

CATS-EHV

Agenda & Meeting Notes – August 4, 2009

Date: Tuesday August 4, 2009
Time: 9am-12pm, joint meeting with CATS HV
Location: APS Service Center 50 N. Brown Avenue, Casa Grande, AZ

1. Introductions (attendance list attached)
2. BTA Work update (LeeAnn Torkelson)
 - Discussion/review of final draft report
The Rev 3 report was reviewed with two minor changes, removal of “area” in the generation table and an addition of a footnote to table 10, thermal overloads.
 - Final Draft approval
The Rev 3 report was approved with comments noted above. LeeAnn will route to Rob for distribution to SWAT for their approval at the August 2009 meeting.
 - Next Steps
 - *route final to SWAT
 - *present final at SWAT meeting
 - *SWAT approval of document (August 2009)
 - *Docket final report and appendix at ACC
3. 2013/2014 coordinated case update (APS)

The case is under development, its last year’s 2013 case updated by APS, WAPA, and SRP is currently updating. It is expected the case will be used for utility planning.
4. Western Statement of Interest (SOI) update- (WAPA)

Western continues to review statements of interest. LS Power has announced development of the Montana-Alberta project and the SWIP project as part of the Western Transmission Infrastructure Project (TIP) process.
5. Review 2010 Study Plans (Maria Ramirez/Jeff Loehr)
 - Long Term (2050) Study plan
The long term study plan was discussed. Participants voiced concern over the 2050 timeframe, preferring something closer to the 2030 timeframe if this study was pursued. The other concerns regarded duplicating work that utilities already do on an individual basis, lack of manpower to perform the study, the amount of assumptions regarding load growth that would have to be made, and the lack of load growth data beyond the 20 year timeframe. As currently drafted neither APS nor SWTC could support the study plan. It was suggested before pursuing this, or other study plans that some direction from SWAT or WestConnect (WC) be provided so that this group doesn’t duplicate work being considered at the SWAT or WC level. A compelling reason to perform this study is because individual long range or saturated studies that have been completed in the past may be appropriating the same resources and transmission lines. This appropriation by multiple studies would be highlighted under a coordinated long term study.

- **Renewables Study Plan**
It was proposed to remove this study plan from further discussion because, as drafted, it may duplicate/replicate work by either the Arizona Renewable Resources Transmission Infrastructure Subcommittee (ARRTIS), or by the Renewable Transmission Task Force (RTTF). It was recommended instead of scrapping this study plan, that it be forwarded to Robert Kondziolka (SWAT Chairman), Peter Kryzkos (RTTF Chairman) for their consideration at another level before CATS EHV either pursues or scraps the study plan. LeeAnn will forward the study plan for ARRTIS/RTTF/SWAT consideration. If another group performs this, or similar study it would free CATS EHV to do another study.
- **Stability Study Plan**
The 2020 timeframe seems reasonable, but the worst case scenario for a stability scenario regarding penetration of renewable would be a spring case where there is low load and many generators (particularly those generators with mass, which damp system events) are off line for maintenance. Also, may investigate the impact with a heavy load too, just to see if anything odd pops up. Participants discussed the over voltage problems with low load. APS and TEP shared how they study the leading and lagging voltage support (or lack thereof) of the solar and wind generation. Further items to address in developing the study plan would be synching renewable with transmission and addressing wind power's propensity to drop off line for low voltage events. It will also be important to address how to bring on the renewable generation (replace traditional resources, or only tie new load with new renewable generation). There is sensitivity of doing any studies with a reduced coal generation scenario.

6. Project updates

- **SunZia – Mark Etherton**
Nine Scoping meetings have been completed, 500 comments have been received. Comments are still being accepted through August 25 or 26th. Project has received WECC Phase II status.
- **Solana – Jason Spitzkoff**
APS continues to wait to hear if Solana will get financing, facilities study is complete, LGIA has not been signed.
- **TS5-TS9 – Jason Spitzkoff**
APS continues to work BLM on a forest plan amendment, in service by 2016
- **Delany - Jason Spitzkoff**
There are 6 interconnection studies for 3010MW all but 110MW is concentrated solar, the 110MW is proposed photovoltaic. The interconnections were studied in three clusters, 2 projects in each cluster. The first cluster report was completed and delivered in July, 2nd Cluster participants met last week with posting of the report expected in August. The Third cluster still needs to meet, with posting at the end of August.
- **Abel/Pinal Central – Jeff Loehr**
Browning-Pinal Central/Randolph foundations are under construction. Pinal Central 500/230 delayed to 2013.
- **Pinal Central/Tortolita – Gary Trent**
Continued environmental studies underway.

It was requested the following projects be added to future project updates: Sawtooth generation and the SPPR transmission.

7. Next Meeting – Tentatively scheduled for October 13, 2009 at ED3's office. Time: 9-noon

8. Open Discussion/Comments (All)

Development of a Case-building database – Jeff Loehr

The group discussed developing a program/software database for ease of creating Arizona detail power flow cases. The idea would be to easily take WECC bulk representations (which stop at 230/69kV transformers, generally), remove all of Arizona and insert the Arizona detailed (i.e. 69kV) representation.

Items to consider: What software? What access? Another software to update? Would have to be an Arizona-wide project in order to cut out the entire bulk representation and insert an updated detail representation.

Jeff Loehr (SRP) will develop a study plan for discussion at the next meeting.

Jeff Ulmer – Water Resources Institute

Jeff Ulmer provided a letter from Smart Grid Transmission Systems LLC. The letter wants SWAT to “add the following non-carbon based generation to the maps for consider by FERC:

1. Add the Palo Verde to Devers II lines with a Non carbon Generation plant near the solar areas.
2. Please consider adding a 230 KVA line coming out of the Gulf through San Luis to the I-8 line near Yuma.
3. Please add and upgrade to the Mead to Phoenix line for dual 230 kva and Generation near the solar.
4. Please add and upgrade to the Gila Bend Solar plant to add a non carbon based generation plant.”

Along with discussion of this letter, Pinal County indicated they’re getting lots of requests from solar companies to site projects. It was discussed that the next CATS HV/EHV meeting should set aside time for developers to share their renewable projects and allow utilities to share the interconnection process with the developers.