

WestConnect Annual Planning Workshop

November 16th, 2011, 9:00 AM – 5 PM Mtn Time

SRP PERA Club

1 E. Continental Drive, Tempe, Arizona

Moderators: Charlie Pottey, SSPG Representative LeeAnn Torkelson, SWAT Chairman
Blane Taylor, CCPG Chairman Tami Anderson, WestConnect Plng Mgr

9:00

1. Introductions, Agenda Review & Opening Remarks Tami Anderson

Ms. Tami Anderson began the meeting by welcoming everyone. She explained meeting logistics, and gave a brief overview of the agenda. The meeting attendees in the room and on the phone introduced themselves. The WestConnect Annual Planning Workshop attendee list is attached at the end of these meeting notes.

9:15

2. Presentation of Entities' Ten Year Transmission Plans and Transmission Planning Study Summaries

Panel 1: CCPG WestConnect Planning Members Blane Taylor

Basin Electric Power Cooperative	Public Service Company of CO
Black Hills Power	Tri-State G&T
Colorado Springs Utility	WAPA – RMR
Platte River Power Authority	

CCPG Subregional Study Groups

CDWPG	Senate Bill 100
DEEP	Foothills
Voltage Coordination	Compliance
Conceptual Work Group	3627

Mr. Blane Taylor, Chair of the CCPG, presented the CCPG 2011 4th quarter update to the Workshop attendees. He highlighted that CCPG meetings are transparent, and open to stakeholders. The CCPG update presentation summarized 10-year transmission plans for the CCPG members. The presentation discussed: Black Hills transmission projects in South Dakota, Wyoming, and Colorado; Update on WAPA-RMR 10 year transmission plans, a PSCO update discussing the expected 10-year plan projects (with a brief description of each facility); an update from the CCPG Subcommittees – Colorado West Slope (San Juan Basin Energy Connect), CCPG Foothills Area (PRPA, PSCo, TSGT, and WAPA), and Douglas, Elbert, El Paso Pueblo Counties (DEEP); updates on the Subregional Study Groups (listed above), and CCPG upcoming events.

Mr. Taylor reviewed maps of the CCPG projects and discussed the facilities in more detail such as proposed in-service dates, and the nature of the projects.

Mr. Tom Green presented the PSCO projects through 2016. He provided a brief overview of the 2011 CCPG Organization Chart, and summarized the functions of the different groups, subcommittees, and task forces within CCPG.

Mr. Jared Griffiths presented San Juan Basin Regional Transmission Improvements for the Colorado West Slope. He described projects in the San Juan Basin to alleviate TOT 2A impacts due to loop flows (TOT 2A is the major tie between Colorado and New Mexico). He gave a brief overview of the studies done to determine the need for the projects and nomograms for the interface.

Mr. John Collins provided an update on the 2011 summer and 2011-2012 winter construction outage assessments done in the CCPG Foothills Area. He described the types of analysis run, and the conclusions -- no stability problems were found in the area.

Mr. Tom Green and Mr. Cliff Berthelot provided the DEEP update which addressed plans for the transmission system in the Southern Front Range area of Colorado. Cliff provided historical background on DEEP activities and analytical achievements in the front range area. He described the analysis (2017 & 2022 HS Category B&C outages), and anticipates providing a report to the CCPG in December 2011 for approval.

Mr. Tom Green and Mr. Shawn Carlson provided an update on the NERC standards compliance group that performs the TPL assessments (powerflow, reactive, and dynamic analysis). The 2016 light autumn and 2015/16 heavy winter scenarios have been completed. The 2022 heavy winter study report will be completed by December 31st. The study results are being reviewed by the group, and will be included in 2011 assessments. The 2021/22 heavy winter cases were scheduled to be posted in September, but were not finalized in time for the study work.

Mr. Tom Green and Mr. John Collins Provided an update on CCPG Voltage Coordination Guidelines originally developed in 1993 for the area. The guidelines are reviewed and checked for consistency with standards on an annual basis. The Colorado PUC and WECC RC have also been coordinated with during the review of the voltage guidelines. The WECC RC requested a set of multiple contingencies for consideration in real time study analysis, and Mr. Green requested follow-up from the group on this matter.

Mr. Tom Green then provided an update on the Colorado SB (Senate Bill) 07-100 which requires utilities to designate "Energy Resource Zones" in Colorado. The last plan was filed in October 2011. Mr. Green showed the proposed projects on a map, several of which have already been implemented. Open stakeholder meetings have been held, and Mr. Green hopes to file with the CPUC in early 2012 for these projects. The full report will be available on the CPUC website.

The Black Hills SB100 projects were presented by Mr. Wes Wingen. There are two Energy Resource Zones for Black Hills based on projects in the queue. Project 1 involves a 115 kV line, scheduled to be in-service at the end of 2012. Zone 2 is part of a Solar/PV installation at a 69 kV station with no associated transmission projects.

The Conceptual Planning Work Group was the next update introduced by Mr. Green. The CPWG contemplates plans in 2030 and beyond. The CPWG is trying to get input from TPs and others on how to build such scenarios. Mr. Gerry Stellern provided the meeting attendees with background on how the group was established and current status. The majority of the work is being done on Scenario 3 which contemplates a 30% RPS for the state. Wind and Solar resources and transmission line topology were put in the resource zones, and 1.4 % and 3% load growth scenarios were examined. The report was finalized and posted on the WestConnect CCPG website. Next steps are to take the assumptions and put them into a powerflow analysis to ensure the proposed lines are still valid. The report also contemplates a scenario where Colorado is modeled as an exporting state, and a scenario where the fossil resources are retired. The next steps include development of transmission plans for each of those scenarios.

The discussion concluded with Mr. Blane Taylor informing the attendees of the following upcoming meetings:

- TSGT Transmission Rule 3627 stakeholder outreach meeting on December 2, 2011
- WAPA RMR FERC 890 planning stakeholder meeting on December 14, 2011
- CCPG meeting on December 15, 2011 in Westminster
- PSCO FERC 890 planning stakeholder meeting on December 9, 2011

The full CCPG presentation is located at: [CCPG Status Update](#)

Panel 2: SSPG WestConnect Planning Members **Charlie Pottey**

NV Energy - NPC/SPPC	SMUD
TANC	WAPA – SNR

SSPG Subregional Study Groups **Charlie Pottey**

Mr. Charlie Pottey gave the Sierra Subregional Planning Group Update presentation which covers the 2011 study request, and 2011-2020 projects. The SSPG has 4 Members – NV Energy, SMUD, TANC, and WAPA-SNR.

The presentation covered: SSPG request analysis considerations; background of the SSPG request, the SSPG 2011 Technical Study Plan; case diagrams; base case development parameters; reliability study conclusions, SSPG ongoing projects updates (new transmission projects, proposed transmission projects, renewable energy transmission, NV Energy/LS On-line project, and detailed analysis results).

SSPG requested 3 scenarios to be studied by WECC largely due to the availability of geothermal resources in northern Nevada (1000 MW LMUD trans-sierra tie 100% renewable

Eldorado Valley Study Group	NM Study Subcommittee
SATS Subcommittee	Short Circuit Work Group
Transmission Corridor Work Group	Advisory Work Group

Ms. LeeAnn Torkelson presented SWAT 10-year transmission plans to the attendees. She noted that the plans are still under development and that names/dates/routes, etc. are subject to change. The presentation provided high level summaries for the entities listed above under the heading Ten Year Transmission Plans. Ms. Torkelson presented plans for SRP and IID.

Ms. Barbara McMinn presented APS projects and transmission plans. She noted that the Morgan – Pinnacle Peak 500/230 kV double circuit line was completed in late 2010. New projects included the Hoodoo Wash 500 kV switchyard, and Cedar Mountain 500 kV switchyard. Ms. McMinn then went through the deferred projects list. All deferred projects except one had its in-service date moved from 2014 to 2015. The remaining project was moved to 2016. The projects were deferred due to slower than anticipated load growth. She described the facility and necessity of the 10 year plan projects for APS. Transmission line siting for the North Gila – TS8 230 kV line is anticipated for the week after Thanksgiving.

The next update was from El Paso Electric given by Mr. Dennis Malone. Mr. Malone noted that most of the projects he'd be discussing are load growth projects involving re-conductoring existing lines, and a few new line projects. His discussion also included information on new generation and retirements. The total retirements in the plan were 573 MW, while new generation is anticipated at 1045 MW. Much of the new generation will be in the eastern area, near the Caliente sub because it is the fastest load growing area.

The IID presentation was covered by Ms. Torkelson. The presentation covered a completed project (TL2-2011), new projects, and deferred projects. There are five 230 kV transmission lines anticipated in-service during the 2013-2014 timeframe, and one 500 kV line anticipated in-service in 2017. Other development activities included four substations anticipated in-service from 2012-2015.

Mr. Charlie Pottey gave the NV Energy presentation. Most of the NV Energy projects were covered in the SSPG presentation earlier. Please refer to Panel 2. Mr. Pottey's discussion focused on the consolidation of NV Energy's Northern and Southern BAs. Also, if Phase 2 of the On-Line project goes forward, there will likely be more path rating studies completed at that time. NVE intends to withdraw the On-Line from the Three-Phase Rating Process at this time. He also discussed the nature of the 6200 MW of renewable interconnection requests in the NVE queue.

The PSCNM presentation was given by Mr. Tom Duane. The updates reviewed the 10 year plan in the NE area of New Mexico. There weren't any additional projects for this 10-year plan cycle, and some projects in the plan have been deferred.

The Salt River Project presentation was given by Ms. LeeAnn Torkelson. The presentation provided an overview on changes since last year's plan cycle. The presentation showed

completed projects, new projects, and deferred projects. The new projects involved Eastern Mining Area Projects, and East Valley Industrial Expansion. Deferred projects were delayed due to economic reasons, as with many other deferred projects in SWAT. System maps segregated by voltage displayed changes (in red) from the previous year's plan.

Mr. Bruce Evans presented Southwest Transmission Cooperative 10-year plan projects. The Pantano to Sahuarita 230 kV line loop-in to the New Tucson Project went into service in 2011. There are two new 115 kV projects and one 115 kV deferred project in the plan.

Mr. Gary Trent presented the 10-year plan projects for Tucson Electric Power. Completed, new, and deferred projects (due to load growth projections) were included in the presentation. Unchanged projects for the 10-year plan were described by Mr. Trent. The deferred projects (mostly re-conductor deferrals based on possibility of achieving higher operating temperatures) were moved from the planned to the conceptual designation. Mr. Trent noted that the Pinal Central – Tortolita 500 kV project hasn't been sited yet. The project is expected to be in-service in 2014, with siting possibly after the first of the year 2012.

Mr. Joshua Johnston presented the WAPA-DSW region 10-year plan project information. He reported on completed, new, and deferred projects. His discussion emphasized that the 115 kV wood pole transmission lines south of the Phoenix and Parker systems should be replaced with steel structures. WAPA-DSW is only able to make replacements as funding is received.

Ms. LeeAnn Torkelson completed the presentation by presenting contact information of the presenters, and upcoming open (FERC Order No. 890) stakeholder meetings.

The full SWAT Transmission Plans presentation is located at: [Panel #3 – SWAT Ten Year Transmission Plans - 11/16/11](#)

An update on SWAT activities called the SWAT Update presentation was given by Ms. LeeAnn Torkelson. Ms. Torkelson described the SWAT Projects List and encouraged participants to contact her to get their project included on the list and subsequently on the map developed for the SWAT region. The SWAT Committee updates highlights follow: The CRT is continuing the biennial assessment, next meeting to be held in December 2011. The CATS is covering 3 studies (project outage, extreme contingency, and RMR) and the Centennial West WECC Project Coordination is complete, 2012 activities include coordinating AZ seed cases and CATS may become the forum for the coordination request with CTPG studies. The NM committee will be completing collector system studies in 2012. The Short Circuit Work Group CAPE and ASPEN cases are approved and ready for use, PSS/E case complete for LADWP, Ms. Torkelson requested a reply from LADWP on the PSS/E case. The next meeting will be in February or March for potential development of short circuit maps. The Transmission Corridor Work Group encouraged viewing the Blog on the WestConnect website. The Advisory Work Group is focused on monitoring and understanding planning activities in the area, the last conference call was held on 10/7, the 2012 activities include continued outreach on Southwest planning activities. The EVSG

completed an inventory of existing and proposed projects, and a conceptual plan of proposed projects, testing the conceptual plan is now underway, the 2012 activities include finalizing the study, and determining future tasks/activities/leadership.

The full SWAT Update presentation is located at: [SWAT Update - 11/16/2011](#)

12:00-12:45 (Lunch Break)

Panel 4: Other WestConnect Planning Participants with Transmission Plans

High Plains Express Initiative	SPPR Transmission Project
SouthLine Project	TransWest Express
Western Wind and Solar Integration Study	Wyoming-Colorado Intertie
Centennial West Clean Line	SunZia Transmission Project

Mr. Green gave an update on the High Plains Express Initiative. The participants in the project include XCEL, SRP, PNM, NextEra Energy, TSGT, CSU, BH, LS Power, WAPA, Wyoming Infrastructure Authority, State of Colorado Governor's Energy Office, and New Mexico RETA. The project is now in Stage 3 of development. Mr. Green noted that the goals are to provide a good system backbone, provide access to renewables, and coordinate with the surrounding systems. Reports and materials are posted at www.highplainsexpress.com. A Stage 3 Efforts Meeting will take place in the first quarter of 2012.

Mr. Green's full presentation is located at: [High Plains Express Update - 11/16/11](#)

Mr. Doug Patterson gave an update on the SouthLine Transmission Project. The updates showed that the WECC Project Coordination process was completed in March 2011, and the WECC Phase 1 Comprehensive Progress report will be completed in December 2011. An NOI to initiate an EIS is intended to be complete by the end of 2011, with public scoping in early 2012. The project involves two line segments connecting southern NM and AZ. The targeted in-service year for the project is 2015. Phase 1 studies are mostly complete. The comprehensive progress report should be complete in December 2011. The purpose and need of the project is to improve reliability of the area (removal of very old wooden structures), addition of another source to the area, relieve congestion (to get a path to market), and support growth. The route philosophy aims to use existing rights of way, to minimize the impacts of the project. Further information can be found at www.southlinetransmissionproject.com

Mr. Patterson's full presentation is located at: [Southline Transmission Project](#)

Ms. Debra Lew gave a presentation on the Western Wind and Solar Integration Study (Phase 2). The update reported on environmental analysis results and data such as NOx, SO2, and CO2 emissions, and other thermal generation startup impact info. The analysis examined emission impacts of on/off cycling and ramping of thermal units, and finding wear and tear costs of such cycling. A report will be available when the analysis is completed. Units that

performed well under the cycling and ramping analysis will be categorized as “best in class” in the final report. Ms. Lew reported that updating the wind and solar data sets is complete, and the next steps for this effort are to build the Plexos model to run transmission analysis (in the next 2 months). There is a TRC call scheduled for December, and it is likely that there will be an all day meeting at the end of January or the beginning of February 2012.

Ms. Lew’s full presentation is located at: [Western Wind and Solar Integration Study Presentation-11/16/11](#)

Mr. Keith Sparks gave a presentation on the Centennial West Clean Line project. He began with an introduction of the project and background of the Clean Line Energy Partners (CLEP). The project aims to connect renewables located near the geographic center of the USA to major load centers. CLEP wants to build a converter station in AZ for solar and wind from NM. The NEPA process has been initiated with the BLM leading. Mr. Sparks then described the public outreach efforts, such as community leader workshops held by CLEP. CLEP is now working with WECC and the Environmental Data Task Force. Mr. Sparks outlined coordination taking place with WECC and inclusion of the project in the 10 and 20 year study plans, and path rating process. A CAISO interconnection request will be filed in March 2012. The NEPA process right-of-way application has been submitted. An MOU with WAPA and New Mexico RETA has been signed. NEPA public scoping meetings for the project are anticipated in mid 2012. A NOI is anticipated to be issued in the 2nd quarter of 2012. Helping CA meet the RPS (33% by 2020) was presented as a benefit of this project. Centennial West plans on achieving commercial operation by early 2018. Further information can be found at www.centennialwestcleanline.com.

Mr. Spark’s full presentation is located at: [Centennial West Clean Line WestConnect Presentation 11/16/11](#)

Mr. Dennis Delaney delivered the Southwest Public Power Resource Group Transmission Project update. He noted that the project is being funded through the Western TIP, and equipment is currently being purchased. The first leg of the project is moving forward (3 terminal plan for rebuilds of existing Western lines).

Mr. Delaney’s full presentation is located at: [SPPR Transmission Project Presentation - Panel 4 - 11/16/11](#)

Mr. Tom Wray gave a presentation on the SunZia Southwest Transmission Project. The presentation contained information on the Rapid Response Team for Transmission (RRTT) projects, the draft Environmental Impact Statement, project timeline, and maps of the projects. The current plan involves two 500 kV AC transmission lines (400 mi, 3000 MW bi-directional rating). The RRTT accelerated the process where possible, reducing the typical permitting delays. The NEPA process began in 2009, and BLM is the lead agency. The SunZia project is anticipating an NEIS, with anticipation of the final EIS in June 2012. Mr. Wray displayed geographical maps of the study area and described the proposed routes for the project. Initial work with the anchor tenants for the merchant portion of the project is beginning. Further information for the project is available at www.sunzia.net.

Mr. Wray's full presentation is located at: [SunZia WestConnect 11/16/11 Presentation - 11/16/11](#)

Mr. Bob Easton from WAPA delivered a presentation on the TransWest Express Project Update. The presentation included a project summary, WAPA's involvement in the project development, Rapid Response Team support, Phase II WECC path rating process progress, and a project timeline. The project aims to deliver renewable wind energy from Wyoming to the Las Vegas valley, and on to the California markets. The WECC RTEP was posted in September 2011. Western and TransWest Express signed an MOU, and Western will receive 50% of the line (1500 MW) capacity rights. Western is the lead for environmental analysis. The Phase I rating process will be completed in 2012. Phase II processes are underway, and a report to the path review group is expected in the fourth quarter of 2012. A Draft EIS is also expected in 2012, and the anticipated in-service date for the project is in mid 2016. Further information can be found at www.transwestexpress.net.

Mr. Easton's full presentation is located at: [TransWest Express Project Update - 11/16/11](#)

Mr. Adam Gassaway from LS Power gave an update on the Wyoming – Colorado Intertie (WCI) Project. The presentation provided a project overview, project purpose, and project update. Mr. Gassaway introduced LS Power, and provided an overview of their projects in the United States. The project consists of a 180 mile 345 kV line (850 MW capacity is proposed). WCI received a request for 100% of the capacity in July 2011. The auction process produced no other bidder beating the current offer. The TSA needs to be finalized and approved by FERC. Mr. Gassaway also gave supplemental information for the On-Line Phase 2 project.

Mr. Gassaway's full presentation is located at: [Wyoming-Colorado Intertie Project Presentation - Panel 4 - 11/16/11](#)

3. 2011 WestConnect Subregional Transmission Study Plans **Tami Anderson**

a. TEPPC Study requests

Two 2011 requests were discussed (shifting 12,000 GWh from CA to NM and shifting 12,000 GWh from CA to AZ/South NV)

b. Stakeholder Study Requests

Ms. Anderson requested suggestions for the upcoming TEPPC study request window for any economic study requests that transmission providers have received. Proposals and study requests should be sent to WestConnect by December 16th. Please submit your request to ta.anderson@mappcor.org.

Ms Anderson also gave an overview of the WestConnect synchronized planning cycle.

Ms. Anderson's full presentation is located at: [2011 WestConnect Subregional Transmission Study Plans - 11/16/11](#)

2:30 (Afternoon Break)

4. Annual WestConnect Transmission Plan

Tami Anderson

a. Modifications to Report(s)

The PMC has decided to combine the two previous reports into one report. The report will include TPPL data and highlights of Subregional planning efforts and stakeholder activities.

b. Transmission Plan Project List Workbook (TPPL)

Ms. Anderson gave a project status update on the TPPL workbook and informed the group that a demo is available on the WestConnect website. She also reviewed some of the project features.

c. Maps Submittal for Projects

Ms. Anderson requested that TPPL sponsors include maps for their projects using acceptable formats. WestConnect has a contract with SRP to develop the maps for the WestConnect plan. The deadline for submitting mapping data is December 15, 2011.

d. Transmission Plan Development Schedule

Today is the opening of the official data request from WestConnect for sponsors to enter data into the TPPL workbook. The deadline for sponsors to enter data into the TPPL workbook is December 16th. The first draft of the WestConnect plan will be sent to the SPG chairs on January 6th with comments from SPG chairs due January 20th. The final draft of the plan will be disseminated on February 1st, with comments due at or before the February 16th Annual Planning Meeting in Las Vegas.

Mr. Green recommended some changes to the TPPL summary sheet, and Ms. Anderson will follow-up with him offline to accommodate the request. Mr. Green also recommended putting the project summary sheets in-line with the project maps. Project sponsors can contact westconnect@mappcor.org for access to the TPPL workbook.

5. Mod 29 Updates

Bob Easton

Mr. Easton presented the MOD 29 Issues Update. The Joint Initiative Group has begun drafting an issue paper which will culminate with a SAR. The proposed SAR will kick off the effort to provide proposed changes to R2.1 of the standard, and remove R2.2. R2.3 changes eliminate the reliability limit, and replace with TTC. Next steps are to complete and issue the draft issue paper, develop a timeline for the SAR process, begin outreach efforts in the east, maintain contact with WECC and NERC, and finally submit the SAR and begin the NERC process. The draft issue paper has been completed and is out for comment. Comments from Columbia Grid and Northern Tier are expected soon.

Mr. Easton's full presentation is located at: [MOD 29 Updates - 11/16/11](#)

6. FERC Order 1000**Charlie Reinhold**

Mr. Reinhold delivered the WestConnect Order 1000 Process presentation. The order was issued on July 21, 2011, and became effective on October 11, 2011. Mr. Reinhold began by giving a high level overview of Order 1000 requirements and impacts on WestConnect and neighboring regions in terms of interregional coordination. Some of the compliance due dates discussed were the October 2012 deadline for the intra-regional processes, and 6 months after that for inter-regional coordination. WestConnect held a meeting on October 24th for stakeholder input in Denver. ICF International is facilitating the stakeholder process. More stakeholder meetings and webinars will be held in the future. Stakeholders recommended a governance process, principles document, work group creation for specific issues/functions, and bringing together as broad a group of stakeholders as possible. The WestConnect preliminary action plan was displayed, and is part of the presentation. The presentation included proposed timing deadlines. Mr. Reinhold and Mr. Trent offered recommendations on saving customers the most money versus a bigger or smaller planning region.

Mr. Reinhold's full presentation is located at: [FERC Order 1000 - 11/16/11](#)

The meeting was adjourned at 3:05 pm on November 16, 2011.

7. Next Meeting

Annual WestConnect Planning Meeting
NV Energy Office
Las Vegas, NV
February 16th, 2012 @ 9:00 am

November 16, 2011 WestConnect Annual Planning Workshop Attendees:

<u>First Name</u>	<u>Last Name</u>	<u>Company</u>
Tami	Anderson	MAPPCOR
Frank	Barbera	Tres Amigas
Ron	Belval	Tucson Electric Power
Cliff	Berthelot	Colorado Springs Utilities
Michelle	Bissonnette	HDR
John	Bloodgood	Towill Inc.
Tim	Breece	Longview Energy Exchange
Shawn	Carlson	BEPC
Kaicheng	Chen	WAPA
Steven	Cobb	SRP
John	Collins	PRPA
Dennis	Delaney	K.R. Saline
Tony	Deluca	SMUD
Tom	Duane	PNM
Bob	Easton	WAPA
Omar	Elabbady	MAPPCOR
Peter	Esposito	Tres Amigas
Bruce	Evans	SWTC
Chris	Fecke-Stoudt	K.R. Saline
Dave	Folce	LMUD
Cindy	Freeman	Southwestern Power
Adam	Gassaway	LS Power
Gary	Graham	Wstrn Resource Advocates
James	Greers	Peak Power Engineering
Mike	Hart	Towill Inc.
Jeff	Hein	XCEL
Robert	Henke	ICFI
Heather	Honsberger	HDR
Phil	Hutton	Kleinfelder
Suzanne	James-King	3M
Lewis	Jeremy	Wstrn Resource Advocates
Joshua	Johnston	WAPA
Larry	Keith	Tetra Tech
William	Kipp	Black Forest Partners
Debbie	Lew	NREL
Margaret	Little	AZCC
Dennis	Malone	El Paso Electric
Enrique	Marroquin	Hunt Power, LP
Grace	Martinez	SCE

Barbara	McMinn	AZPS
Mike	Olson	WAPA
Amanda	Ormond	Western Grid Group/IW
Michael	Ostermeyer	AZ ARNG
Doug	Patterson	Black Forest Partners
Charles	Pottery	NV Energy
Charles	Reinhold	CTC
Mike	Risan	BEPC
Gary	Romero	PDS Consulting
Vicky	Sandler	AZ Independent Scheduling
Russell	Sherman	Worley Parsons
Diane	Simpson-Colebank	Logan Simpson Design
Jerry	Smith	P&R Consulting
Julia	Souder	Clean Line Energy Partners
Keith	Sparks	Clean Line Energy
Gerry	Stellern	XCEL
Bill	Stewart	LMUD
Matthew	Stoltz	BEPC
Paul	Szewczykowski	Logan Simpson Design
Jim	Tang	CAP-AZ
Blane	Taylor	TSGT
Joe	Taylor	XCEL
Rod	Thomas	Longview Energy Exchange
LeeAnn	Torkelson	SRP
Gary	Trent	Tucson Electric Power
Matthew	Virant	Hunt Transmission
Matthew	Waldron	MAPP COR
Laurel	Whistler	SRP
Wes	Wingen	Black Hills Power
David	Winkeljohn	Burns & McDonnell
Tom	Wray	Southwestern Power/SunZia