Transmission Planning

Attachment K Public Input

Meeting Minutes

FERC Order 1000(890) Q2

Biennial Cycle 2016-2017

June 9, 2016

Attendees: Jamie Austin – Transmission Services

Mark Adams – Transmission Planning East

Scott Murdock – Transmission Planning East

Nicole DeGiulio – Transmission Planning East

Sachith Abayakoon – Transmission Planning East

Carlton Jones – Transmission Planning

Christiaan Riet – Transmission Planning

Jeremy Viula – Transmission Planning

Rachel Matheson – Transmission Services

Robyn Kara – Transmission Planning East

Brian Fritz – Transmission

Kevin Putnam – Transmission Planning

Anastasia Belesiotis – Scribe

Marshall Empey – UAMPS

* Jamie Austin explains the Attachment K process and FERC Order 1000. In Q2 planning cycle finalization of methodology, planning criteria and process used, while coordinating with other in house processes on reliability, for transmission planning studies and five year area studies.
	+ PacifiCorp plans on reviewing with stakeholders the status of five-year studies, covering methodology, criteria, assumptions, databases and results.
	+ No study requests were received in Q1, next opportunity will be in Q5.
	+ Focus groups may be established in Q1 by PacifiCorp with customers, to incorporate ideas, local issues, etc.
* The timeline for eight-quarter process is detailed showing Q1 data is collected for economic and or technical studies; Q2 reference cases are developed; Q3 technical and economic studies are conducted; Q4 draft transmission system plans are created; Q5 draft reports are compiled on system adequacy, or further economic studies; Q6 draft reports are reviewed; Q7 final reports are created and reviewed; and in Q8, final transmission plans are approved.
* Brian Fritz reviews the Generation Interconnection studies.
	+ Central Oregon has ~900 MW in the Queue
	+ Southern Oregon has ~1500 MW in the Queue
	+ Eastern Wyoming has ~4000 MW in the Queue
	+ Southwest Utah has ~2000 MW in the Queue
	+ Most is solar, with the exception of eastern Wyoming
* Driving factors in interconnection requests include solar and wind availability, change in property costs, anticipation of the Energy Gateway project, state renewable portfolio standards changing, and qualifying facility pricing.
* Applications to In-Service is 18%, studies to In-Service is 26%, executed interconnection agreements to In-Service is 47%,
* Marshall Empey asks what percentage of wind and solar is QF (Qualifying Facility); Brian responds that the majority of solar is QF, wind in Wyoming is a mix of jurisdictional and QF.
* Marshall Empey also asks if it’s known what portion are Energy Resource (ER) or Network Resource (NR); Brian responds that if they are QF, they are NR. Very rare NR FERC jurisdictional.
* Kevin Putnam reviews the PacifiCorp West studies;
	+ Crescent City is 85% complete, expect to present results at Q2 meeting
	+ Pendleton/Hermiston/Enterprise is 20% complete, expect to present results at Q2 meeting
	+ Dalreed/Arlington/Sherman is 5% complete, results presented at either Q3 or Q4 meeting
	+ Yakima is 10% complete
	+ North Oregon Coast studies will kick off by Q3
* Mark Adams reviews the PacifiCorp East studies:
	+ Honeyville/Malad and Montpelier studies are complete
	+ Utah Valley study is under management review and will be published soon
	+ Grace Idaho, Smithfield, and Price studies are anticipated to be complete by Q3
	+ Price, Sigurd, Vernal and Southern Wyoming studies are ready to be kicked off
* Scott Murdock discusses the Rocky Mountain Power 5 year studies:
	+ Honeyville/Malad are urban and agricultural, service to Oneida and Box Elder Counties; the three largest communities are Snowville, Malad City and Holbrook.
	+ This study area has four transmission substation, serving 16 distribution substations and 11 transmission customers.
* The Wheelon/Cutler study area, mainly agricultural and industrial; one transmission substation, eight distribution substations, and three customer owned substations.
* The Honeyville area mainly agricultural, with service to Honeyville, Corrine and Bear River
	+ Serving one transmission substation, six distribution substations and two customer owned.
	+ The Lamp study area is all industrial loads, one transmission substation and three customer substations.
	+ The overall area loads are 276 MVA summer, and 220 MVA winter. Summer growth is 1.1% summer and 1.0% winter growth.
	+ The average daily output is 16 MW from two hydro generation units. There are several small third-party hydro generation, but it is excluded from the studies.
	+ Malad has a distribution substation 128kV, and will be overloaded during the study period. Plans are to increase that capacity at Malad Bank #2.
	+ Summary of construction of Malad capacity increase is approximately $1.9M
* Carlton Jones reviews the Montpelier study findings:
	+ Montpelier spans three states, Idaho, Wyoming and Utah
	+ There are five main residential load centers; Montpelier, Cokeville, Garden City, St. Charles and Bear River.
	+ The remaining substations are in agricultural areas
	+ There are four transmission substations: Ovid, Sage, Naughton and Oneida
	+ Base system loads are 33.4 MVA summer, 23.8 MVA winter; grown is 2.3% summer and 1.2% winter. Projected system loads are 38.2 for summer 2020, and 25.3 MVA winter 2020-2021, with a distribution capacity of 65 MVA for summer.
	+ Sage systems will have low voltage soon and St. Charles regulators are undersized and need to be replaced.
	+ Construction costs are approximately $322,000 for new tap changes and switching bus sources.
* Nicole DeGiulio reviews the Utah Valley study:
	+ Base system loads are 1011 MW summer 2015 (47% industrial), 617 MW winter 2014-2015, with growth a t 3.2% summer and 3.6 % winter; projected system loads are 1232 MW summer 2020, and 816 MW winter 2019-2020.
	+ The Vineyard line will be upgraded to 138kV to accommodate load
	+ Pelican Point showing low voltage for 2018 so it will be moved to a distribution circuit, Saratoga 17
	+ Willow Ridge is projected to overload for 2018, a new 22.4 MVA transformer will be installed. A transformer at Benjamin will also be upgraded to accommodate load, as is Mapleton. Lehi Carter conversion will increase 46 to 138kV lines. The American Fork transformer is projected to overload in 2020.
	+ Total construction costs are projected at $18.4M.
* Marshall Empey asks when the actual study reports will be posted on OASIS; Mark Adams responds that only highlights of the study are posted, as per our legal department. Mark and Marshall will meet to go through the completed study affecting UAMPS areas. Rachel Matheson will schedule the meetings.
* Carlton Jones kicks off the Smithfield/Preston study.
	+ The study covers most of the Cache Valley, with Logan City and Hyrum City municipalities.
	+ Transmission voltages are 230, 138, and 46 kV
	+ The transmission substations to be covered are Treasureton, Oneida, Franklin, Green Canyon and Smithfield.
	+ There are four transmission customers, and less than 50 MW of natural gas and hydro generation.
* Marshall Empey notes that there is a generation interconnection request in the area and asks if the current study is conducted without the interconnection request, and then studied separately. Mark Adams responds that it is not included in the five year study.
* Carlton Jones kicks off the Sigurd study:
	+ Counties included are Sanpete, Sevier, Beaver, Garfield, Piute and Millard, serving Gunnison, Beaver, Richfield, Panguitch and Milford.
	+ There are approximately 32 substation in the area
	+ Other entities in the area include Garkane Energy and Beaver City Municipal Electric.
* Nicole DeGiulio kicks off the Price study:
	+ The study is approximately 5,200 square miles in Emery and Carbon counties
	+ Price and Helper city municipalities
	+ There are approximately 60 substations, 31 are customer owned
	+ Huntington and Hunter generation plants are the main sources for the are
	+ The study focuses on 138kV and below lines
* Scott Murdock kicks off the Southern Wyoming study
	+ The study covers approximately 14,00 square miles
	+ Municipalities include WAPA and AMOCCO
	+ There are approximately 32 substations
	+ The majority of investigative work with be on the 230kV and below
	+ Major generation in the area is Flaming Gorge Dam, Jim Bridger and Foote Creek Rim
* Scott Murdock kicks off the Vernal study
	+ Study area is approximately 1,7 square miles, in Duchesne and Uinta counties
	+ Major communities served are Vernal and Maeser
	+ There are 11 substations, four of which are customer owned