



Monthly Energy Update

September 2017

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For information, contact UAE staff at 801-355-4374

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On September 15th, Rocky Mountain Power (RMP), the Division of Public Utilities (DPU), the Office of Consumer Services (OCS) and the Utah Association of Energy Users (UAE) filed comments with the Utah Public Service Commission in relation to the Commission's March 2017 solicitation of comments regarding "whether allowing an electrical corporation to continue to recover [100% of the electrical corporation's prudently incurred] costs under Subsection (2)(d) [of the EBA statute] is reasonable and in the public interest."

The Energy Balancing Account (EBA) was adopted to address RMP's contention that it had a problem in the lag between rate cases in regard to Net Power Costs (NPC), if changes of those costs went unrecovered.

The EBA was approved by the Commission in Docket No. 09-035-15 as a "pilot" program to run for an approximate four-year period. However, the pilot was extended for an additional year as agreed upon by parties to end on December 31, 2016. At that time, the Commission also approved UAE's recommendation to implement a "70%/30% sharing mechanism" to balance some of the power cost risk between the customers and the shareholders.

In March 2016, the Utah Legislature passed Senate Bill 115, the "Sustainable Transportation and Energy Plan Act" (STEP) which mandated that the sharing mechanism be eliminated through December 31, 2019, after which it would revert back to the 70/30 sharing mechanism.

SB 115 also requires that the Commission shall file reports to the Public Utilities and Technology Interim Committee (PUTIC) before December 1, 2017, and 2018, regarding whether allowing an electrical corporation to continue to recover 100% of the costs is reasonable and in the public interest.

In its comments, the DPU "reiterated" its position from previous EBA filings and testimony that the original 70/30 sharing band "provided benefits for PacifiCorp in managing its costs and share the business risk with the customers, as well as reducing the fluctuations in customers' bills from year to year. The DPU went on to say that the elimination of the sharing band is a "significant shift of risk to the ratepayers."

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The DPU comments that while it believes the EBA is beneficial to RMP, there is “little to no benefit to ratepayers.” It adds that the elimination of the sharing band further benefits the Company and it “magnifies the problem of shifting risks onto ratepayers.”

The OCS states in its filed comments that it is “premature” to draw conclusions about whether or not the elimination of the sharing band is reasonable and in the public interest or not.

As the DPU’s annual audit will not be completed until November, the OCS believes parties lack the sufficient evidence to comment on the sharing band or lack of one. It also recommends that in its PUTIC report, the Commission provide background on the EBA history regarding the development of the EBA and the sharing band, in order to evaluate the changes that have been made and their impact.

UAE, on the other hand, fully agrees with the DPU in its May 2016 report on the sharing mechanism in that the EBA has provided a meaningful incentive for the company to manage its net power costs.

UAE also believes that the 70/30 sharing mechanism “struck a reasonable balance” between RMP’s customers and its shareholders. UAE states in its comments that under a sharing mechanism, RMP also shares in the economic consequences in respect to RMP’s operations. Without the sharing mechanism, UAE believes that RMP would be “economically indifferent” in the way that it operates its facilities in regard to forced outages, maintenance, etc.

Also, UAE notes that in all other PacifiCorp states in its jurisdiction, each have a sharing mechanism in place, except for California, which is its smallest territory. If any extension of the EBA is permitted by the Commission beyond December 31, 2019, UAE recommends in its comments that the 70/30 sharing mechanism be re-instated.

RMP also filed comments to the Commission. The Company states that net power costs are influenced by “variables” that are generally outside the Company’s control. RMP

adds that because the EBA is meant to reflect actual costs, a sharing band can “sometimes be misconstrued” and shift the net power costs in a party’s favor in a general rate case.

RMP believes that eliminating the sharing mechanism removes the potential for that shift to occur. Stating that the sharing band is an “ineffective way” to manage risk, RMP believes that eliminating the sharing mechanism benefits Utah customers.

The Commission is required to provide its comments to PUTIC on the EBA and the sharing mechanism by December 1st.

PacifiCorp Issues Wind RFP; Utah PSC Requires Solar Addition

On September 27th, PacifiCorp issued a Request for Proposals (RFP) to build new wind projects by 2020 of up to 1,270 MW.

The Company is seeking wind energy resources interconnecting with or delivering to PacifiCorp's Wyoming system and any additional wind energy located outside of Wyoming that will reduce system costs and provide net benefits for customers. The exact capacity of the new resources will depend upon response from the market, PacifiCorp said.

Release of the RFP came days after approval from Utah regulators. The Oregon Public Utility Commission approved the RFP in August.

The Utah Public Service Commission on Sept. 22 approved the RFP but recommended it be modified to include solar resources that can interconnect to PacifiCorp's system. The PSC preferred this approach to PacifiCorp's offer to issue a second RFP for solar resources.

"Simply put, the question is not whether solar resources should be built in addition to the proposed wind resources," the order said. "Rather, we find that the more relevant question

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is whether solar resources should be built instead of, before, or in conjunction with the proposed wind resources."

The PSC said while its recommendation is not mandatory for approving the RFP, the utility's decision about whether to accept the suggested modification will be relevant in any docket evaluating costs related to a winning RFP bidder.

"PacifiCorp must make an operational decision with respect to this issue and must be prepared to defend it," the order said.

Commissioner David Clark dissented. Clark thought the PSC ought to have rejected the RFP unless PacifiCorp agreed to include solar resources.

In his dissent, Clark acknowledged that the pending expiration of wind-related production tax credits puts the RFP and construction process under a time constraint, but waiting a few months to open the solicitation to solar resources would not threaten the availability of the tax credits, he said.

Clark said PacifiCorp's offer to do a second solar RFP does not fix the issue.

"Such a solar solicitation would presume the existence of the wind resources previously selected through the proposed RFP and would not accomplish the critical purpose of ascertaining the least-cost resources the instant RFP should be designed to identify," he said.

PacifiCorp plans to issue a second solar RFP in four to six weeks in response to the Utah PSC, said spokesman Bob Gravely, adding that it will be for projects throughout the company's six-state service area.

UAE and other parties, including the Independent Evaluator hired by the PSC for the wind RFP, stated in earlier filed comments that the company should expand the RFP to all cost-competitive renewable resources.

The new wind resources are part of the company's Energy Vision 2020 initiative, which also includes repowering the company's existing wind fleet with longer blades and newer technology and building a new 140-mile, high-

voltage transmission line in Wyoming that is expected to help more wind energy connect to PacifiCorp's transmission system.

A bidder conference has been scheduled for Oct. 2. Responses to the request for bids are due by Oct. 17 for Wyoming projects and by Oct. 24 for non-Wyoming projects. The company expects to have made final decisions and completed agreements by mid-April 2018.

UAMPS' SMR Plant the New Future of Nukes

With half of America's fleet of 99 reactors to be shuttered by 2034 and all of the remaining half retiring by 2055, the factory-built, ready-to-install small modular reactors, or SMRs, could bring the industry back from the brink of extinction.

According to the World Nuclear Association, three different SMR designs are currently operational in China, India, Pakistan and Russia, with another four SMR designs under construction in Argentina, China (two) and Russia. Ten other SMRs are in later stages of development around the world.

In the U.S., Pastrich said SMRs likely will not be operational until at least the mid-2020s, given the U.S. Nuclear Regulatory Commission takes approximately 40 months to approve a proposed new design. Fluor Corp.-majority owned NuScale Power LLC has been the only one thus far to seek approval for an advanced nuclear design, a stackable 50-MW SMR.

NuScale's hopes to stack 12 of the 50-MW SMR units to create an approximately 600-MW facility, the size of a typical coal-fired power plant.

The first of NuScale's commercial SMRs are planned for a 35-acre plot at the Idaho National Laboratory in eastern Idaho and will be operated by Energy Northwest in partnership with the Utah Associated Municipal Power Systems. The first of the units are expected to come online in 2026.

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The ability for SMRs to be aggregated together into a larger power plant will help lower the cost per unit, the analysis said. Also, unlike large traditional light-water reactors that are now cost prohibitive, especially in markets awash with cheap natural gas, SMRs promise to lower upfront capital costs through modularity.

"They can be built in factories. They can be shipped out and installed," said Pastrich. The analysis added that the more standardized and streamlined building process eliminates case-specific risks and unforeseen construction pitfalls and improvisations that are inherent in large, \$10-billion-plus projects.

Todd Shipman, senior director for S&P Global Ratings, said utilities are now, more than ever, reluctant to undertake large baseload projects like a conventional nuclear plant.

SMRs also offer competitive advantages, including inherently safer reactor designs that significantly decrease chances of a reactor meltdown.

For example, NuScale's SMR design has an emergency cooling system that does not require human intervention, additional water or electricity. As a result the nuclear technology could be deployed in locations previously considered unsuitable.

The significantly smaller SMRs could also be deployed closer to load centers, said Pastrich. "And if they are dispersed locally, SMRs could better support microgrid operations, backup renewable and distributed generation, and even provide load-following capabilities to help match supply and demand," he said.

Despite the expected lower costs and advantages, SMRs still need a helping hand.

"The government will probably have to help the industry get this off the ground and we're thinking along the lines of subsidies as we have seen in the renewable sector," said Pastrich. Whatever the future holds for nuclear, Pastrich said the wheels are in motion and SMRs are gaining traction.

Rocky Mt. Index Prices	Sept 2017	Aug 2017	Sept 2016
Questar Pipeline	DNT	DNT	DNT
Kern River	\$2.63	\$2.64	\$2.66
Northwest Pipeline	\$2.59	\$2.59	\$2.62
NYMEX Futures Settlement	\$2.961	\$2.969	\$2.853

PGE Joins the EIM, Expanding Utilities in the Footprint

Portland General Electric Co. and the California ISO are ready for the utility on Oct. 1 to become the fifth and newest utility to join the western energy imbalance market.

The Portland, Ore.-area utility's entry into the real-time market comes after about 18 months of preparation and coordination both with the grid operator and within PGE, said Larry Bekkedahl, PGE's vice president of transmission and distribution.

"Fortunately there were a few utilities that went before us, so they got to break the ice and we learned from them," he said, referring to PacifiCorp, NV Energy Inc., Arizona Public Service Co. and Puget Sound Energy Inc., who are all active participants in the market.

PGE got advice about things like making sure its network model is correct, helping employees understand any changes in their role and understanding new systems and how to deal with market settlements. The network model is a representation of PGE's system of generators and transmission that essentially becomes the basis for how PGE speaks with CAISO, Bekkedahl explained.

A big feat for PGE in the lead-up to Oct. 1 has been bringing together its power

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operations group and transmission and distribution group, Bekkedahl said.

Bringing those together to work through the details really strengthened our teams and has really been a pleasure to watch as we've morphed into a new environment to be able to bring this new technology on board," he said.

Like other utilities that made the decision to participate in the market, PGE expects that its customers will benefit. A desire to integrate more renewable resources and deploy new technology that will allow for operating and looking at assets in a better way were factors in PGE's decision to join the EIM.

"Ultimately it's [about] affordability, reliability, safety of our system," Bekkedahl said.

PGE has estimated that it will see \$3 million to \$5 million in savings annually just from operating the system in a better way, he said. Joining the EIM will also help offset about \$6 million a year paid to the Bonneville Power Administration for wind integration.

"Offsetting those costs are a big benefit to our customers and we want to be able to provide that and keep our customer at that low-cost position here in the northwest," he said. CAISO's most recent quarterly report said the energy imbalance market has provided \$213 million in savings since its launch in 2014.

While the number of entities participating in the EIM has grown, the process of getting each new member up and running has not become routine, said Don Fuller, director, strategic alliances at CAISO.

"I've always felt that considering an implementation like this routine can get you into trouble," he said, pointing out that each of the utilities that has joined is unique, with different resources and transmission systems. "We really try to dig into the details of each of them as we go forward."

In April 2018, IDACORP Inc. subsidiary Idaho Power Co. along with Powerex Corp., the energy marketing subsidiary of BC Hydro and Power Authority, will join the energy imbalance market as well.

Seattle City Light, the Balancing Authority of Northern California, Sacramento Municipal Utility District and the Los Angeles Department of Water and Power will start participating in the energy imbalance market in April 2019. Phoenix-area utility the Salt River Project plans to join in April 2020.

Fuller said when the EIM was set up, planners went through a lot of work to make it flexible so it would work for each of the entities and deal with differences in their own systems. The market's growth is a vote of confidence that the EIM is providing those entities and their customers value, he said.

Janet Morris, director of CAISO's program management office, said there are benefits to the EIM's growth.

"With each implementation, we get more and more geographic diversity, which brings in more renewable resources, and more transfer capability," she said.

"As we connect with more and more entities, there's more ability to share our resources through market optimization than if we were all working independent of each other."

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Utah Part of Regulations Slowed Down Under Trump

Updates to U.S. EPA's regional haze regulations published early this year now rank among the latest Obama-era rules to face a clouded future.

Already the target of 11 separate lawsuits brought by states, power producers and environmental groups, the revised regulations confront further uncertainty as the Trump administration takes a timeout to review its position.

Earlier this week, the U.S. Court of Appeals for the District of Columbia Circuit approved EPA's request for a 90-day hold on legal proceedings, in part so the agency can review three reconsideration petitions brought by the state of Alaska and utilities.

In making the request, EPA said it needed the extra time to reach decisions on "which of the contested issues it will address through non-litigation alternatives, whether through granting reconsideration and commencing a rulemaking or through guidance."

The D.C. Circuit signed off on the motion Wednesday without comment; none of the plaintiffs objected to the delay, which means proposed briefing formats won't be due until shortly before Christmas.

But at the National Parks Conservation Association, which is among the environmental groups that are defending the revised regulations while challenging some provisions as inadequate, clean air counsel Stephanie Kodish said in an interview that she hoped EPA "would find it prudent to reflect on the many different stakeholder interests in play and at a minimum keeping the rule in place."

The regional haze program, authorized under the Clean Air Act, has a goal of restoring visibility to 156 national parks and wilderness areas.

The bulk of sulfur dioxide and other haze forming pollutant comes from older coal-fired

power plants; under the Obama administration, EPA and state regulators repeatedly clashed over the scope of cleanup measures needed. Among the challengers was EPA's current administrator, Scott Pruitt.

In his previous job as Oklahoma's attorney general, Pruitt, a Republican, waged an unsuccessful three-year legal fight to block an EPA haze reduction plan for his state.

Since Pruitt took over EPA in February, the agency has sought to roll back or delay implementation of pollution control measures in haze plans for Texas, Arkansas and Utah.

The updated regulations for the broader program, published in the *Federal Register* in January just before the Obama administration left office, pushed back the deadline for the next round of state haze reduction plans from 2018 to 2021.

Among other changes, they bolstered consultation requirements, with a goal of bringing National Park Service employees and other federal land managers earlier into the planning process.

The three reconsideration petitions, all filed in March, raise a potpourri of issues. Alaska, for example, charged that EPA adopted a "one-size-fits-all" strategy that fails to account for the impact of airborne dust wafting in from Russia and China.

The Utility Air Regulatory Group, a trade association, wants changes to "clearly emphasize state decision-making authority." The group is also seeking to scrap the revised consultation requirements, saying that they "add unnecessary uncertainty and confusion to a process that previously was comparatively well-defined."

The third petition, jointly filed by Southwestern Public Service Co., Entergy Services Inc. and Cleco Power LLC, asks EPA to undo revisions related to the connection between long-term haze reduction strategies and goals used to measure "reasonable progress."

The revisions turn "the statutory scheme on its head," the power producers wrote, by requiring states to identify "reasonable progress" pollution control measures before setting the actual goals.

Utah PSC Approves Net Metering Settlement

On September 29th, the Utah Public Service Commission approved the net metering settlement that over a dozen parties (including RMP, the DPU, and OCS) signed onto. UAE and Western Resource Advocates advocated against approval.

The settlement does the following:

1. Lowers the cap on participation under the current, statutory net metering program such that no new customers will be accepted into that program after a specified date;

2. "Grandfathers" statutory net metering customers and allows them to remain on the program through 12/31/2035;

3. Creates a time-limited "Transition Program" for customers with generation systems who submit an interconnection application after the Net Metering Cap date until the Transition Cap date;

4. Fixes the compensation Transition Customers receive for energy they export back to the grid called "Export Credits";

5. Waives R746-312-13;

6. Allows RMP to recover a portion of the energy payments it makes to Transition Program customers through the EBA; and

7. Provides the PSC will, on RMP's filing, open a new Export Credit proceeding to determine the compensation for exported power from customer generation systems.

Please see the PSC order for all the details.

<https://pscdocs.utah.gov/electric/14docs/14035114/29703614035114oass9-29-2017.pdf>

Wind Energy In CA has Hit a Lull

The U.S. Department of Energy released its annual report a few weeks ago analyzing technologies and markets for the wind industry,

showing that California has installed 5,656 megawatts of utility-scale wind, the fourth highest in the nation.

California also ranks fifth in capacity for smaller, distributed wind energy systems since 2003, with 66 megawatts.

According to the most recent numbers compiled by the California Energy Commission, wind accounts for 36% of generation from facilities — the most in the state, edging out solar.

Although that has put California as a leader in solar energy, Nancy Rader, executive director at the California Wind Energy Assn., was discouraged when asked about the future of wind energy in the Golden State.

"It's pretty bleak in terms of the potential for new development," she said in a telephone interview from her group's headquarters in Berkeley. "We're actually at risk of going backward in total capacity in California."

Texas has taken the lead in the U.S. by a wide margin in total megawatts of wind, with farm states such as Iowa and Kansas moving up fast. Meanwhile, California's numbers have essentially remained unchanged since 2012.

This year's Energy Department report showed installed capacity in California was actually 6 megawatts less in 2016 than in 2015.

Rader blames a host of reasons, including land-use restrictions. California's desert areas are considered prime spots for wind farms and in the final months of the Obama administration, a plan was finalized that set aside more than 10 million acres for conservation and recreation and designated 388,000 acres for clean energy development, such as solar and wind projects.

Rader said that number is too small, saying about 80% of federal land in the desert is off-limits to wind farms.

"We're facing restrictions like that all around the state," Rader said. "You can't put a wind project anywhere. You have to go where there's good wind, and that's in really limited areas."

Environmentalists in general favor wind projects, but some green groups have opposed individual projects.

NATIONAL NEWS

Industry Pushes CPP Redo, Delays CO2 Reductions to 2035

A power industry coalition group has offered the U.S. Environmental Protection Agency replacement guidelines for the Clean Power Plan that would push back to 2035 carbon emissions reduction requirements for the nation.

The EPA is currently reviewing the Clean Power Plan consistent with an executive order from President Donald Trump that tasked the agency with repealing the controversial carbon-cutting regulation.

While the EPA has yet to confirm the rule will be replaced, many industry insiders have been informed that the EPA plans to do so with some sort of power plant efficiency rule

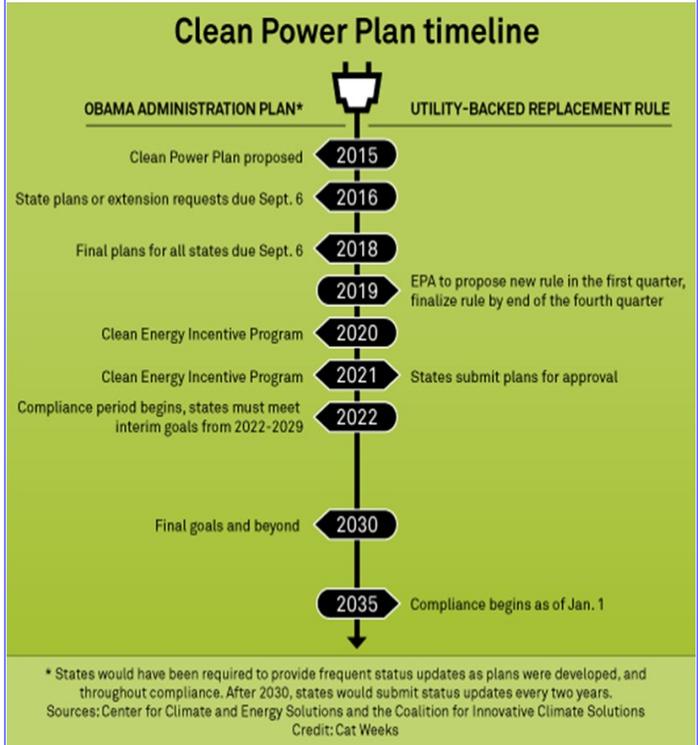
The original Clean Power Plan would have required power plants in the nation to begin phasing down carbon emissions in 2022, with the final goals to be reached in 2030. But a new proposal from the Coalition for Innovative Climate Solutions, or CICS, would push back the initial compliance date to as late as 2035.

Under the proposal the EPA would issue a new rule in early 2019, finalize it by the end of that year, and states would then have two years to submit plans for approval.

Representatives from the coalition met with officials from the EPA and the Office of Management and Budget Sept. 14 as part of the agencies' review of the Clean Power Plan.

The members of the coalition include Ameren Corp., Avista Corp., Entergy Corp., Great River Energy, Idaho Power Co., Portland General Electric Co., Puget Sound Energy Inc., PPL Corp., Louisville Gas & Electric Co., Kentucky Utilities Co., Public

Service Co. of New Mexico, Salt River Project Agriculture & Power District, Talen Energy Corp, Westar Energy Inc. and Xcel Energy Inc.



Power utilities have already expressed an openness to replacing the Clean Power Plan if the new rule's requirements lie well within the bounds of the Clean Air Act and can be achieved at the plant level.

CICS also argues that a replacement rule would avoid the creation of a "regulatory vacuum" that could leave utilities at risk of being sued in the absence of federal carbon cutting regulations.

A new regulation would also bring certainty to the utility planning process, something that industry craves given long-term planning horizons for infrastructure investments.

CICS agreed with other utilities' recommendation that the "best system of emissions reduction" chosen for the new Clean Power Plan rule should be "based on what can be achieved by individual facilities," including boosting heat rates to improve the efficiency of existing plants.

Opponents of the original Clean Power Plan asserted that it was not consistent with the

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statute under which it was promulgated because the rule would promote more power being generated by low- or non-emitting sources at the expense of coal-fired or other higher emitting generation.

The rule does not require any state to take any specific path to meet the prescribed goals, but allows the shifting of generation to other sources as a means for compliance.

"When assessing the availability of heat rate improvements at individual facilities, EPA should take into consideration the technological feasibility and cost of such measures," CICS maintained.

The group further suggested that the EPA allow state equivalent programs -- such as participation in the Regional Greenhouse Gas Initiative, renewable energy programs or standards, tax incentives or other state policy initiatives -- to act in place of a Clean Power Plan-type plan submission.

If the EPA decides to modify the Clean Power Plan, CICS urged the agency to consider changes to the new source review program as well. That program sets the threshold for when changes to an existing facility becomes a "major modification" triggering more stringent emissions requirements.

EPA Administrator Scott Pruitt announced Sept. 20 that a task force has been formed to study reform of the program, which some critics say provides a disincentive for industry to pursue efficiency or emissions reduction projects out of fear of triggering harsh new permitting requirements.

The Sierra Club is opposed to a replacement Clean Power Plan that would only rely on heat rate improvements because such efficiency improvements often lead to higher-polluting facilities running more often and releasing more of the pollutant at issue as they become more cost-effective to operate.

Managing Attorney Joanne Spalding called the 2035 deadline suggestion "obscene," and said the request to allow state programs to substitute for a plan submission would render

the rule unenforceable.

"We need to be off fossil fuels — particularly off coal by then — and we're working towards that. And we need to really start ramping down natural gas as well, so that's an outrageous timeline," Spalding said. "We think not only do we need to get off coal before 2035, but that we can and we will."

Ore. Sen. Wyden Rolls Out Bills to Support Renewables and Protect Grid

As Puerto Rico and other parts of the country recover from hurricanes, U.S. Sen. Ron Wyden, D-Ore., rolled out three new bills aimed at making the electric grid more flexible and better integrating renewable energy.

The legislation comes as the utility industry, policymakers and regulators are considering whether the devastation Hurricane Maria wrought on Puerto Rico, which lost nearly all its power Sept. 20 as a result of the weather event, presents an opportunity to modernize the island's electricity assets and make the rest of the U.S. grid more resilient.

"These bills will promote a more flexible electricity grid that can respond to power disruptions from natural disasters and ensure reliable, low-cost electricity for consumers now and in the future," Wyden said Sept. 27 as he introduced the proposals.

Dubbed the Flexible Grid Infrastructure Act of 2017, Senate Bill 1875 would require the Secretary of Energy and the Federal Energy Regulatory Commission to conduct, at least once every three years, a national assessment of the technical and economic potential of distributed energy resources, including their ability to enhance grid flexibility and reliability.

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The bill would authorize \$50 million for the U.S. Department of Energy and FERC to establish an internet clearinghouse to give energy companies, utilities and homeowners data to help deploy small-scale distributed energy resources, or DERs.

The DOE also would be tasked with creating and making public a national, voluntary action plan to provide states with technical assistance to deploy DERs.

In addition, the bill would authorize \$100 million for the DOE to research, develop and demonstrate ways to balance the grid using newer, advanced technologies such as electric vehicles and provide \$150 million for a nationwide innovation "prize" to encourage states to coordinate with public and private entities to cut energy prices and better integrate emerging energy technologies.

Another bill, the Reducing the Cost of Energy Storage Act of 2017, would provide the DOE with \$3.25 billion over 10 years to research, develop and demonstrate projects aimed at lowering the cost of energy storage, including for large-scale and distributed storage, electric vehicle storage and battery lifecycle management.

That bill, S. 1876, sets an ambitious goal for the DOE to lower energy storage costs by 80%.

Lastly, Wyden introduced S. 1874, or the Distributed Energy Demonstration Act of 2017, which would direct the DOE to create competitive, cost-share demonstration grant programs to help integrate small-scale distributed energy resources.

Such resources would include rooftop solar and new energy storage technologies into the grid; design and implement energy storage demonstration projects using hot water heaters; advance electric vehicle-to-grid integration; and streamline energy transactions through more modern trading platforms based on real-time, minute-by-minute changes in the price of electricity.

The bill would also reauthorize DOE

grants that support smart grid deployment and require utilities applying for those grants to have a plan for integrating smart grid technologies onto their systems.

The three bills were referred to the Senate Energy and Natural Resources Committee. It's possible the bills could be attached to other legislation.

U.S. Emissions Declined by 6% from 2005 to 2014

Thirty-five states and Washington, D.C., reduced their emissions from 2005 to 2014, with Vermont, Maine and Alaska leading the way. Vermont and Maine both benefit from vast forestland that acts as a carbon sink to absorb more carbon dioxide than it releases.

Alaska's reductions came largely from reduced petroleum use for transportation and lower emissions from natural gas use in industry.

Fifteen states have increased their emissions, with North Dakota, Montana and Iowa in the lead. North Dakota's increase was largely driven by the boom of natural gas and oil extraction, and the lack of standards that require operators to adopt all cost-effective measures for controlling methane emissions.

On the other hand, Montana is in this group because of its small absolute emissions, which saw a relatively large percentage increase (from around 2.0 MtCO₂e in 2005 to 2.4 MtCO₂e in 2014) even though the state – with vast forestland – still accounts for less than 0.1 percent of total U.S. emissions.

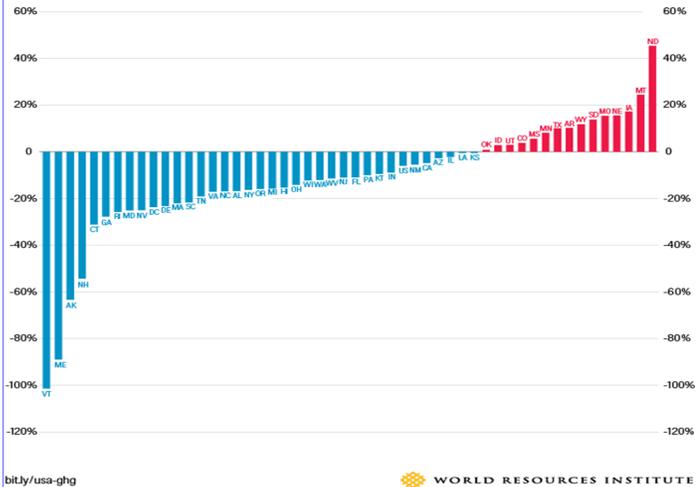
Nearly all states have reduced emissions from the electric power sector.

Ohio, Georgia and Pennsylvania record the largest reductions. The switch from coal-fired power plants to natural gas-fired electricity generation has been one of the leading factors contributing to those reductions: all three states have halved their electricity generation from coal over the past decade according to the latest EIA data.

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Percent Change of U.S. State Emissions
2014 Compared to 2005 Levels

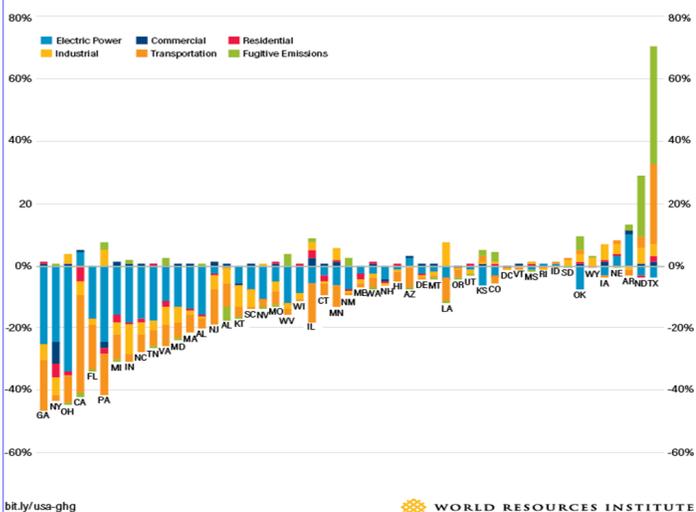


Most states have also cut emissions from transportation. California, whose transportation sector is the biggest contributor of its GHG emissions, has led the pack by significantly reducing fuel use overall with its efforts to transform to a clean transportation sector.

In contrast, Texas has seen a significant increase in its transport-related emissions.

North Dakota and Texas saw the largest increases in so-called fugitive emissions from leaks and other unintended releases, mostly due to increased methane emissions associated with natural gas production.

Change of Energy Sub-Sector Emissions
2014 Compared to 2005 Levels MtCO₂e



Perry Proposes Regulatory Overhaul

In a rare move that could spark sweeping changes in energy regulation, Energy Secretary Rick Perry today called on the Federal Energy Regulatory Commission to take action that could prop up struggling coal and nuclear plants.

The Department of Energy wrote in a notice of proposed rulemaking that FERC has an "immediate responsibility to take action to ensure that the reliability and resiliency attributes of generation with on-site fuel supplies are fully valued."

The proposed regulation directs FERC to require the electricity markets it oversees to change their rules to compensate "fuel-secure" sources of generation that have a 90-day fuel supply on-site — which could include coal, nuclear and hydropower plants — by allowing them to fully recover their costs.

"If FERC actually adopted this rule, it'd be the largest change to electricity regulation in decades," Travis Kavulla, a Montana regulator and former president of the National Association of Regulatory Utility Commissioners, said on Twitter.

But implementation of the regulation could prove challenging, and FERC still has a say in how it responds. And ultimately, opponents could ask the courts to intervene in any final rule.

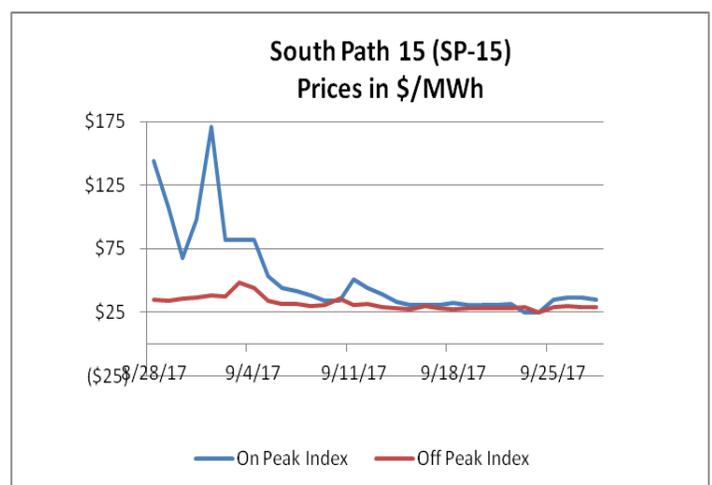
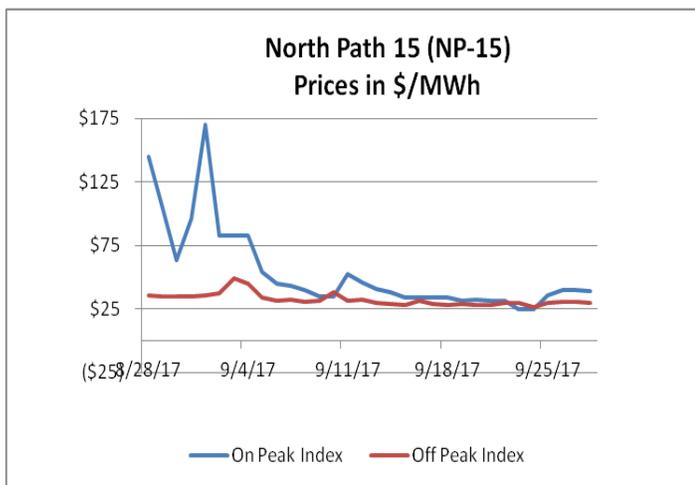
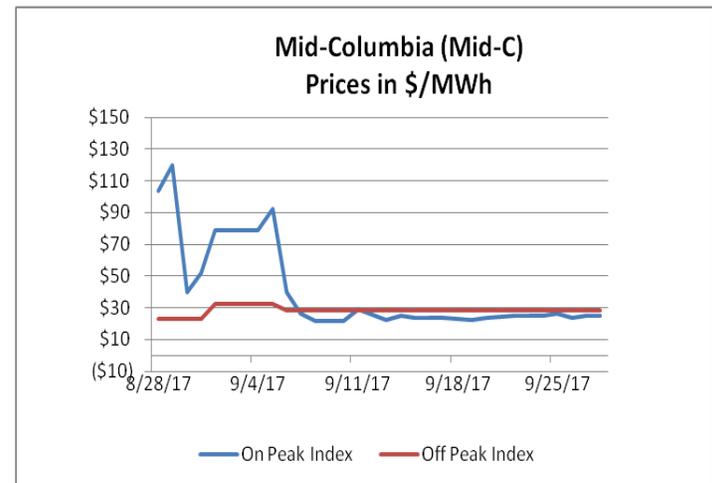
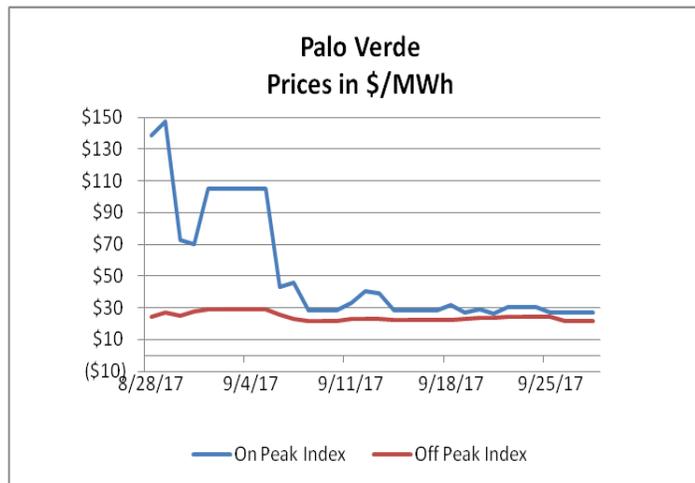
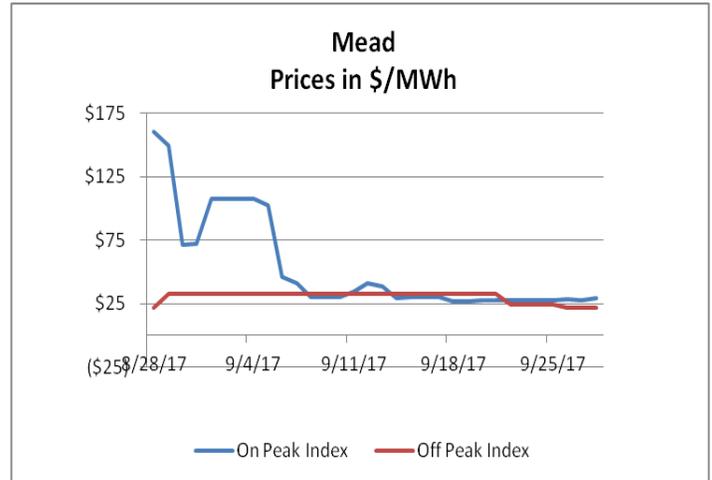
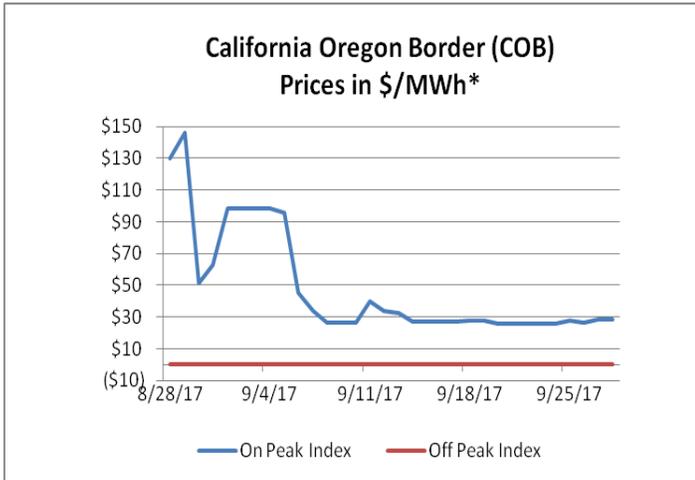
DOE's proposed rule orders FERC to finalize the regulation within 60 days of its publication in the *Federal Register*, but that timeline might not meet legal requirements, said Ari Peskoe, a senior fellow at the Harvard Law School Environmental Policy Initiative.

"FERC rules usually have much more technical detail," said Peskoe. "This reads more like a directive to FERC to figure this out."

Legally, he said, "FERC can't issue a problem statement like that and then 60 days later finalize a rule." He added, "People have to have notice of what the proposal is so they can meaningfully comment on it."

A FERC spokeswoman said the agency has received the proposal and is reviewing it.

Western Electricity Market Prices



* COB off-peak prices unavailable

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Kelly Francone at: 801.355.4374 or kfrancone@energystrat.com