

**COLORADO COORDINATED PLANNING GROUP
WEDNESDAY, APRIL 25, 2007
TRI-STATE OFFICES – WESTMINSTER, COLORADO
DRAFT Meeting Notes**

1. Introductions and Meeting Arrangements

- Tom Green called the meeting to order at 9:00
- Participant list is included **{Attachment 1}**

2. Approval of Notes from December 12, 2006 (Tom Green – PSCo)

- No comments made.
- Minutes were approved.

3. Colorado Public Utilities Commission (Inez Dominguez - CPUC)

- Inez gave a heads-up that he will be contacting Colorado Transmission Owner executives in the next 2 weeks to discuss:
 - o Status of projects
 - o Coordination – how
 - o Senate Bill 100
 - o State Energy Policy
- **Senate Bill 100**
 - o The bill only addresses PSCo and Aquila
 - o CPCN's will be treated similarly as in the past. However, there must be some quantified need. The PUC will look at the magnitude of potential resources, consider regional load requirements. Applications must include a good story that the resource has good potential to materialize.
 - o Discussion comments:
 - o Other utilities should join with PSCo and Aquila to develop transmission plans
 - o Should develop short-term plans that align with long-term goals and development.
 - o Need to be able to accommodate low cost resources that bid into PSCo RFP process.
- House Bill 1281 (Rich Mignogna - CPUC) **{Attachment 2}**
 - o HB1281 (20% by 2020) stems from Amendment 37, passed in 2004;
 - o PSCo and Aquila submitted compliance plans in August
 - o IOU renewable requirement is:
 - o 2007: 3%
 - o 2008-2010: 5%
 - o 2011-2014: 10%
 - o 2015 – 2019: 15%
 - o 2020: 20%
 - o Solar 4%
 - o REA's, Munis > 40,000 customers brought in at lesser standard:
 - o 2008-2010: 1%
 - o 2011-2014: 3%
 - o 2015 – 2019: 6%

- Other Bills
 - SB 91 – another bill that has to do with renewable energy zones; only renewable energy zones;
 - HB 1150 – Renewable Energy and Infrastructure Authority - was to set up a bonding agency to provide loans for transmission for renewable projects.
- Discussion:
 - Mark Graham (TSGT) indicated that TSGT would rely on requirements for Coops and REA's; Mark thinks TS may go beyond that requirement.

4. Colorado Energy Forum (Gary Schmitz - CPUC)

- CEF exists as outreach forum to provide general information about the electrical industry.
- A series of reports were published last fall including a forecast of energy needs for Colorado over next 20 years (4900 MW by 2025), and an electricity basics primer for those that don't really know about the electrical industry
- Recently the board of CEF has authorized a phase 2 effort with 2 goals:
 - 1. further the outreach to community leaders,
 - 2. a series of white papers including transmission basics should be out next month.
- Web site is: www.coloradoenergyforum.org

5. WestConnect and FERC 890 (Charlie Reinhold – WestConnect)

- Charlie went through a PowerPoint presentation {Attachment 3} and discussed what CCPG should do to prepare the FERC 890 straw man.
- WC footprint now covers 3 “subregions”: CCPG, SWAT, and Sierra (new).
- Vision:
 - Serve future customers
 - Make more efficient use of existing transmission
 - Develop long term transmission plans
 - Facilitate development of new transmission
 - Encourage generators to locate in areas that support transmission
 - Coordinate and integrate with neighboring regional planning groups and over arching organizations
- **Strawman Proposal**
 - Will rely on WECC TEPPC for Western Interconnection Regional Studies and Coordination
 - Will use CCPG and SWAT sub-regional planning groups as planning forums
 - WestConnect-SWAT-CCPG Principles for Sub-Regional Planning 2/26/06
 - WestConnect Objectives and Procedures for Regional Transmission Planning 8/24/06
 - Commits to Independent Coordination and Facilitation of the Sub-Regional Planning Process
 - **Key Dates**
 - April 18 – WestConnect Stakeholder Meeting (Denver)
 - April 25 – CCPG Meeting (Denver)
 - May 15/16 – SWAT Meeting (Albuquerque)
 - May TBD – WestConnect Stakeholder Meeting (Phoenix or Las Vegas)

- **9 Principles of FERC 890**

- Coordination
- Openness
- Transparency
- Information Exchange
- Comparability
- Dispute Resolution
- Regional Participation
- Congestion Studies
- Cost Allocation

- Discussion:

- At this point, SWAT and CCPG web sites will point to WestConnect pro-forma strawman.
- The Transmission Product Work Group is working on developing “seasonal firm” product.
- May want to build the stakeholder meetings as joint SWAT/CCPG/WC meetings.
- Any transmission owners that want to participate in oversight of planning staff, please contact Charlie.

6. Rocky Desert Reliability Coordinator (John Greenlaw)

- RDRC is predominantly a real-time planning organization.
- State estimator uses topology model, similar to WECC base case models. However, it does not have loads. Program uses the topology of the real-time system, gathers real-time data through SCADA, and runs through the model. The program comes up with state estimation of system flows. It runs every 15 minutes; every 2 hours saves a study case; after 2 weeks starts writing over.
- Goal is to establish an interface to get more accurate topology models for the state estimator. Needs to keep model as current as possible to get accurate information. Won't solve if equipment not modeled. Therefore, changes to the transmission system should be made through Grid Alert program.
- Grid Alert is not tied with any other program and will not be part of Westwide System Model (WSM), which WECC is in the process of implementing. John thinks Grid Alert will still be needed after WSM is unveiled.

7. Western Wind Integration Study (Debra Lew – NREL)

- {Attachment 4}
- Debra discussed the drivers for the study including helping meet renewable energy portfolio standards, and the planning of long distance transmission projects.
- This study by NREL intends to address economics of diversifying the geographical placement of wind projects throughout the region of study.
- NREL is in the process of gathering wind data and will look at the Southwest as regional load center, and wind generation in the Southwest and up through the Rocky Mountain area. It will also examine the long distance transmission of wind.
- Similar studies have been completed for the California and NW regions.
- Other fundamental questions: what are additional operational issues and costs associated with wind and what kind of mitigation measures can a utility take to integrate wind?

- Phase 1:
 - A Stakeholder meeting is scheduled for May 23rd at NREL; the stakeholder group will be those that can provide input, data, load and historical load data, where wind sites will be developed, and wind data to validate models.
 - Technical Review Committee
 - Meso-scaling of Wind
- Phase 2:
 - Evaluate scenarios for cost and operational impacts;
 - Evaluate mitigation measures.

8. High Plains Express (Tom Green - Xcel Energy)

- {Attachment 5}
- Tom indicated that the studies are just getting started and the group is working on preparing the base case models.

9. Ranger Express (Bob Briggs – Rocky Mountain Rail Authority & Colorado Rail Assn.)

- Bob provided presentation {Attachment 6}
- Goal is to develop alternative transportation methods using rail along the I-25 and I-70 corridors.
- Feasibility study will consider types of technology, routes, and financing options
- Looking for synergies with transmission
- Web site is www.rangerexpress.com

10. NERC/WECC Study Group (Matthew Stoltz – BEPC)

- Matthew gave an update of the study effort.
- Regional Transmission Providers are using the studies to help meet documentation for NERC Standards TPL - 001, 2, 3, and 4.
- Consolidated effort; report is basically final; couple of outstanding comments; hope to finalize in the next couple of weeks.

11. Base case development (Gene Medina – WAPA)

- Gene gave an update of the WECC 2007 Annual Study Program
- Cases approved: 2007 light and heavy summer; 2011
- The 2012 was moved ahead of the 2011 case to meet TEPPC schedule.

12. Foothills Planning Group (John Collins – PRPA)

- John described the Foothills footprint, which includes WAPA, TS, PSCo, PRPA.
- 1500 MW of load in the area for this summer operating season;
- Tot 7 transfer limit studies show limits ranging from 600 – 900 depending on load and local generation limits;
- PSCo is installing a real time monitoring system (CAT) to get real-time rating on the limiting element: Weld – St.Vrain line.
- The Timberline – Harmony project has been delayed 3 weeks because of pole delivery problems;
- Additional studies are being performed for the current operating season.

13. OTCPC (Jared Griffiths – WAPA)

- Tot 1A studies not run this year;
- Tot 2A: full studies were run; no changes – limit is still 690 MW
- Tot 3: several construction projects are going on to increase the limit 18-33 MW
- Tots 4a/4b, 5: no update
- Prior outages
 - Updated studies performed for Yellowtail – South; 4A/4B was looked at by Pacificcorp;
 - Tot 5 prior outage work was done and split up between parties;
 - Tot 2B/C: Bill Hall indicated that a report was approved by the Rocky Mountain subregion of OTC {Attachment 7}.

14. FERC/NERC/WECC (Bob Easton – WAPA)

NERC Standards

- Bob provided Powerpoint that also included some ongoing project information {Attachment 8}
- NERC Compliance:
 - June 4, 2007 is the date that everyone must be compliant;
 - Mitigation plans (MP's) due at WECC ASAP for approval; if approved by NERC and FERC then may not be sanctioned;
 - John Collins was at the NERC workshop in San Diego, where they focused on WECC;
 - Can accrue sanctions like debt. If MP is not accepted, then consequences may be much worse than if it was accepted.
 - MP time-frame must be “reasonable”.
- FERC
 - WAPA re-filed tariff in March and included SGIA and SGIP processes;
 - Revisions for sections 17.3, 29.2 clarifying no need for deposit capped at \$100K
 - Workshop scheduled for May 10-11 regarding 890 (other than Planning issues);
 - Workshops June 11 in Park city and June 26 in Phoenix to discuss posted strawmen.
- Projects:
 - Animas – La Plata Project
 - Joint TSGT/WAPA
 - ISD: March 31, 2008
 - Granby Area 138kV Loop
 - Joint TSGT/WAPA
 - Completion date uncertain
 - Wyoming – Colorado 230kV Transfer Path
 - Jared preparing Phase 2 study report
 - Hope for Phase 3 by end of this year

15. Studies of Proposed Projects

- WIA/TransElect TOT 3 (Jerry Vaninetti – TransElect)
 - {Attachment 9}
 - Lloyd Drain (WIA) on board and in charge looking for met towers
 - This project came from the RMATS study;
 - Looking at 180 miles for first phase;
 - Done with WECC Regional Planning and will move forward with Path Rating Process.

- All Source Solicitation (Tom Green - PSCo)
 - Should be titled Least Cost Resource Plan
 - 2003 resources: six new resources; 3 wind (300, 400, and 75 MW)
 - 3 gas (Spindle, Squirrel 2009, Plains End)
- San Luis Valley Sub. 2nd 230kV Source (Mark Graham - TSGT)
 - Project is going to increase reliability of service to San Luis Valley loads; now TS loads served over PSCo line from Poncha;
 - Proposal is to bring in 230kV t-line from the east;
 - Presently, when the existing line goes out, TS has to shed some load.
- Eastern Plains Transmission Project (Mark Graham)
 - Now in configurations specifications stage; considering impact of integrated resource plan, which has a lower load forecast; considering a slower plan;
 - Preparing and evaluating alternatives;
 - Looks like 500 kV system still the best alternative;
 - Looking to propose alternative configurations for various generation levels;
- Wyoming Joint Queue Study (Matthew Stoltz)
 - Complex effort has been underway for a year now;
 - Looking at single-system concept 800 – 900 MW of interconnection requests; 600 MW of point to point request; study meant to address those impacts; developing transmission plans to address those; working with neighboring providers to formalize plans.
 - Another phase is Basin's effort to increase Tot 3 by 300 MW in response to one of their point to point requests;
 - Working through getting the project through the WECC Rating process.
- Dry Fork Generation (Matthew Stoltz)
 - Also part of the JQS; 390 MW; ISD 2012;
- Wygen II Generation and Wyodak to Casper/DJ 230KV transmission line (Vance Crocker)
 - Part of the JQS noted above; Wygen II 90 MW Net, ISD late 2007
 - 230KV transmission line in-service 2010

16. Status on Projects Committed or Recently In-Service

- Granby Area 138kV Loop
 - See Bob Easton presentation {Attachment 7}
- Nucla-Telluride 115kV Line (Mark Graham)
 - Have permits to survey 85% of line.
 - 1st commission approval in 2001;
 - San Miguel granted based on significant portions being underground; TS estimates; PS affirmed TS right to design any underground; hired firm to negotiate with non-coalition land-owners;
 - Appeal process on-going;
- Walsenburg-Gladstone 230kV Line (Mark Graham)

- o Project is done, but left on agenda to talk about interaction of phase shifter action with other Tot 2 lines.
 - o Started operation around Feb 1, and saw predicted through flow of about 90 MW. Loop flow varies with PST operation,
 - o Looking at additional Colorado – New Mexico lines in the next 5 years or so.
- Comanche-Daniels Park 230/345kV Rebuild (Tom Green)
 - o The CPCN was approved
 - o Moving forward with 2009 ISD
 - Western’s 10-year Plan (Bob Easeton)
 - o Nothing new to report
 - Fordham-Fort St. Vrain 230kV Line (John Collins)
 - o The ISD slipped from 3rd qtr. 2008 to Feb 2009 due to row acquisition;
 - o 230kV projects: 4 overhead, 3 underground; most on existing ROW

17. Additional Items

- Bob Wilson mentioned that during the upcoming democratic convention, no coal trains would be permitted to go past the Pepsi center.

18. Next Meeting – August joint meeting with SWAT

- CCPG meet the morning of August 21, Joint in afternoon, SWAT on 22nd?
- Mark Graham will check on room availability;
- Westconnect scheduled to meet on the 23rd

19. Adjourn