	1,519	-	-	MO	Yes
Kansas City Board of Public Utilities	2,669	-	-	KS	Yes

SPP Load (cont.)

Area	Jurisdictional Load (GWh)	OATT Load (GWh)	Difference	State	RPS or Goal ?
KCPL	19,016	19,016	0%	KS, MO	Yes
City of Lafayette	3,128	-	-	LA	No
LES	5,565	5,565	0%	NE	Yes
Louisiana Energy and Power Authority	1,131	-	-	LA	No
MKEC	2,954	2,954	0%	KS	Yes
MIDW	2,447	2,447	0%	KS	Yes
Municipal Energy Agency of NE	989	-	-	NE	No
NPPD	17,036	17,036	0%	NE	Yes
OGE	38,152	36,021	-5.58%	OK	Yes
OMPA	3,136	-	-	OK	Yes
OPPD	17,586	16,743	-4.79%	NE	Yes
SPA	5,890	-	-	MO, AR, OK	Yes
SPS	49,589	30,014	-39.47%	NM, TX, OK	Yes

SPP Load (cont.)

Area	Jurisdictional Load (GWh)	OATT Load (GWh)	Difference	State	RPS or Goal ?
SUNC	3,636	3,257	-10.42%	KS	Yes
Westar	38,991	33,343	-14.48%	KS	Yes
WFEC	10,278	10,278	0%	OK	Yes
TOTAL	334,186	256,154	-23.34%		

Conclusion

- The numbers presented by some utilities in the survey were different than expected
  - Will result in less renewable generation sited than in previous ITP studies
- The difference between jurisdictional and OATT load could affect the Renewable Portfolio Standard in some states, and lead to a lower than expected renewable targets.

Questions

- jfreitas@spp.org
- (501)-688-1625

Gen Data Review & Zonal Capacity Margins

May 10, 2012

Tim McGinnis

Engineer, SPP Planning

Southwest Power Pool

Agenda Item 5a:

GEN DATA REVIEW & ZONAL CAPACITY MARGINS

Purpose

- **Generation review** → Accounting for all the existing generators (MW) allows new generators to be allocated to the correct areas
- **Load review** → Load grows over time so each simulated year needs to have enough new generation to cover load
- **Capacity margin review** → Calculating existing Capacity Margins is a way to confirm that the load and gen inputs into the Resource Planning Tool are reasonable for each area and on a regional basis

Important Note: At this point, please review the format and formulas of the Resource Planning Workbook, since the actual data is in rough draft format

Generation Data Review Package

- ITP20 Generation Data review will start tomorrow (May 11)
  - ESWG feedback on format will be implemented
- ITP10 as starting point
  - Based on Commercially Available Data from 3rd Party Vendor
  - Updated with stakeholders' EIA-411 data
  - Updated with EPA Rules Impact feedback
  - Includes last year's stakeholder review responses

Load Review Recap

- Reviewed by stakeholders
- MDWG cases used as data source
- Load assigned ownership by MDWG “owner”
- Items Surveyed
  - Peak Load
  - Annual Energy
- 16 members provided updates

Calculation of Capacity Margin

- Capacity Margin Requirements
  - Each SPP RTO Zone: 12% (Per ITP20 Scope and SPP Criteria 2.1.9)
  - SPP RTO Total: 16% (Per ITP20 Scope)
- Basic Capacity Margin Equation

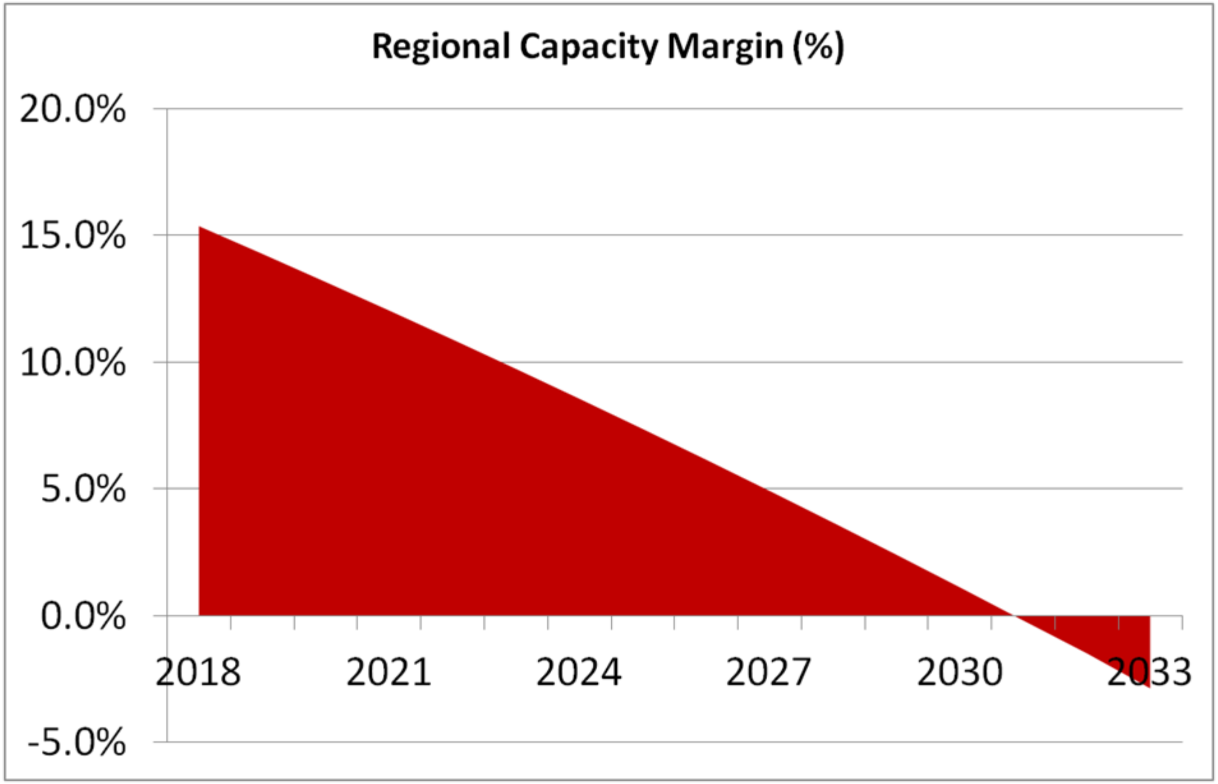
$$\text{Capacity Margin \%} = \frac{(\text{Gen} - \text{Load})}{\text{Gen}} = 12\%$$

- Expanded Capacity Margin Equation

$$\text{Cap Marg \%} = \frac{(\text{Gen} + \text{IPP} + \text{Wind}) - (\text{Load} - \text{Purch})}{\text{Gen} + \text{IPP} + \text{Wind}} = 12\%$$

Draft Regional Capacity Margin

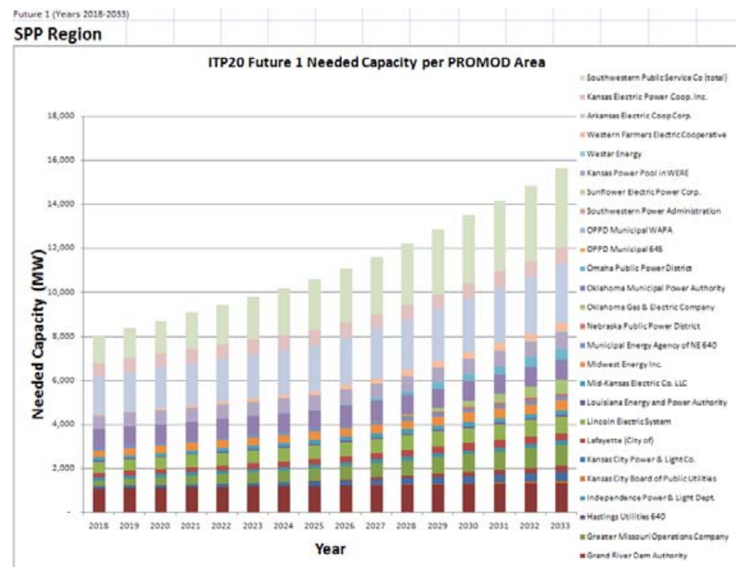
- **Capacity Margin results are preliminary and expected to become <u>much more balanced</u> between zones once generation ownership data is fully compiled**



Zonal Capacity Margin Workbook

- ITP20 Resource Planning Workbook 05-03-2012.xlsx

PROMOD Area	Powerflow Area	Future 1 Total Needed Capacity (MW) 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
East Texas Electric Cooperative	AEPW	1,072	1,088	1,103	1,119	1,135	1,151	1,168	1,185	1,202	1,219	1,236	1,254	1,272	1,290
American Electric Power System West	AEPW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central Louisiana Electric Co. Inc.	CLEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
City of Grand Island 640	NPPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-
City Utilities of Springfield (Springfield, MO)	SPRM	-	-	-	-	-	-	-	-	-	13	26	40	54	68
Empire District Electric Co.	EMDE	-	-	-	-	-	-	9	29	48	68	88	108	129	150
Grand River Dam Authority	GRDA	-	-	-	-	-	-	-	23	54	86	119	153	187	222
Greater Missouri Operations Company	GMO	-	-	-	9	52	95	139	183	229	275	322	369	418	467
Hastings Utilities 640	NPPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Independence Power & Light Dept.	INDN	54	57	60	62	65	68	70	73	76	78	81	84	87	90
Kansas City Board of Public Utilities	KACY	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas City Power & Light Co.	KCPL	-	-	24	55	86	117	148	180	211	243	276	308	340	373
Lafayette (City of)	LAFA	213	220	228	235	242	250	257	265	273	281	288	296	305	313
Lincoln Electric System	LES	393	410	427	444	461	479	497	515	534	553	573	593	613	633
Louisiana Energy and Power Authority	LEPA	57	59	60	61	62	64	65	66	68	69	70	71	73	74
Mid-Kansas Electric Co. LLC	MKEC	140	144	148	153	157	162	167	171	176	180	185	190	195	199
Midwest Energy Inc.	MIDW	243	251	258	266	273	281	289	297	306	314	323	331	340	349
Municipal Energy Agency of NE 640	NPPD	132	134	136	137	139	140	142	144	146	147	149	151	153	154
Nebraska Public Power District	NPPD	-	-	-	11	31	52	73	93	114	135	157	178	199	221
Oklahoma Gas & Electric Company	OKGE	-	-	-	-	-	-	-	-	-	-	70	176	285	394
Oklahoma Municipal Power Authority	OMPA	837	841	845	850	854	858	862	866	870	875	879	883	887	892
Omaha Public Power District	OPPD	-	-	-	-	-	-	-	0	62	125	189	255	321	389
OPPD Municipal 645	OPPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPPD Municipal WAPA	OPPD	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Southwestern Power Administration	SWPA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower Electric Power Corp.	SUNC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas Power Pool in WERE	WERE	587	594	600	607	613	620	626	633	640	647	654	661	668	675
Westar Energy	WERE	-	-	-	-	-	-	-	-	-	-	56	113	170	228
Western Farmers Electric Cooperative	WFEC	11	34	57	80	103	127	151	175	199	224	249	275	300	326
Arkansas Electric Coop Corp.	AEPW/OKGE/SWPA	1,745	1,795	1,846	1,898	1,952	2,008	2,065	2,123	2,184	2,246	2,310	2,375	2,443	2,512
Kansas Electric Power Coop. Inc.	SUNC/WERE	643	649	655	661	667	672	679	685	691	697	703	710	716	722
Southwestern Public Service Co (total)	SPS	1,245	1,384	1,525	1,669	1,815	1,964	2,116	2,271	2,429	2,589	2,753	2,919	3,089	3,262
Coops and Munis in SPS	SPS	113	126	138	152	165	179	193	207	221	236	251	266	282	298



Resource Planning Next Steps

1. Review methods to calculate zonal capacity margins
2. Review generation data
3. Review zonal capacity margins for all regions and futures
4. Coordinate resource plans with MISO
5. Review draft resource plans
6. Add Finalized Resource Plan into economic model

Staff Recommendation

- SPP staff recommends that the calculation methods and data inputs shown in the attached spreadsheet be utilized in the calculation of zonal capacity margins for use in the 2013 ITP20 generation resource expansion plan.

Southwest Power Pool

Southwest Power Pool, Inc.

2013 INTEGRATED TRANSMISSION PLANNING 20-YEAR ASSESSMENT

ESWG

May 10, 2012

Generation Resource Expansion Siting Criteria for Business as Usual future

Purpose

A physical spatial location for each proxy generator will be selected based upon the siting parameters approved by the ESWG. Siting considered incorporation of the renewable requirements, and other futures parameters, as well as physical siting criteria to determine the proper location for each resource. Siting criteria included, for example, that the generator be located within a certain distance from an existing natural gas pipeline, an existing railway, and/or a navigable waterway.

This siting effort will be conducted as a screening level exercise to identify site areas that generally comply with the criteria approved by the ESWG, and is not intended to provide or replace a full scope power plant siting study. This document contains details on the siting process and sites selected for proxy locations of the generating resource associated with each Future.

Siting Criteria

At SPP's recommendation, siting of the generator resources forecast from the Strategist expansion model was based on the philosophy and rule-based methodology documented in the Joint Coordinated System Plan '08 report (JCSP)1. The JCSP's siting philosophy and methodology is detailed in Section 5.2 of that report. In conjunction with stakeholder feedback and industry expertise the JCSP siting criteria was modified to met the needs of the ITP20 study. The siting guidelines are summarized in this subsection.

The general siting philosophy used by the JCSP and modified based on stakeholder feedback during the 2010 ITP20 is:

- **Do not use transmission as initial siting factor:** Let geography and existing infrastructure guide placement of proxy generation. Existing transmission used as a weighting factor rather than a primary siting factor.
- **Site proxy generation by zone:** Site expansion model generation in zone with highest capacity needs. In this study the zones are in general equivalent to SPP's Balancing Authorities, although there are some deviations from direct correlations between the zones used in this study and the SPP Balancing.
- **Avoid greenfield siting for NG fired capacity:** NG generation is flexible to site. Locating generally more peaking NG generation near load centers will have tendency to reduce impact on transmission system.
- **Limit capacity to 2,400 MW maximum per location:** Limiting total capacity per location potentially minimizes impact of contingencies removing large blocks of capacity from service.

When a zone contains merchant generation, it will be assumed that the merchant generation hosted by that zone will be available in the future to meet the load in that zone, even if it is not currently contracted to do so.

[1] "Joint Coordinated System Plan 2008 (JCSP'08)." Available at:
https://www.midwestiso.org/_layouts/MISO/ECM/Redirect.aspx?ID=16485
https://www.midwestiso.org/_layouts/MISO/ECM/Redirect.aspx?ID=16486

A priority based siting order was established to standardize locating generation as-needed and logical order:

- **Priority 1: Uncommitted locations within generation interconnection queues.**
- **Priority 2: Brownfield sites.** Not all brownfield sites are ideal for new capacity so stakeholder feedback will be solicited to identify sites that are good candidates and sites that are not good candidates.
- **Priority 3: Retired/Mothballed sites which have not been reused.** Transmission and other infrastructure may still exist at the site and could be recommissioned with new capacity.
- **Priority 4: Greenfield sites – Cancelled or postponed projects.** Sites proposed through interconnection queues and cancelled may be good candidates. Known reasons why a project was cancelled, to determine the sites viability for inclusion/exclusion for consideration as a candidate site were solicited from stakeholders and SPP staff.
- **Priority 5: Greenfield sites.** Sites with no existing or planned development.

Greenfield Siting Details

The lowest priority sites considered for siting the expansion plan generators focuses on pure greenfield sites. To identify legitimate locations for new generation sites, a rule set was adapted. GIS software will be used to help facilitate indentifying legitimate locations. Criteria were developed based on generator technology. The following criteria were used to consider a greenfield location for siting Base load Steam Coal or IGCC:

- Within one mile of a railroad or a navigable waterway
- Within one half mile of a major river or lake
- Outside a 20 mile buffer of Federal Class I lands
- Outside a 25 mile buffer of an air quality non attainment region
- Outside a 25 mile buffer surrounding a major urban area (a population greater than 50,000 and an area larger than 25 sq. miles)

To differentiate between multiple locations that meet the base load steam coal and IGCC siting criteria, locations were prioritized based on locality to coal mines, gas pipelines, and multiple railroad lines.

Criteria for siting natural gas fired combined cycle generator technologies are:

- Within ten miles of a gas pipeline
- Outside a 20 mile buffer of Federal Class I lands
- Outside a 25 mile buffer of an air quality non attainment region

Natural gas fired combined cycle sites prioritized based on location relative to urban areas, railroads, navigable waterways, major rivers, and lakes.

Natural gas fired simple cycle generator technologies siting criteria are:

- Within ten miles of a gas pipeline
- Outside a 20 mile buffer of Federal Class I lands
- Outside a 25 mile buffer of an air quality non attainment region

Natural gas fired simple cycle sites prioritized based on access to urban areas, railroads, and navigable waterways.

The expansion planning model did not forecast any new nuclear units in the SPP footprint by 2030. An initial siting criterion for nuclear units was to site them at brownfield locations with existing nuclear generation.

Wind Siting

Two categories of wind resources will be sited:

1) those existing and in-service by the end of 2013 as identified in the 2012 Policy Survey and
2) generic wind sites that will meet any remaining wind energy mandates or goals not satisfied by the existing and in-service by the end of 2013 sites.

Wind resources that are in service or under construction will be explicitly sited in their corresponding locations. Generic sites will be sited at EHV substations based on the locations selected in the 2012 ITP20 and 2012 ITP10. Stakeholder input will be sought in order to adjust the location of these sites as needed.

Designated Resources & Wind Ownership

Comment [TimMiller1]: Is this pertitnent to the siting discussion?

The ownership of the generation at each wind farm will first be given to zones which have identified those wind farms as designated resources in the 2012 Policy Survey. Wind capacity remaining after all designated resources are accounted for will be apportioned to zones which need the capacity of that wind farm to meet the mandates and goals outlined in the 2012 Policy Survey, starting with the zones in the same state as the wind farm. The ownership results will be reviewed by stakeholders. The cost per MWh of generating energy and the sales from each wind farm will be credited to the area that owned the wind farm. These values are reflected in the calculation of each area's Adjusted Production Cost (APC).

2013 ITP20 Generation Expansion Plan Siting Criteria

ESWG

May 10, 2012

Tim Miller, SPP staff

SPP Southwest Power Pool

Generator Siting Approach

- Draft criteria document for eventual approval
- Three phased approach as in the 2010 ITP20
  - Determine resource additions
  - Spatially locate the resources
  - Incorporate additions into planning models
- Components of phase 2
  - Site each generator specifically
  - Use siting criteria to determine locations
  - Review with stakeholders

Siting Criteria based on ITP20/JCSP

- Criteria originally developed for use in the 2008 JCSP
- General Siting Philosophy
  - Do not use transmission as initial siting factor
  - Site proxy generation by region
  - Avoid greenfield siting for NG fired capacity
  - Limit capacity to 2400 MW maximum per location
  - Site base load non-nuclear steam capacity in 600 MW increments; nuclear capacity in 1200 MW

Siting Priority

- General Siting Priority
  1. Uncommitted locations within the GI queue
  2. Brownfield sites
  3. Retired/Mothballed sites which have not been re-used
  4. Greenfield Sites - Cancelled or postponed projects
  5. Greenfield Sites

Greenfield Siting

- Use GIS rule sets to identify legitimate potential locations for new (greenfield) generation.
- Criteria for Base Load Steam Coal and IGCC:
  - Within one mile of RR or navigable waterway
  - Within one half mile of major river or lake
  - Outside
    - 20 mile buffer of Class I lands
    - Air quality non-attainment region
    - 25 mile buffer surrounding any major urban area
  - Prioritize based on access to coal mine, gas pipeline, multiple railroad lines

Greenfield Siting (continued)

- Criteria for NG fired Combined Cycle:
  - Within
    - one mile of RR or navigable waterway
    - two miles of major river or lake
    - 10 miles of gas pipeline
  - Outside
    - 20 mile buffer of Class I lands
  - Prioritize based on proximity to urban area (within 25 mile buffer)

Greenfield Siting (continued)

- Criteria for NG fired Combustion Turbines:
  - Within
    - twenty miles of RR or navigable waterway
    - five miles of gas pipeline
  - Outside
    - 20 mile buffer of Class I lands
  - Prioritize based on proximity to
    - river or navigable waterway
    - major river or lake
- Nuclear sited at Brownfield locations only

Future 4 "Combined Policy": Load Growth Approach

ESWG

May 10, 2012

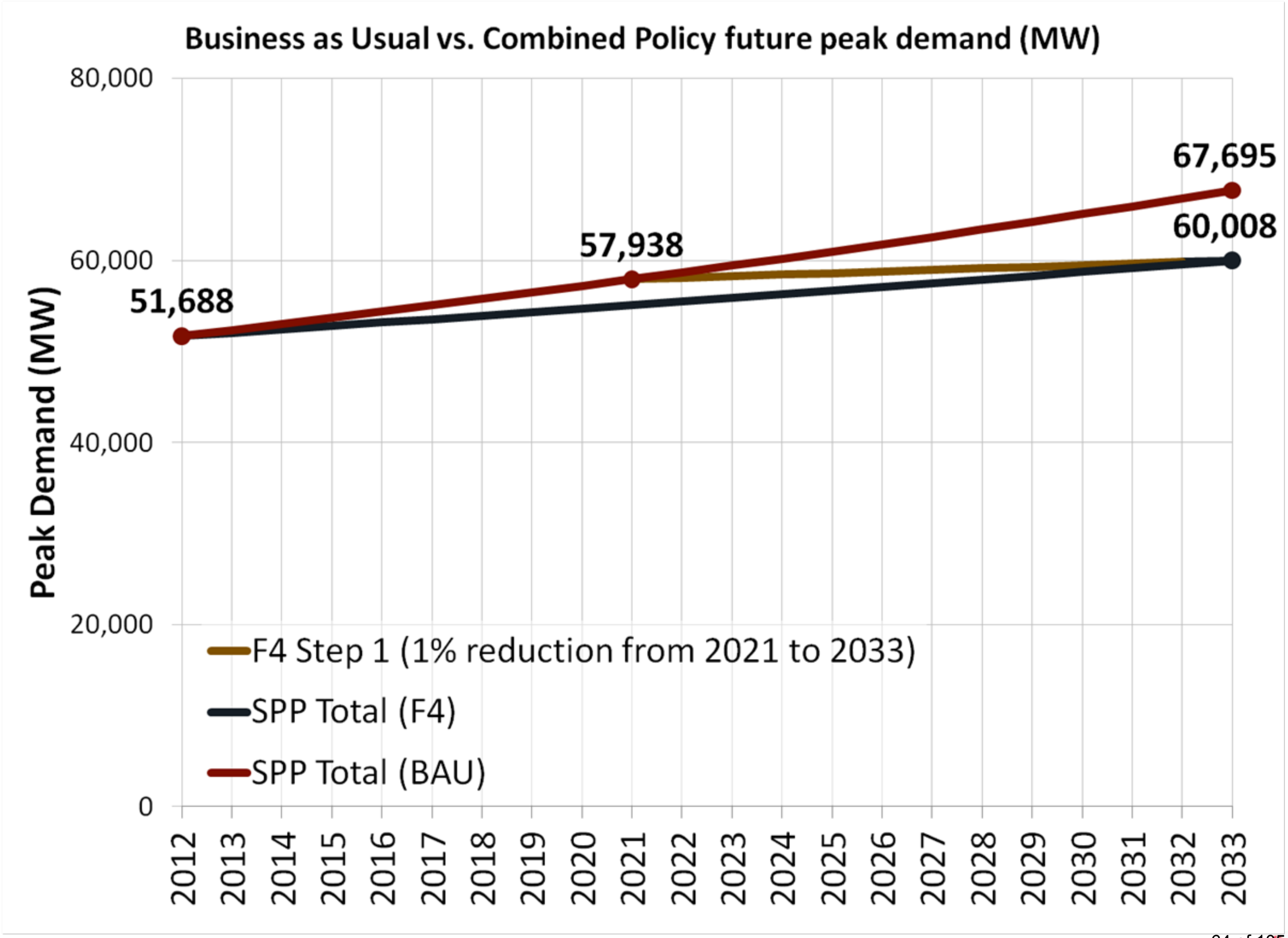
Tim Miller, SPP staff

SPP Southwest Power Pool

Future 4: Combined Policy

- Future Definition
  - 20% RPS, include DSM, load growth reduction and a carbon constraint.
  - Load growth reduction from Business as Usual by approximately 1% annually
  - Commonalities with Business as Usual
    - Entergy in MISO RTO
    - EPA regulations
- Update provides surveyed load and demand values

Future 4 – Peak Growth



Reduction in zonal load growth

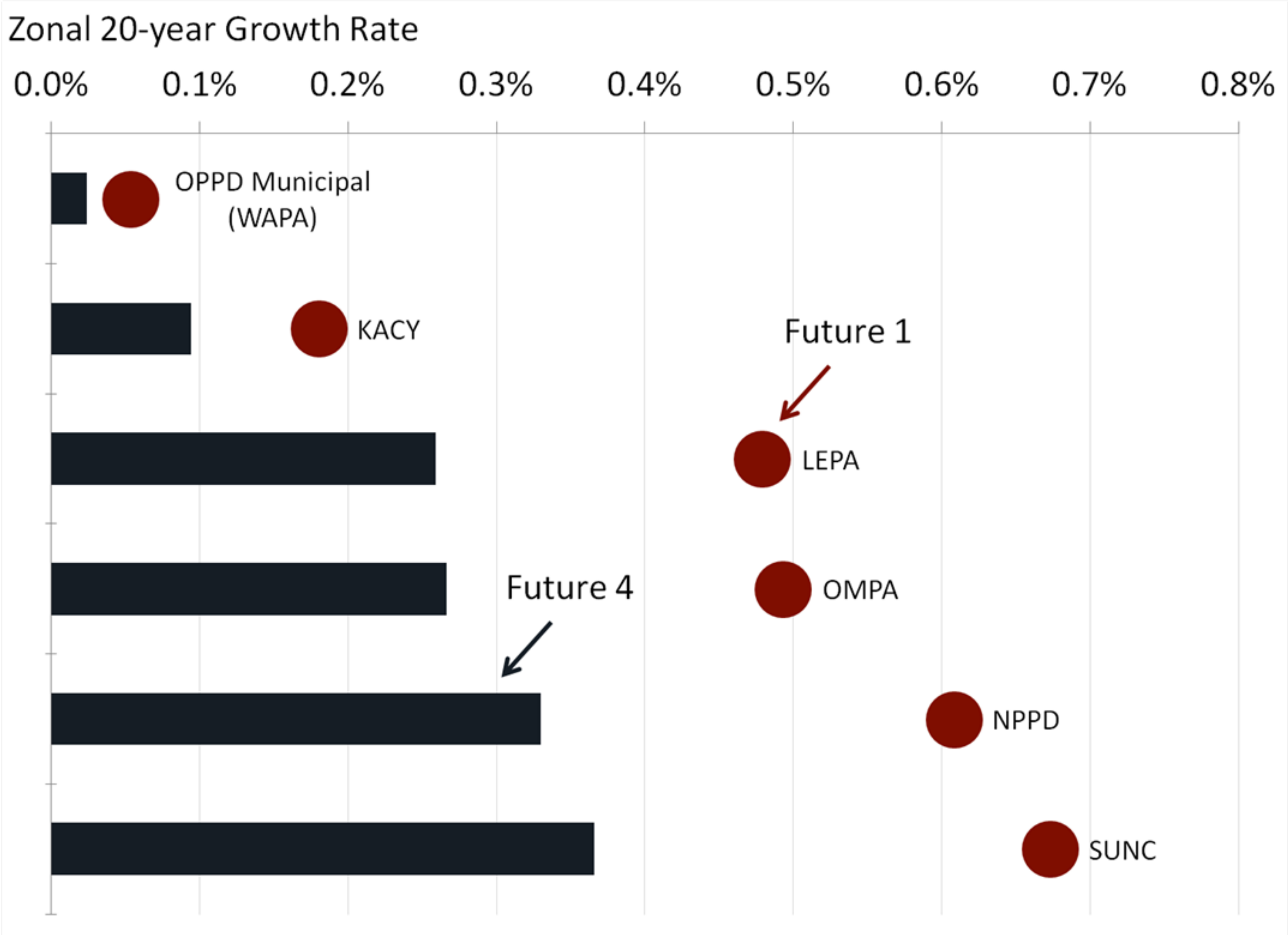
- Individual zones have diverse load growth rates
  - Kansas City Board of Public Utilities: 0.17%
  - Westar Energy: 0.82%
  - Oklahoma Gas & Electric Company: 1.34%
  - Southwestern Public Service Company: 2.02%
  - others....
- Applying the ratio of Combined Policy SPP load growth to Business as Usual SPP load growth over the period to the zonal load growths should preserve the uniqueness of zonal load growth rates

Zonal “pro-rata” Growth

- Load growth in Future 4 is 55% of the load growth in Future 1
- Multiplying each zone’s growth rate by this ratio yielded positive load growths, proportional to the SPP load growth in Future 4

$$\frac{0.71\%}{1.29\%} = 55\%$$

Zonal "pro-rata" Growth Example



Recommendation – Zonal Load

- SPP staff recommends a treatment of zonal load growths based upon a pro-rata application of region wide growth in SPP to all zones in the model.

Annual Energy – Four Options

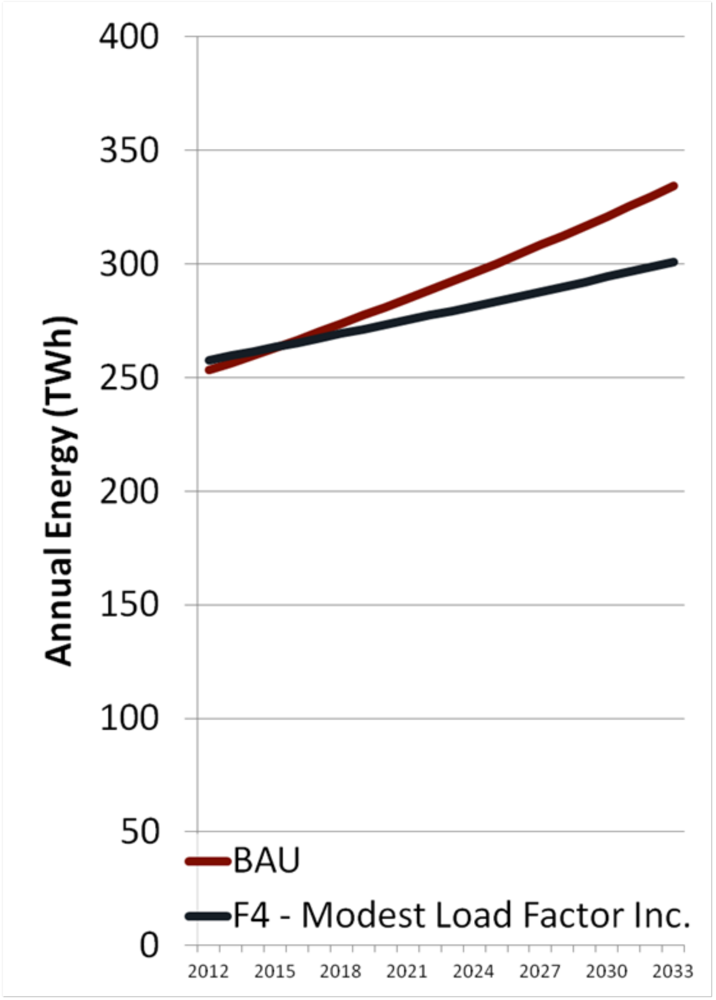
- Combined Policy annual energy options
  - Allow a modest increase in load factor
  - Utilize BAU load factor
  - Hold energy constant
  - Keep load factor constant (note: same as BAU option)

Peak (MW) · 8,760 (hrs) · Load Factor (%) = Energy (MWh)

Calculation of annual energy

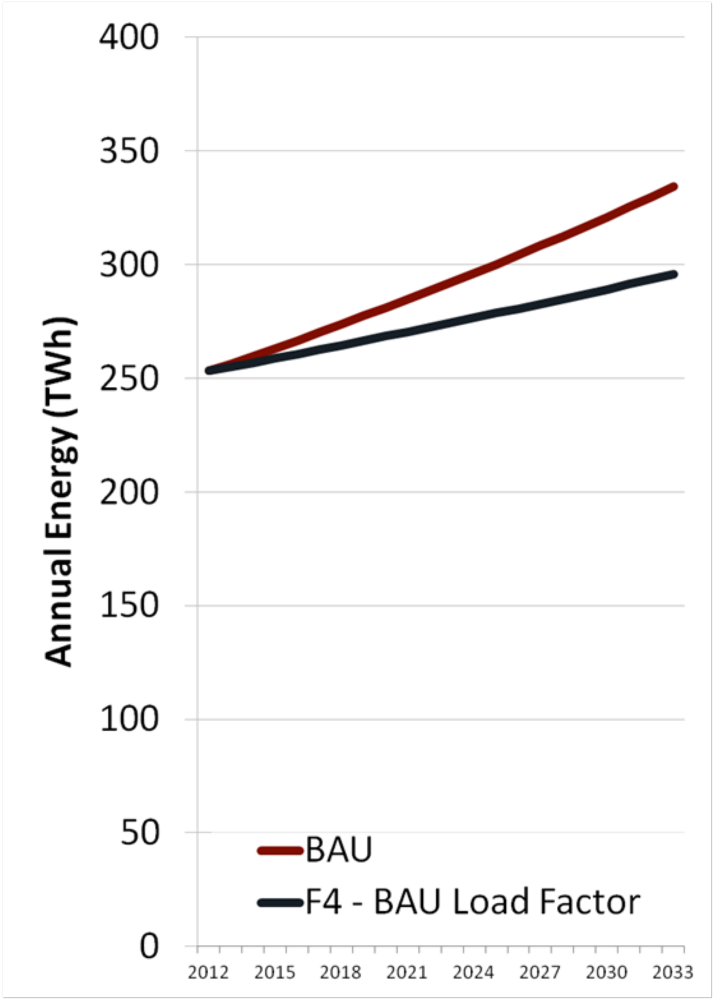
Annual Energy – Modest Load Factor Inc.

- Increase the load factor from the BAU by a modest percentage
  - 1% increase shown here
    - i.e. 55% load factor becomes 56% load factor
  - Matches BAU in 2015
  - Highest energy in 2033 of the three options



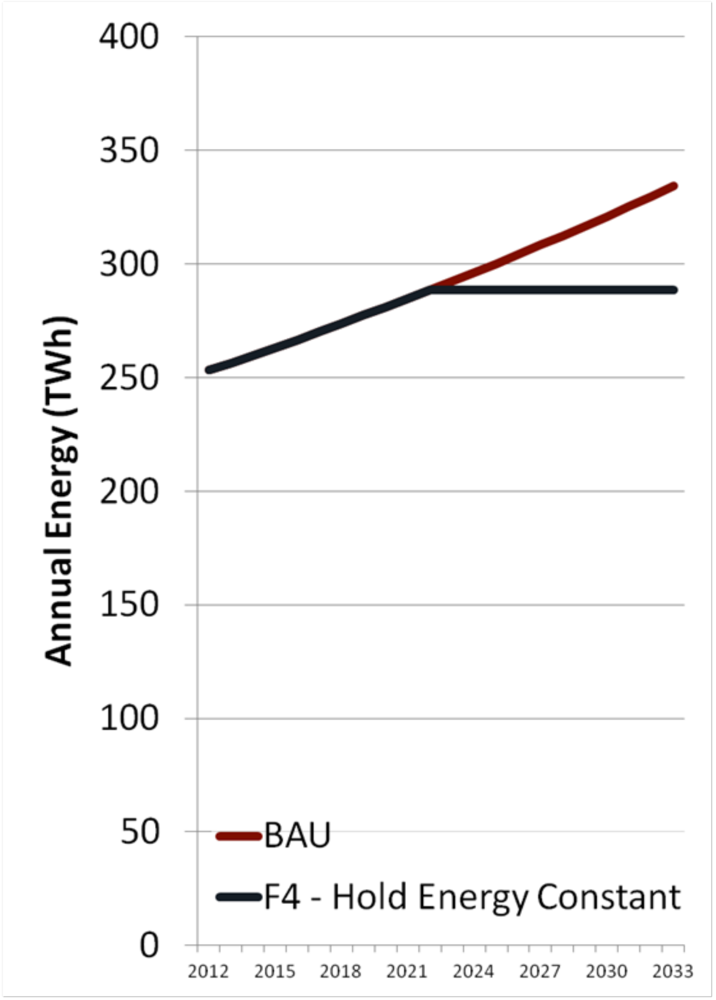
Annual Energy – Utilize BAU load factor

- Maintain the same load factor as the BAU case
  - Less energy than BAU
  - Directly proportional to the lower peak in the Combined Policy future
  - Second lowest energy in 2033 of the three options



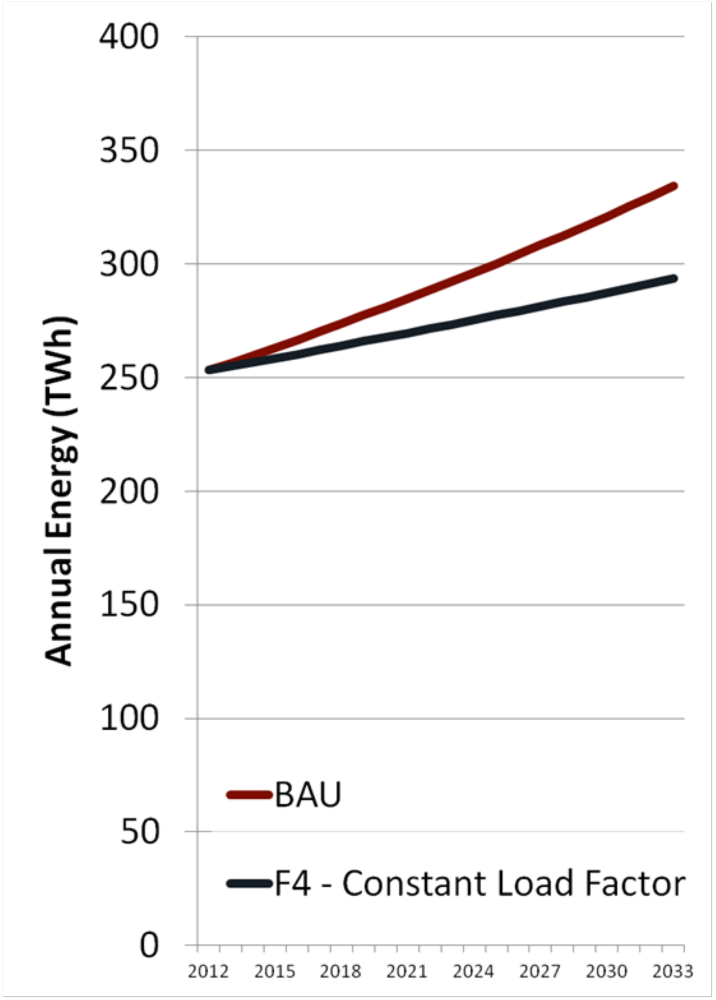
Annual Energy – Hold Energy Constant

- After some growth hold the energy constant
  - 2022 used as start point in example
  - Lowest energy in 2033 of the three options



Annual Energy – Constant Load Factor

- Reflects no growth in load factor
  - Generally reflected in BAU load factor forecasts



Recommendation – Annual Energy

- SPP staff recommends, based on modestly increasing load factors indicated in EIA 411 submittals and feedback during the April ESWG, that a modest increase in load factor be utilized in the Combined Policy future for all zones in the model.

SFOTF Update to ESWG

May 2012

Southwest Power Pool

Outline

- ✓ SPP Concepts
- ✓ FERC Order 1000 Coordination Meeting
- ✓ SPP & MISO Concept Comparison
- ✓ Next Steps & Meetings

SPP Concepts Introduction

- Order 1000 defines interregional project as a tie line
  - SPP proposes to expand definition to also include regional projects that provide interregional value
- Each concept is based on an Order 1000 requirement
- Concepts document available on SFOTF section of SPP website
- Prefer for concepts to be incorporated into the JOAs
- Language in OATT would point to the JOAs
- May also utilize planning manual

SPP Concepts Development

- Seams Steering Committee (SSC) responsible for Order 1000 interregional transmission planning requirements
- SSC chartered Seams FERC Order 1000 Task Force (SFOTF) in February
  - Jake Langthorn, OG&E, Chair
  - Includes 3 SSC members and 1 each from the Economic Studies Working Group (ESWG) and Transmission Working Group (TWG)
  - SFOTF tasked with developing concepts and initial JOA language

SPP Concepts Development

- SPP staff developed initial gap analysis
- Based on requirements in gap analysis
- SFOTF developed draft concepts document
- Concepts presented to:
  - SSC
  - ESWG
  - TWG
  - CAWG
- Coordination with MISO staff

SPP Concepts

1. Identify and Jointly Evaluate Interregional Projects
2. Harmonize assumptions and models
3. Timelines for analysis in "same general timeframe"
4. Sharing of "needs" and solutions of each region
5. Share planning data annually
6. Transparent process with stakeholder participation
7. Projects must first be proposed in each region's regional planning process

SPP Concepts

8. Project must be selected for construction in each region's regional planning process to qualify for interregional cost allocation
9. Website must be maintained for interregional planning

Order 1000 Interregional Coordination Meeting

- April 12 in Oklahoma City
- Interregional Planning & Interregional Cost Allocation
  - Review concepts presented by SPP and MISO staff
  - Incorporate stakeholder comments
  - Develop consensus on concepts

Comparing SPP & MISO Concepts

- Focused on conceptual differences and not on details of implementation
- The comparison is based on what's included in the concepts documents

SPP & MISO Planning Concept Differences

- Process for joint evaluation
  - MISO: Approach utilizes annual review of needs but only periodic review of transmission solutions as needed. MISO prefers the periodic evaluation approach as specified in the PJM-MISO JOA.
  - SPP: Prefers a more defined transmission solution review process that fits within the ITP process.
- SPP would consider a process in which an annual joint stakeholder meeting is held to review the needs to determine whether further analysis of transmission solutions is warranted

SPP & MISO Cost Allocation Concept Differences

- Cost Allocation Concepts
  - MISO:
    - Prefer to utilize formulaic approach that exists with the current MISO-PJM cost allocation agreement (B/C ratio of 1.25)
  - SPP:
    - Seams Cost Allocation Task Force - Concepts drafted from Brattle Group consultant
    - RSC Task Force on Order 1000 – to include 3 RSC members, 3 MOPC members & 1 SPP BOD member

Next Steps & Meetings

- Send comments on SPP FERC Order 1000 Interregional Coordination Meeting to Brett Hooton or David Kelley
- SPP Staff developing 1st draft JOA language based on Concepts
- Next SFOTF Meetings
  - 5/24/12 & 6/12/12 conference calls; 2-4pm
- Next Interregional Meetings
  - 7/13/2012 conference call
  - 9/12/2012 face-to-face
  - December 2012 conference call

Metrics Task Force Update to ESWG

May 2012

SPP Southwest Power Pool

Outline

- ✓ Where we are
- ✓ Preliminary feedback on proposed Metrics
- ✓ Next Steps & Meetings

Where MTF is at this point

- Stole ideas on metrics shamelessly from MISO, PJM, NYISO, ERCOT and member companies. Didn't want to reinvent the wheel.
- March - Brainstorming effort resulted in 28 different ideas for metrics to address RARTF recommendations.
- April - Narrowed 28 down to 13 that are being intensely discussed, reviewed and analyzed.
- The 15 that didn't make it were eliminated due to:
  - Not complete thought or no real dollars associated
  - Difficult if not impossible to calculate
  - Duplicate of existing metric (usually APC)
- Provided updates to ESWG, CAWG
- Review by RARTF Chair and Vice-Chair to see if we are meeting expectations.

Reminder of RARTF Metrics Recommendations

1. Reduced Capacity Reserve Requirements
2. Improvement in Reliability
3. Improvement in Import/Export Limits
4. Public Policy Benefits
5. Reduced Operating Reserve Requirements
6. Other Benefits that can be monetized

Reduced Capacity Margin

- Only included in Regional Cost Allocation Review (RCAR) if SPP reduces Capacity Margin requirement based on annual LOLE calculation. If no Capacity Margin requirement, Benefit = 0
- If SPP reduces Capacity Margin requirement:
  1. Monetization: Capacity Value ($/MW) x Reduction in Capacity Required where price in capacity market < capacity value< cost of new entrant (combustion turbine)
     - Point: SPP has no Capacity Market
  2. Reduction in Capacity= $[(\Delta \text{ CMR})\text{x}(\text{Peak Load})] \div (\text{CMR}_{old})(\text{CMR}_{new})$, where $\text{CM} = [\text{CAP} - \text{Peak Load}] \div \text{CAP}$
     - Timing of when reduction began for each load zone
     - Impact of transfer capacity on LSE sources outside zone

Improvement in Reliability

1. Reliability Cost = Reliability Benefits (simple approach)
2. Increased ATC adds reliability and can be economically captured through the ability to sell more transmission service and reduce cost to ratepayer.
   - Δ ATC x Transmission Rate (x usage factor)

3. Increased ATC allows more sales/purchases of power
   - Δ ATC x (Production Cost – ΔLMP between zones involved in the transfer)
     - Could be double counting of APC

   Concern: loop flows make this metric inappropriate until JOA dispute settled.

Improvement in Reliability (continued)

4. Avoidance of Catastrophic Events

   1. Reduction in load being shed over time x Value of Loss of Load

      Concern: Requires Value of Loss of Load to be defined, requires significant power flow modeling

   2. Risk management valuation. Treat it like an insurance product.

      - Working with AIG to see if this concept can be quantified

Improved Import/Export Limits

Difficulty in monetizing. No known model

1. Removal of hurdle rates in excess of transmission rates between seams.

- This metric should be captured in APC
- Must be done by zone. Some zones will benefit others will not
- Requires an expanded model of neighbors systems and dynamic estimates in imports and exports

Public Policy Benefits

1. Renewable Energy Goal
   - Capital cost savings from being able to locate renewables in higher capacity factor locations (done by zone). APC savings from renewables for each zone.
2. Benefit = Cost of upgrades required to Meet the Goal
   - Assign benefit to each zone base on renewable energy targets.
   - Transmission upgrades by zone
   - Benefit = 0 if no reduced APC and no public policy in zone

Benefits from 1 & 2 are not additive. Could use the Maximum of 1 or 2 for each zone.

Reduced Operating Reserve Requirement

Operating Reserve partially captured in APC

1. Reduction in Ancillary Services is not captured in APC
   - Requires modeling of ancillary services market (future possible metric)
   - Backdoor Method to compare Ancillary Services before and after under discussion.

Other Possible Metrics

1. Increased Generation Competition
   - Zonal Price before – Zonal Price after transmission
   - Long time frame comparison of prices
   - Will require further work and evaluation of data from Integrated Marketplace
2. Reduced Price Volatility
   - Reduces market price risk for buyers and sellers
   - Lower risk premiums in energy offers
   - Will require further work and trend data from Integrated Marketplace

Other Possible Metrics (continued)

3. Increase in Financial Transmission Rights (TCR's)
   - Increased paths create more TCR's and lower congestion cost
   - Market prices for TCR's change over time – difficult to model
   - Not useful for first RCAR but can be used later

Next Steps & Meetings

- Feedback always welcomed. Please send to Tim Miller
- Draft report under development
- Next MTF Meetings
  - 5/11/12 , conference calls in June
- Draft report to ESWG in July for approval

129 FERC ¶ 61,058
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Suedeen G. Kelly, Marc Spitzer,
and Philip D. Moeller.

Midwest Independent Transmission System Operator, Inc. — Docket No. ER08-394-019

ORDER ON COMPLIANCE FILING

(Issued October 23, 2009)

1. On March 23, 2009, the Midwest Independent Transmission System Operator, Inc. (Midwest ISO) submitted revisions to comply with the Commission's order issued February 19, 2009 directing the Midwest ISO to modify Module E to clarify that demand resources can be netted from a load serving entity's (LSE) load forecast.[1] This order conditionally accepts the Midwest ISO's compliance filing, effective January 6, 2009, subject to a further compliance filing, as discussed below.

I. <u>Background</u>

2. In the February 19 Order,[2] the Commission clarified its October 20, 2008 order[3] prohibiting the netting of behind-the-meter generation from a LSE load forecast. The February 19 Order made clear that while an LSE could not net behind-the-meter generation from its load forecast, it could net demand resources from its forecast.[4] The Commission required the Midwest ISO to: (1) submit tariff revisions to clarify that demand resources can be netted from an LSE's load forecast;[5] and (2) to revise the tariff

[1] *Midwest Indep. Transmission Sys. Operator, Inc.*, 126 FERC ¶ 61,143 (2009) (February 19 Order).

[2] *Id*.

[3] *Midwest Indep. Transmission Sys. Operator, Inc.,* 125 FERC ¶ 61,061 (2008) (October 20 Order).

[4] February 19 Order, 126 FERC ¶ 61,143 at P 14.

[5] *Id.* P 33.

to indicate that the Midwest ISO will submit resource adequacy information to state authorities for LSEs that are subject to regulation or using delivery services, rates, terms or conditions established by such state regulatory authority.[6]

II. Compliance Filing

3. The Midwest ISO states in its compliance filing that it has revised Module E of its tariff to clarify that demand resources will be netted against an LSE's forecasted demand unless the LSE requests that the demand resource be treated like other Planning Resources.[7] In addition, the Midwest ISO submitted revisions to ensure that if a demand resource is netted, it will not receive double credit by also being used as another Planning Resource. The Midwest ISO also submitted tariff revisions that clarify that behind-the meter-generation cannot be netted.

4. The Midwest ISO proposes that the quantity of demand resources that have been designated by an LSE to be used for netting against the LSE's forecasted demand will be multiplied by one (1) plus the planning reserve margin applicable to the LSE's demand in determining if the LSE has sufficient Planning Resources in an amount greater than or equal to the forecast LSE requirement – adjusted for netting – multiplied by one (1) plus the applicable planning reserve margin to meet the LSE's resource adequacy requirement. The Midwest ISO asserts that its gross up for netting achieves the netting requirement mandated by the February 19 Order.

5. The Midwest ISO also proposes to modify its tariff to require the Midwest ISO to submit resource adequacy information to the applicable state authority for LSEs subject to regulation or using delivery services rates, terms or conditions established by such state regulatory authority.

III. Notice of the Compliance Filing and Responsive Pleadings

6. Notice of the Midwest ISO's compliance filing was published in the *Federal Register*, 74 Fed. Reg. 14,795 (2009), with interventions and protests due on or before April 13, 2009. None was filed.

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[6] *Id.* P 37.

[7] Planning Resources are capacity resources or load modifying resources that can be used to satisfy resource adequacy requirements. Midwest ISO FERC Electric Tariff, Fourth Revised Volume No. 1, Original Sheet No. 245.

IV. Discussion

Commission Determination

7. We accept the Midwest ISO's compliance filing, subject to a further compliance filing. The Midwest ISO has met the requirements of the February 19 Order by revising its tariff to provide for netting of demand resources from an LSE's load forecast and to prohibit the netting of behind-the-meter generation. The compliance filing also complies with the February 19 Order's requirement for reporting of resource adequacy information to state authorities.

8. However, we find that the Midwest ISO's proposal to gross up the demand resources that have been designated by the LSE to be used as a netting adjustment appears to be beyond the scope of the compliance requirements of the February 19 Order. We direct the Midwest ISO to revise proposed Substitute Original Sheet No. 1442A to remove the gross up provision and provide that demand resources that have been designated by an LSE pursuant to section 69.2.2 can be netted from the Forecast LSE requirement, as required by the February 19 Order. Our ruling in this proceeding is without prejudice to the Midwest ISO making a proposal in a section 205 filing.

The Commission orders:

(A) The proposed tariff revisions submitted in the compliance filing are hereby accepted, as modified, and discussed in the body of this order. The proposed tariff revisions regarding the gross up of demand resources are rejected, as discussed in the body of this order.

(B) The Midwest ISO is hereby directed to make a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Memorandum

To: **ESWG**

From: **SPP Staff**

CC:

Date: **04/12/2012**

Re: **Policy Survey Justification**

EXECUTIVE SUMMARY

During the ESGW call on 04/05/2012 two action items were created:

1) Staff should provide redraft instructions/questions for the policy survey renewable section to clarify what is being asked. This should be sent to the ESWG as soon as possible Friday morning so that the group members can respond by Monday COB with questions and/or changes.
2) ESWG members should provide explanation of the differences in renewable targets/mandates they are showing in this survey compared to the 2010 ITP20 survey.

On April 9, 2012 SPP staff received the justification from the members about the difference between Mandates/Targets regarding 2010 ITP20 and 2013 ITP20 Policy Survey. Also members sent the confirmation/modification regarding the current Policy Survey.

- EMPIRE DISTRICT (Greg Sweet) – no changes currently to the 2013 ITP20 survey. Responses are not significantly different from the 2010 survey, they tried to reflect some flexibility in location of the wind resources once current wind farms reach the end of their assumed useful lives. They may re-invest in the same locations or possibly in another state, but the renewable output for Empire remains relatively constant.

- OMPA (Michael Watt) – no changes currently to the 2013 ITP20 survey. No justification about the difference between 2010 and 2012 survey.

- SWEPCO/AEP (Kip Fox)- no changes currently to the 2013 ITP20 survey.

1. SWEPCO was in negotiations for potential wind project in Arkansas that was included in the 2010 survey which never materialized (553 GWh) and was not included in our 2012 survey.

2. The requirements in Arkansas, Louisiana were estimated at 10% for the 2010 survey those requirements are no longer there. With the cost of natural gas dropping, AEP sees natural gas as more logical energy replacement over wind without a state mandate or settlement agreement and took those numbers out of our 2012 estimate. Therefore only mandated wind is in Arkansas, Louisiana, and Texas numbers for SWEPCO. The PSO numbers are a target and based on the lack of a state mandate PSO have lowered estimate to reflect the lower price of gas as a replacement.

3. Additional contributing factors include a lower growth rate than what was used in 2010.

   In Summary, AEP lowered estimate based on changes in mandates not materializing in various states, lower load growth, lower natural gas prices, and potential wind projects no longer being considered. AEP have no changes currently to the 2013 ITP20 survey but may revise estimates if the 2013 ITP20 survey definitions change.

- LES (Kurt Stradley) – no changes currently to the 2013 ITP20 survey. Originally LES had thought would have some MWh targets which was shown in the CAWG survey but have since done away with that.

- AECC (Bruce Walkup) – AECC have changed the 200,800 MWh of wind in the “Renewable TARGETS’ tab is officially to be made up by 51 MW of the Flat Ridge 2 project in Kansas in the ‘Existing Wind in Models’ tab, previously they had no target.

- City Utilities of Springfield, Missouri (Kenneth Hale) – no changes currently to the 2013 ITP20 survey. Their current survey submission would be the latest forecast based on existing renewable mandates. The earlier survey response would have been based on a future with a 20% Federal RES mandate.

- OGE (Leon Howell) – no changes currently to the 2013 ITP20 survey. OG&E lowered its expectations on wind total from 6 million MWh in the 2010 survey to 5 million MWh in the 2012 survey. I the 2010, OG&E had expectations that legislation regulating carbon would be passed through legislation similar to Waxman Markey. That legislation would have caused utilities to reduce carbon output every year for several years to come. It now appears that type of legislation will not be passed. In fact SPP’s scenarios assume a carbon tax will be applied not a reduction in carbon output.

- NPPD (Timothy Owens) – no changes currently to the 2013 ITP20 survey. The vast majority of the reduction in renewable energy targets between the 2010 and 2013 ITP20 surveys is due to a reduction in NPPD’s forecast for native load energy over that same time period.

- SUNFLOWER (Tom Hestermann) – no changes currently to the 2013 ITP20 survey. Changes from the 2010 survey were due to changes in the load forecast which precipitated changes in the amount of wind mandated.

- SPS (Beenie Weeks) – no changes currently to the 2013 ITP20 survey. In the ‘Existing Wind in Models’ tab on the third table the Majestic Wind II project is being counted twice. The project is in the SPS zone but will be going to AEP. SPS called Majestic Wind Phase 2 and AEP called it High Majestic II. The 2010 ITP20 survey included a tab for Existing Wind. The instructions stated that the existing wind in the first table would be used in the 2030 model. SPS interpreted the instructions to mean they should show the amount of wind that it "thought" would be online in the year 2030. The 2010 survey also included a Renewable Energy Target (RET) tab that included state mandates and utility targets (one number) to be used for the year 2022 and 2017. SPS's interpretation of the instructions was that they should include the amount of wind that it "thought" would be online within the SPS BA in the year 2022. Therefore, the amount of wind provided in the survey was a projection that included new wind that SPS thought would be on the transmission system. The 2012 ITP20 survey instructions have been updated to clarify what information is needed for existing wind and the mandated and targeted renewable requirements. The existing wind should included facilities that are currently in operation plus any new wind that may be online by December 2013. SPS's jurisdictions have renewable mandates and SPS has provided the minimum mandate requirements for SPS in TX and NM. SPS does not operate in a jurisdiction that has a renewable "target (goal)" therefore the target is zero. Clarification of the intent of the survey has resulted in a large reduction in the existing wind from the 2010 ITP20 survey.