

Final SATS Meeting Notes
Trico Electric Cooperative, Inc. Offices
October 31, 2008

Attendees:

Ken Bagley, Genesee/SSVEC
Vincent Thor, APS
Ron Belval, TEP
Bobby Chavez, TEP
Bruce Evans, SWTC
Ray Som, SWTC
Reuben Ruiz, CAP
Jim Charters, WSES
Milt Percival, WSES
Charlie Emerson, Trico
Karen Cathers, Trico
Randy Etheridge, Acciona
Cindy Bailey, SunZia/SWPG
Tom Wray, SunZia/Bowie/SWPG
Steve Atkins, NAU

On Phone Bridge:

Gary Romero, KRSA
Allistair Rennie, SRP
Cary Patten, Western
Vicki Sandler, AzISA

Agenda Items:

1) Welcome and Introductions

Ron Belval welcomed everyone to Trico's offices and asked for introductions. Randy Etheridge of Acciona introduced himself and briefly described the "Cobre Sol" or Copper Sun Project which is a new Solar Plant that will be located within the SATS area.

The central focus of the meeting today will be to finalize the SATS Draft Report and present it to SWAT Oversight Committee Meeting, which will be held on November 12th.

2) Review/Approve 10/09/2008 Meeting Notes

Bruce Evans reported that he had received an e-mail from Ken Bagley with a question on the second page, fourth paragraph of the Notes which states "In the 2010 base case studies, one regional issue that was discussed is an overload of the SWTC Apache to Butterfield 230 kV line in 2010 as a result of a category D outage on the EHV system." Ken asked if this outage is caused by a loss of two 345 kV lines then shouldn't this be considered an N-2 or Category C outage? Bobby Chavez explained that as modeled in the 2010 case, a loss of the Express 345 kV line and the Winchester to Vail line is a Category C outage. Another Category C outage, assuming either is initially out of service, which overloads the Apache to Butterfield 230 kV line is loss of Winchester to Vail and Pinal West to South. Bobby suggested that in order to minimize confusion, the

wording be changed to: “In the 2010 base case studies, one regional issue that was discussed is an overload of the SWTC Apache to Butterfield 230 kV line in 2010 as a result of multiple outages on the EHV system.” The group agreed and Bruce will make these changes and send out the final version of the Notes prior to the next meeting.

3) SATS Draft/Final Report

Ron asked the group to turn to the end of the Report stating that there were some major changes made there that need to be discussed first, before going through the main body of the Report. Ken asked if it would be possible to include an Appendix E for the Cochise County Study Group meeting notes. The SATS group agreed to add those to the Final Draft.

Section 27.0 Conclusions and Recommendations. This Section discusses the benefits of Regional Planning and how the brainstorming efforts of the group has provided a framework for future studies. This effort has lead to the discovery of several projects that are candidates to increase transfer and load serving capability. These projects will receive further consideration in the 2009 Study Plan. Use of multiple corridors for proposed lines will provide a higher reliability to the overall system.

Jim Charters suggested that language be added to show that seams issues with New Mexico and the CATS HV Subcommittee have been addressed. He complimented Ron and the SATS group on their efforts in putting together the Report which is a model for other Sub-regional Planning groups.

Ken provided some additional language for Cochise County which prompted a question as to why other counties were not considered. Ron replied that the Cochise County Study group is the only sub-group for a county that was formed within SATS and this was done at the request of Cochise County participants. The other counties are not being excluded, but are being considered through the SATS Study Process. In particular, the Transmission Planning Sub-group or TPSG is looking at transmission system issues crossing multiple county boundaries within SATS..

Tom Wray asked about the time frame for the words “short term in reference to plans addressed in the Cochise County study.” From his perspective, short term is six months or less. Ron replied that in general Planning terms as previously discussed at SATS it has referred to 3-5 years. The group agreed. Wherever the term “short term” appears, Ron will add in parenthesis: (3-5 years).

Tom provided additional wording for the report regarding its benefit in helping to establish need for the siting of projects. He stated that Projects that go before regulatory bodies for siting, such as the Arizona Line Siting Committee, are now expecting to see need for the Projects being established by studies that have taken place in Regional Planning forums. He suggested that the importance of this fact needs to be discussed at SWAT and the other sub-groups.

The group asked that some of these newly discussed items be put into the Executive Summary of the Report.

Section 28 Recommendations and 2009 Study Plan. Some minor wording changes have been made.

Jim Charters stated that language needs to be added that sensitivity analysis will be done for all Renewables. This prompted a discussion on integration issues. Ron replied that the group has not taken steps to address this at the SATS planning level. In fact the report explicitly states that SATS did not evaluate renewable resource integration or regulation issues. These concerns are more appropriately considered in broader study forums such as the SWAT renewable Transmission Task Force or TEPPC. Jim felt that it would somehow need to be addressed as we move forward. The bullet item “Conduct sensitivity analyses related to solar and wind renewable projects” was changed to read “Conduct studies to accommodate renewable projects.”

Ron then focused the attention of the group towards the beginning of the report and stated that he had made some additional changes to the report prior to this meeting, that are not in the revision of the report that was sent to the group.

Section 3.3 Arizona Power Authority (Authority). The third sentence of this paragraph contains the word “Hoover River Plant.” The word “River” needs to be removed.

Section 3.4 Central Arizona Project (CAP). A question arose as to the need to change the wording of the second paragraph of this Section. However, Reuben Ruiz who represents CAP felt that it was ok.

Section 3.8 Fort Huachuca. Need to add the word “Fort” at the start of the first sentence.

Section 3.11 Southwest Area Transmission (SWAT). Need to reword the last sentence to read: “The SWAT regional planning group includes several subcommittees which are overseen by the SWAT Oversight Committee.”

Section 3.12 Southwest Transmission Cooperative (SWTC). The word “TRICO” needs to be changed to lower case “Trico.” This change needs to be made throughout the text.

Section 3.17 Tucson Electric Power Company, Inc. (TEP). Ron added wording for Unisource Energy Services (UES) into this Section.

Sections 4.2 EHV (Extra High Voltage) and 4.2 HV (High Voltage) need to be changed to define the term first and then do the acronym: “Extra High Voltage (EHV)” and “High Voltage (HV).”

Section 4.5 Load Serving Capability (LSC). It was pointed out that this definition is different from the ACC definition. Ron pointed out that the ACC definition that is used for RMR and other ACC study purposes refers to Maximum Load Serving Capability

(MLSC). TEP follows these definitions when doing RMR and other studies for the ACC, but for internal studies for 5-year capital plans and long range plans, the LSC definition is used and this is the definition that is used throughout the report.

Section 5.0 Study Process. The third sentence of the 2nd paragraph should read: “The base assumption is that all incremental loads will be supplied from remote resources.”

The phrase “AZ/NM Renewable Task Force” should be “AZ/NM Renewable Transmission Task Force” in the third paragraph of this Section. Ron noted that this Task Force has now evolved into the SWAT Renewable Transmission Task Force (RTTF).

Section 7.0 Study Scope and Schedule. AEPCO has now been added to this Section. New material added to this Section regarding economic analyses states that it will not be disclosed in this Report, but will receive greater attention in the 2009 Study Plan.

Section 14.0 Existing Transmission. The last sentence of the paragraph between Tables 11 and 12 on page 48 needs to be changed to read: “However, there are also a number of radial lines serving loads in the SATS area.”

The list of CAP lines in Table 13, showing the segments of line between ED2 and Saguaro on page 49 will be moved to Table 12 and replace the overall ED2 to Saguaro description. Snyder Hill will be changed to Black Mountain.

Section 15.0 Characteristics of SATS Transmission System. Sub-section 15.1.1 needs to be changed to read: “Loads are increasing stress on the parallel 345kV and 230kV transmission lines. Critical contingencies are loss of the various combinations of 345kV lines between Springerville and Vail.”

Tom stated that Sub-sections 15.1.17-15.1.19 are all options to solve the same problem and suggested that the problem be identified with a list of measures to fix it.

The language in Sub-section 15.1.3 was changed to point out additional critical contingencies. Ron will also add in that the SATS group will focus on solving these concerns in the 2009 Study Plan.

Sub-section 15.2.7 will be changed to show a new joint load-serving substation on the Vail to Bicknell 345kV line or on the Sahuarita to Bicknell 230kV line.

Section 16.0 Potential Alternative Projects. SWTC was asked to look over the potential 230kV projects listed in Table 17 on page 63 and the potential 115kV projects listed in Table 19 on page 66.

Section 18.0 Southwest Public Power Resource (SPPR) “Three Terminal Plan.” Ron noted that the status of the SPPR/SATS task force efforts needs to be included in this report. Bruce replied that he had just received an e-mail from Gary Romero with this information. Ron will look over this information from Gary and add in as needed.

Section 19.0 Long Term SATS and Individual EHV Transmission Provider Strategies. The graphics in this Section will be fixed. In order to avoid confusion, a statement will be added that Pinal Central is also known as Pinal South.

Section 20.0 TEP 138kV Future System Strategy. The graphics in this Section have been fixed.

Sub-section 20.1.2 Cochise Area. SSVEC has provided revisions to this Section which will be included in the final draft of the Report.

Section 21.0 Findings from Power Flow Analysis. The middle paragraph on page 112 needs to be changed to read: “Benefits for the SWTC system to interconnecting with the CAP system includes improved system reliability.”

Sub-section 21.3 needs to be populated with information from Western. Bruce noted that Cary Patten had sent material in an e-mail today which Ron will look over and add as needed.

Section 26.0 List of Projects for Ten Year Planning Horizon. SWTC accepted an action item to provide Ron with information to populate Tables 25-32 by Tuesday of next week.

4) Executive Summary

Ken said that he had not received any comments to the Executive Summary. However, he and Ron will work on getting it finalized with the comments that were received earlier today when discussing Section 27 Conclusions and Recommendations. There was discussion on material that Ron had added in regarding the TEP system, briefly listing the miles of lines it jointly owns and SWTC accepted an action item to provide similar information to Ron. It was suggested that SWTC could use language from an older report.

Ron accepted an action item to send the Final Draft Report, once the Executive Summary is complete to WestConnect by Wednesday of next week.

5) December Stakeholder Meeting

A date for this meeting has been set – December 9th. For purposes of notification on the OASIS, this will have be posted 30 days in advance.

6) Project Updates

- a. Bowie
- b. SunZia

Due to time constraints, Tom Wray very briefly ran through Power Point presentations

for Bowie and SunZia. These presentations will be sent to the SATS participants next week.

7) Action Items

1. SWTC to provide data for Tables 25 to 32 to Ron by Tuesday, Nov. 4th
2. SWTC to provide a system description for the Executive Summary from an older Report
3. Ron to provide a draft SATS Report to WestConnect by Wednesday, Nov. 5th

8) Next Meeting Agenda

This was not discussed but is likely to be similar to today's agenda.

9) Next Steps/Meeting(s)

It was decided that the next meeting of the group be scheduled after the SWAT meetings that will be held next week. A possible teleconference call could be held or the meeting could be postponed until January.