



GOVERNOR'S OFFICE OF
ENERGY DEVELOPMENT

Natural Resources, Agriculture & Environment Interim Committee

July 13, 2016

Dr. Laura Nelson, Energy Advisor

Energy Advisor Update



- ▶ **Governor's energy advisor (63M-4-2)**
 - ▶ Advise the governor; update policy; promote resource development; promote education and conservation
 - ▶ Coordinate among state agencies to: streamline regulation; prepare for emergencies; promote access; retain and share energy information, etc.
 - ▶ May testify on behalf of governor before Public Service Commission
 - ▶ Reports annually to NRAE Interim Committee



State of Energy Development in Utah in 2016



▶ Oil & Gas

- ▶ Oil production in '14 was ~41M bbls, in '15 was ~37M bbls, and this year is on track to be ~30 million bbls, i.e. back to 2012 levels.
- ▶ Gas production has declined slowly – 5-8% each year – since '12, when it peaked at 490 million MCF. 2016 is on track for about 388 million MCF

▶ Oil Shale and Sands

- ▶ US Oil Sands anticipating commencement in Q4 of '16; Red Leaf Resources anticipates commercial demonstration project under development in Q3 of '17; Enefit anticipates a final EIS for its utility corridor in Q4 of '16.

▶ Coal

- ▶ According to the U.S. EIA, Utah's coal production has declined ~31% since 2006; Deer Creek Mine closed in '15; BLM Coal Moratorium in effect pending review of leasing program



State of Energy Development in Utah in 2016



▶ Renewables

- ▶ 166 MWs of new solar came online in '15, with another 701 MWs to come online in '16; all new projects concentrated in Millard, Iron, Beaver
- ▶ 60 MWs of wind under construction in San Juan
- ▶ Exponential growth in rooftop solar: more capacity to come online in '16 than all previous years combined.

▶ Energy Efficiency & Conservation

- ▶ PacifiCorp expects to serve over 80% of its load growth over the next 10 years with energy efficiency investments; remaining growth to be served with FOTs
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The Governor's Office of Energy Development



- ▶ OED's role per 63M-4-401
 - ▶ **A)** Serve as resource for advancing energy and mineral development in the state; **B)** implement state energy policy and governor's energy and mineral goals; **C)** advance energy education, outreach, and research; **D)** promote energy and mineral development workforce initiatives
- ▶ State Energy Policy per 63M-4-301
 - ▶ Utah shall have/promote adequate, reliable, affordable, sustainable and clean energy resources;
 - ▶ Will promote all-of-the-above development;
 - ▶ Will be conservative in use of incentives;
 - ▶ Will promote infrastructure deployment, conservation, education



OED's Regulatory/Policy Activities & Successes



- ▶ Clean Power Plan leadership for State of Utah
 - ▶ Regional leadership on Western RTO proposal
 - ▶ Support of ongoing leasing activities at SUFCO & Coal Hollow mines

 - ▶ **Coal Highlight:**
 - ▶ Presented in support of Utah's coal industry at the BLM Coal Moratorium hearing in Salt Lake City, highlighting the value of the resource to local communities, as well as to system reliability and low rates that have contributed to Utah's position as leading economy in the nation.
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OED's Industry Assistance Activities & Successes



- ▶ Creation of incentive for infrastructure/rural development
 - ▶ Production tax credit facilitating alternative energy development in rural communities
 - ▶ Launch of Commercial “PACE” program

 - ▶ **Coal Highlight:**
 - ▶ Facilitated meeting of UK-based AEG CoalSwitch and Biomass Energy Enhancements LLC (BEE) in Q4 of '15
 - ▶ Introduction led to \$250 million project financing for a Utah company focused on utilizing biomass pellets to blend with coal to extend the life of Utah's coal plants
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OED's Outreach/Education Activities & Successes



- ▶ UCAP-funded K-12 Energy & Minerals Education Initiative
 - ▶ Governor's Energy Summit and Air & Energy Symposium
 - ▶ Partnership with Six County Infrastructure Coalition on P3 training

 - ▶ **Coal Highlight:**
 - ▶ Stakeholder Forum with DOE's Secretary of Fossil Energy on advanced coal technologies being developed in Utah; visited University of Utah's combustion facility; heard from 7 companies active in Utah; met with PacifiCorp on clean coal research being undertaken un "STEP" initiative
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Current Priority: Future of Coal



- ▶ **Key Issues: Coal Leasing Moratorium; Thermal unit retirements; Regional Haze Ruling; BLM Planning 2.0;**

 - ▶ **Policy Considerations and Goals:**
 - ▶ Pursue diverse community and workforce opportunities (e.g. POWER)
 - ▶ Facilitating access to expanded/international markets
 - ▶ Investing in innovative, new uses for coal, as well as CCS
 - ▶ Retaining access to coal reserves for future
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Current Priority: Regulatory Impact on Oil & Gas



- ▶ **Key Issues:** BLM Planning 2.0; Ozone rules; methane rules; “Keep it in the Ground” pressures on regulators; BLM sage grouse management

 - ▶ **Policy Considerations and Goals:**
 - ▶ Facilitate infrastructure investments and technological innovations to reduce regulatory pressures
 - ▶ Continued robust coordination among state agencies for commenting on federal actions
 - ▶ Enhanced coordination among energy producing states and regional groups
 - ▶ Energy education promoting value of all-of-the-above approach
 - ▶ Supporting research on background- and transported-emissions
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Current Priority: Proposed Western Regional Independent System Operator



- ▶ **Key Issues: State sovereignty; Maintenance of affordable and reliable power; Preservation of thermal units**

 - ▶ **Policy Considerations and Goals:**
 - ▶ Understand where legislative engagement will be needed as process unfolds
 - ▶ Pursue regional modeling and analysis to demonstrate state-specific impacts
 - ▶ Continue to emphasize governance and state sovereignty in all regional discussions
 - ▶ Continue to assess changing needs of state agencies (DPU, OCS, PSC, DEQ)
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Current Priority: Distributed Generation (PV)



- ▶ **Key Issues:** Rapid escalation of rooftop solar deployment; tax and regulatory incentive programs; changing deployment models

 - ▶ **Policy Considerations and Goals:**
 - ▶ Seek to avoid cross-subsidization among ratepayers
 - ▶ Support growth of the solar industry to the greatest extent practicable
 - ▶ Analyze and reform tax credit programs to reflect industry changes and fiscal pressures
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Current Priority: Air Quality through Responsible Energy Use



- ▶ **Key Issues:** Zero-tailpipe emissions vehicles and transit; Increased importance of density & transit oriented design; increased importance of investing in building efficiency

 - ▶ **Policy Considerations and Goals:**
 - ▶ Structuring transportation incentives specifically to reflect air quality goals
 - ▶ Encouraging communities to update zoning to reflect value of density and active transportation
 - ▶ Valuing businesses' efforts to encourage low- and no-emissions commuting
 - ▶ Facilitating market-driven adoption of efficient building design and technology
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OED's Continuing Leadership



- ▶ Small, highly qualified staff delivering unique value to the State
 - ▶ Working to support and enhance a \$15 billion energy economy
 - ▶ OED's has delivered quantifiable value in tax credits, other direct assistance
 - ▶ More challenging to demonstrate value of regulatory engagement, policy initiatives, planning, outreach & education, etc.
 - ▶ Numerous new development opportunities, across all resources, are in the queue
 - ▶ OED is coordinating partners to help realize the value of innovation to Utah's energy and minerals economy
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