

Report on Infrastructure

Public Utilities & Technology Interim Committee

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Governor's Office of Energy Development (OED)

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Major Transmission Projects: Permitting



The PacifiCorp Gateway West (GWW)

- GWW will move power from Glenrock, WY to Boise, ID.
- The path has been in permitting for about 8 years (applied in 2007).
- Currently, the portion of the project from Glenrock to American Falls, ID has been completed (ROD issued).
- A supplemental EIS has been required for the segment proposed to go through Morley Nelson birds of prey area conservation; this is expected to cause another two year delay, so a total permit time of 9 years for this 500kV AC line.

The PacifiCorp Gateway South (GWS)

- GWS is a 500 kV AC line to take power from the Aeolus substation in WY to a new substation near Mona, Utah.
- GWS has also been in permitting for 7 years. The final EIS is expected in fall 2015 with a ROD issued by the end of the year.

Both projects cover significant amounts of public land, making the permitting process quite complex.

Both projects will support moving renewable power from where it is produced most efficiently to the load centers.



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Transmission Projects: Permitting

The Transwest Express line (Anschutz project)

- A 600 kV DC line proposed to move renewable power from WY to AZ, NV and CA.
- With input from Utah and also as the result of the proposed energy storage project near Delta, TWE's plan includes a DC terminus near Delta to take power but not deliver energy at that site.
- The TWE line can deliver energy to UT, as the IPP line is tied back to the PacifiCorp system at Mona through 345 kV lines.
- This line has been in permitting for close to 8 years, with the final EIS now complete. A decision is expected fall 2015.

Transmission Projects: Proposed



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Zephyr/Pathfinder project (DATC project)

- 500 KV DC line to connect the Pathfinder Wind Project (WY), also through Delta, to deliver power to the market hub in the southwest US and to CA.
- In 2014 DATC announced a partnership with Magnum Energy and Dresser-Rand, in addition to Pathfinder, to deliver renewable energy in combination with UT energy storage to the southern CA market (*These partners presented to this Committee last year*).

Transmission Projects: Proposed



Moon Lake Electric Association

- The proposed line is for 138 kV transmission capacity in the Uinta Basin
 - To move power from Bonanza to Upalco, west of Roosevelt, to serve loads in both Uintah & Duchesne
 - The proposed line would cover approximately 80 miles, depending on load ultimately served.
- Capacity is critical to supporting forecasted load development for the oil and gas industry and maintaining the reliability of the electric system in the Basin.

Proposed Transmission Projects: Summary



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- All projects may not move forward completely as envisioned (e.g. due to common corridors, etc.)
- It is clear new transmission is needed in the West to most efficiently deliver energy to load centers, and support efficient development of renewable options
- New transmission can also provide more efficient options to meet changing federal regulations
- In some cases, transmission lines offer an option to more efficiently meet the requirements of Renewable Portfolio Standards (RPS)
 - Utah has renewable resources that may provide RPS options for other states but development is limited by available capacity

Energy and transportation corridors are an important assets/resources for providing long-term economic opportunities for Utah



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Transmission Projects: Constructed

The Sigurd to Red Butte line

- This is a 345 kV project to move 600 MW of capacity to meet expected load growth in southwestern Utah (e.g. St. George).
- It goes from Richfield to Washington, Co.
- The line was energized at the end of May.
- Permitting took about 5 years.

Other Infrastructure



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Uinta Express Pipeline (Tesoro)

- The proposed common carrier heated pipeline was intended to move product from the Basin to the SLC refineries.
- Currently, the project is postponed indefinitely due to cost and current market conditions.

Six County Infrastructure Coalition

- SCIC is hoping to facilitate a pipeline and/or rail project to move product from the Basin through high eastern Utah terrain to deliver product to new markets, possibly including the Gulf Coast.

Pipeline and rail projects support long-term production of Utah's oil resources and can help to ease transportation bottlenecks, reduce truck traffic on Utah's roads and highways, and provide environmental solutions for transport to markets.

Prioritizing Infrastructure



SB 216: High Cost Infrastructure Tax Credits

- Supports (1) new projects, (2) investment in cleaner fuel technology, and (3) new investments to expand or retain existing large projects.
- Administered by the Governor's Office of Energy Development (OED) and approved by the *Utah Energy Infrastructure Authority Board* ("the Board"),
- Post-performance tax incentive will provide non-refundable tax credits for state revenues generated from new infrastructure investment.
- *Implementation will require tweaks in order for OED to administer efficiently and responsibly*

HB 323: Resource Management Planning by Local Governments

- State and county planning efforts should identify optimal paths for energy infrastructure corridors and aim to preserve them for such use.
- HB 323 planning provides an opportunity for this type of planning, which could take into account developable resources

High-Cost Infrastructure Incentive



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- Sponsored by Sen. Okerlund and passed in the 2015 GS, **SB 216, High Cost Infrastructure Tax Credits**, was designed to encourage investment in infrastructure and lower-emitting transportation fuels that benefit Utah
 - *Development of Utah's energy & mineral resources often constrained physically & economically by lack of adequate infrastructure*
- Projects will qualify by demonstrating that the cost of the infrastructure built to serve the project exceeds 10% of the project's cost, or \$10 million
 - *Incentive will also be made available to refineries for investment in needed upgrades to produce cleaner burning Tier 3 fuels*
- Qualifying projects will receive a non-refundable credit in the amount of 30% of new state revenues that are enabled by the infrastructure investment
 - *The total tax credit available is capped at 50% of the cost of the infrastructure; fuel standard compliance projects are capped at 30%*

Summary



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- OED is supportive of the need for transportation solutions and has been working diligently diversify options.
- OED has worked to assist in the planning and development of projects in coordination with industry, USTAR, and the Utah Energy Infrastructure Authority.
- Projects can be successful, but funding and permitting are challenging
- Investors have choices about where to allocate dollars and incentives, or other state support, can help to offset some of the cost/risk of allocating dollars to projects

Over 8-10 years of permitting the world can change considerably. BLM ROW grants provide a one time option to build. If the lines aren't built relatively soon, they likely never will be because of cost and other permit challenges occurring within a changing electric industry and evolving environmental issues.



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Questions?

