Clearing Up

Energy and Utility News for the Pacific Northwest and Western Canada

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The Week In Summary

[1] Radical Changes Needed to Reach Northwest CO2 Targets, Study Says

Four Northwest states, three decades and an 86 percent reduction in energy-sector carbon emissions below 1990 levels; a study commissioned by the Clean Energy Transition Institute says it's achievable, but will require radical changes. It's the region's first economywide study to look at the economic and institutional realities in Washington, Oregon, Idaho and Montana and model pathways to deep decarbonization by 2050. ***At [14], the Institute presents its findings to the Northwest Power and Conservation Council.***

[2] CAISO Defends EIM Market-Power Mitigation Plan Against CPUC Protest

California's grid operator is seeking federal approval of new market rules meant to address a bidding problem for Northwest hydro resources in the Western EIM, but is facing some resistance from state regulators, who say they don't account for the value of transmission capacity. ***At [12], Northwest hydro group says the opposition is based on a misunderstanding of how energy markets work in the West outside of California ISO territory.***

[3] Seattle Committee OKs 'Large' Solar Program, EIM Entry

A pilot program aimed at commercial customers wanting to invest in "large" solar systems has been approved by a Seattle City Council committee, which also approved Seattle City Light's entry next April into the Western EIM. The pilot fills a "policy gap" for solar arrays in the 100 kW to 2 MW range, and will pay 7 cents/kWh for energy consumed on site, and an "export rate" of 3.5 cents/kWh for energy sent to SCL. It also provides a higher incentive for "highly efficient" buildings that are certified under the city's climate plan. ***At [10], eight months out from going live in the EIM, SCL brings a critical software system into service.***

[4] Seattle City Council Adopts Resolution Calling for Green New Deal

Seattle City Council has set a long list of ambitious economic, environmental and social goals for the city in a "Green New Deal" resolution passed Aug. 12, joining other cities in the national movement, but stopping short of establishing an oversight committee to enforce its provisions. The resolution calls for electrification of transportation, eliminating greenhouse gas emissions from the building sector and expanding renewable energy generation. ***At [15], Seattle's mayor follows suit by directing city departments to evaluate ways to support the resolution's goals and to more quickly achieve targets in the city's 2018 Climate Action Plan.***

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Energy Jobs Portal

Go to www.EnergyJobsPortal.com for the latest in regional energy career opportunities.

[5] MPSC Sidesteps Court Decisions in Ruling on NWE QF Dispute

In a final order resolving a QF contract dispute, the Montana PSC said recent state district court decisions don't apply to the issues at hand, ruling against a wind developer to omit a carbon adder and to impose a 15-year contract limit rather than a 25-year term the court ordered in a different case. ***At [13], the PSC also rejected several of NorthWestern Energy's proposals as lacking "sufficient" evidence or documentation.***

[6] PacifiCorp to Repower One of Region's Oldest Wind Facilities

PacifiCorp announced Aug. 13 that it has acquired sole ownership of the 41.4 MW Foote Creek I wind facility in Carbon County, Wyo., and will rebuild the project to give it a 60 percent boost in output and at least another 30 years of service. Foote Creek I was permitted in 1999, making it one of the oldest wind projects in the region, and was PacifiCorp's first utility-scale wind project. ***At [11], what was old, will be new again.***

[7] POTOMAC: States, Cities Sue Over Clean Power Plan Replacement

Twenty-two states, including five in the West, on Aug. 13 sued in federal appeals court to challenge the Affordable Clean Energy rule, the Clean Power Plan replacement that the Environmental Protection Agency finalized June 19. Six cities, including two in the West, and the District of Columbia joined the suit. Meanwhile, states and environmental groups vowed to fight the Trump administration's revised rules for implementing the Endangered Species Act. ***FERC makes early-action determination for Chelan County PUD's Rock Island project, at [16].***

Briefs

[8] WUTC Says PSE, Avista on Track for Meeting 2019 RPS Mandate

Puget Sound Energy and Avista are in compliance with the state's Energy Independence Act, the Washington UTC announced Aug. 8.

The EIA was approved by voters in 2006 and requires qualifying electric utilities to obtain a certain percentage of their electricity from eligible renewable resources, including wind, solar, and hydropower.

As part of the EIA requirements, PSE and Avista file reports detailing their renewables portfolios and how each utility will supply at least 9 percent of its electric load through renewable sources for 2019.

WUTC determined that PSE and Avista complied with the state renewable resource standard. PSE exceeded its commission-approved target of 1.89 million MWh of renewable power, acquiring more than 2.5 million.

PSE owns three wind facilities with a total capacity of 772 MW, and is the third-largest utility wind generator in the U.S.

Avista exceeded its target of 514,144 MWh, acquiring more than 800,000.

The commission will review compliance by the state's other investor-owned electric utility, Pacific Power, at its Sept. 12 open meeting following further discussions between the commission's staff and the company.

Each company will file a final compliance report by 2021 showing exactly which resources were used to meet its target and requesting a determination from the commission that it met its mandate.

The EIA directs the companies to obtain 15 percent of their electricity from eligible renewable resources by 2020.

All but two of Washington's 17 eligible utilities plan to meet the current 9 percent mandate under the state's RPS for 2019, and all but one appear to be on track to meet their two-year conservation targets, according to plans submitted to the state's Commerce Department last month (CU No. 1900 [12])

Clark Public Utilities and Seattle City Light intend to comply with less than the 9 percent mandate under the EIA's cost-based standards—Clark under its 4 percent cost-cap provision and SCL under an option available to utilities with no load growth.

Together, the 17 utilities will use 6.1 million MWh of generation and RECs for RPS compliance in 2019, and have already acquired 933,328 MWh of cost-effective conservation in 2018, according to last month's report to Commerce. ***[Steve Ernst]***

[8.1] NWPCC Recommends 48 Projects for BPA Funding

The Northwest Power and Conservation Council has recommended BPA continue funding 48 projects in its Fish and Wildlife Program that the Independent Scientific Review Panel reviewed.

The Mainstem and Program Support Project Review was the second of four reviews the Council expects to complete in four years. Many of the projects in the category review involve restoration or research on the main-stem Columbia River.

"This is a very varied set of projects," Lynn Palensky, the Council's project review manager, told the Council Aug. 14. She said the projects included some basinwide research, large-scale data repositories such as the Fish Passage Center, lamprey recovery projects, an ocean survey, an enforcement project and some large-scale habitat work.

Also included in the recommendation is continued funding for the Columbia Basin Bulletin at an annual cost of $74,206 through 2020—which is half of its previous funding—while it transitions to a self-sustaining publication through subscriptions.

In adopting the project review, the Council considered recommendations from the ISRP along with impacts of ocean conditions and cost-effectiveness. "Collectively, work recommended is intended to support and implement the Program and is also integrated with the requirements of the Federal Columbia River Power System Biological Opinion and the commitments made by Bonneville with the parties to the Columbia Basin Fish Accords," the decision memorandum states.

Palensky said that the ISRP identified several issues in its review. Some of those are being addressed through

different work groups or processes. But with the funding recommendation, the Council is also recommending specific requirements of some of the projects, she said.

One of those requires reports from three hatchery research projects to be submitted by September 2020 so the research can be used in a Habitat and Hatchery Review.

Another recommendation is for the Council to convene a Data Management and Information subcommittee to address overall needs for data sharing, efficient flow of information, identification of primary regional databases to house documents, and communication of the role of the databases in providing public access to program-funded projects.

Other recommendations involve the sharing and reporting of information, and improving methods to ensure projects are meeting their objectives.

The Council plans to host a webinar for project sponsors about developing objectives and an adaptive management plan. ***[K.C. M.]***

[8.2] Too Many Shad? NWPCC Wants to Know

As record numbers of shad continue to migrate up the Snake and Columbia rivers, the Northwest Power and Conservation Council decided it's time to look into the ecological impacts of having millions of additional fish in the Columbia Basin.

Since early May, more than 7.4 million have traveled past Bonneville Dam, and they're still coming. So far, more than 3 million have continued past three more Columbia River dams to cross McNary Dam, and more than 526,000 of them journeyed up the Snake River to cross Ice Harbor Dam.

"That's a lot of fish," Tony Grover, NWPCC's director of fish and wildlife, told the Council's Fish and Wildlife Committee on Aug. 13. So many that fish counters have had trouble seeing past all the shad on the fish ladders to count the much sparser sockeye, he noted.

Grover said he went to Bonneville Dam, where some 200 people stood shoulder to shoulder catching shad from the shoreline. For anglers who enjoy them, it's been a boon. But is there an environmental cost?

American shad were introduced to the Pacific Northwest in the late 1800s, and for the last 30 years their annual returns past Bonneville have ranged from 1 million to 6 million. Last year, 6.1 million shad were counted at Bonneville Dam, beating all previous records—until now. The returns to Bonneville are just a fraction of what the U.S. Geological Survey believes may enter the Columbia River each year.

Earlier this summer, Washington Department of Fish and Wildlife officials told Clearing Up they know of no detrimental impacts, and noted they bring with them marine nutrients that the river system may be lacking due to low returns of other anadromous fish (CU No. 1908 [12]).

Grover said he assigned Patty O'Toole, the Council's manager of program performance and development, to research what's known about American shad and their impacts to the larger ecosystem.

"This is very much in the early thinking stages," O'Toole told the Council's Regional Coordination Forum Aug. 12. She said she is gathering and reviewing scientific literature and will be looking into work done by the U.S. Geological Survey.

She said she welcomes any information from others. The main purpose, she said, is to find out "what are the likely impacts of this shad population that seems to be growing and growing and growing." ***[K.C. M.]***

[8.3] WDFW to Seek Supplemental Funds to Fill Shortfalls

The Washington Fish and Wildlife Commission says the state's Department of Fish and Wildlife needs an additional $50.5 million to meet operating costs, capital needs and new responsibilities in 2020—which include recent state and federal laws enacted to promote salmon recovery—and approved moving forward on a request in the next state legislative session.

The request would include $24.5 million in increased operating funds and $26 million in capital funds, according to a news release from the agency.

About $6.5 million is needed to implement the salmon recovery efforts, including $830,000 for the removal of sea lions in the Columbia Basin, a recommendation of Gov. Jay Inslee's Southern Resident Killer Whale Task Force.

Another $1 million would go toward implementing commitments for salmon recovery on the Columbia River, such as funding for alternative-gear pilot projects and a commercial buyback analysis, and for improving fishing opportunities while meeting salmon recovery objectives.

Nate Pamplin, WDFW's director of budget and government affairs, told the commission on Aug. 2 that the funding is needed in the state's 2020 supplemental budget to help fill in revenue lost when a fee bill did not pass the Washington Legislature last year.

He said the agency had asked for $31 million to stabilize the agency's budget, and $30 million in enhancements. Instead, the Legislature approved a one-time $24.5 million appropriation in the state's general fund. In addition, lawmakers passed new bills that added $9.4 million in new costs that were not backed by revenue.

"It's one step forward, two steps back for us on how we're dealing with the structural deficit," Pamplin told the commission.

A number of measures have reduced the agency's budget this year, including expiration of the Columbia River Salmon and Steelhead Endorsement, reduced fisheries and monitoring due to smaller run sizes, the closure of some research projects and the elimination of an after-hours licensing call center. It has also left positions vacant to temporarily resolve its funding needs, Pamplin said.

Funding requests in the supplemental budget will include $11.4 million to help the agency address a deficit caused by "legislated and unavoidable" cost increases, and another $6.6 million to continue providing existing services at current levels. ***[K.C. M.]***

[8.4] Missing Oil Prompts Unit Shutdown at Lower Monumental

The U.S. Army Corps of Engineers says between 200 and 300 gallons of oil at Lower Monumental Dam cannot be accounted for and may have leaked into the Columbia River from a turbine in Unit 2, prompting the agency to take the unit off line.

The potential leak was discovered during the first week in August and is still being investigated, according to an email from Corps spokesman Joseph Saxon, who added that the unit will not return to service until the issue is resolved.

As required by law, the Corps notified the Environmental Protection Agency, National Response Center and Washington Department of Ecology. It also notified Columbia Riverkeeper, which had sued the Corps over oil spills at eight dams—including Lower Monumental—resulting in a 2014 settlement. The settlement required the agency to apply for water pollution permits from the EPA, but the EPA has declined to issue those permits, a news release from Riverkeeper says.

Riverkeeper now has unresolved lawsuits against the Corps for oil losses at Chief Joseph Dam, and against Grant and Douglas County PUDs for oil losses at three mid-Columbia dams. The Chelan County PUD settled before a lawsuit was filed.

"Shockingly, the Army Corps faces no penalties for fouling the Snake River with toxic oil," Riverkeeper's senior attorney Miles Johnson said in a news release about the most recent oil losses. His statement added, "Oil pollution from Lower Monumental Dam is just one more reason to remove the four obsolete, aging dams on the lower Snake River."

Saxon said his agency is doing everything possible to reduce the risk of oil releases, but there are no direct means to detect a leak from turbine runners, especially—as in this case—when the leak is too small to cause a visible sheen on the water.

To help prevent oil leaks, the agency is replacing seals when needed and working to identify improved seal technologies that work better on aging turbine runners, Saxon said.

The agency is also testing and evaluating environmentally acceptable lubricants, and looking for better ways to meter oil transfers to improve early detection of oil releases. "We'll continue refining these procedures because our goal is to not spill any oil," his email said. ***[K.C. M.]***

[8.5] FERC Terminates Okanogan PUD's 9-MW Enloe License

FERC on Aug. 13 terminated Okanogan County PUD's operating license for construction of the 9 MW Enloe hydroelectric project, after the PUD failed to begin construction by the July 9, 2019, statutory deadline.

The order follows one it issued July 10 for "Probable Termination," which started a 30-day countdown for termination *[P-12569]* (CU No. 1910 [13]).

The agency's new order said the license termination is effective at the close of business Sept. 12, to provide 30 days for public comment.

Okanogan had tried for years to re-electrify the dam, but decided in November to abandon the effort after learning the estimated project cost—$70.4 million—was more than twice the $31 million estimate in the 2007 FERC license application (CU No. 1879 [15]).

The utility ultimately opted to let the license expire under its own terms rather than actively seeking this, which would have involved the expense and effort of submitting a letter to FERC relinquishing the license.

Once the license is terminated, jurisdiction over Enloe will revert to the Washington Department of Ecology's dam safety division, which oversaw dam safety issues for Enloe, located on the Similkameen River near Oroville, Wash., prior to the FERC license, according to Okanogan staff. ***[R. A.]***

[8.6] Avista Settles Remaining Issues in Oregon Natural Gas Rate Case

Avista has reached a settlement with all parties in its Oregon natural gas general rate case that, if approved by the Oregon PUC, would provide a 4.2 percent, $3.6 million annual revenue increase, the utility announced Aug. 14.

Issues addressed in the deal include capital investments in infrastructure improvements and the recovery of increased utility operating costs. It would set a rate of return on rate base of 7.24 percent, with a common equity ratio of 50 percent and a 9.4 percent return on equity.

The settlement would result in a 4.5 percent, $2.19 increase in the monthly bill of an average residential customer using 47 therms, and make no change to the basic charge.

In its original filing *[UG 366]*, Avista requested a 7.8 percent, $6.7 million revenue increase. It also proposed a 7.55 percent ROR and a 9.9 percent ROE (CU No. 1894 [7.2]) (the settlement maintains the current levels of both), and would have increased the base charge from $10 to $12.

A partial settlement reached in July reduced the revenue request to $5.4 million (CU No. 1909 [9]).

If the settlements are approved, the new rates would take effect Jan. 15, 2020.

Joining Avista in the new settlement were the OPUC staff, Oregon Citizens' Utility Board and the Alliance of Western Energy Consumers.

Avista serves approximately 104,000 customers in Oregon. ***[R. A.]***

[8.7] BC Hydro Crisis Fund Pays Out Much Less Than Expected

A special fund setup under a three-year pilot project to help BC Hydro customers pay their power bills during times of financial hardship is turning out to be far less costly than expected.

In fact, the Customer Crisis Fund (CCF), which Hydro launched in June 2018 on orders from the British Columbia Utilities Commission as part of its last rate-setting application, has paid out only a quarter of what was expected during its first test year.

Hydro's interim report on the CCF said the B.C. government-owned utility collected C$4.5 million via a 25-cents-per-month rate rider on customer bills but spent just C$1.7 million on operating costs and direct grants to customers in the test program.

Consequently, Hydro has now applied to the BCUC to significantly reduce the monthly rate rider from 25 cents to 13 cents. If approved it would be effective on Oct. 1, 2019.

"Based on the current rate rider, the current CCF pilot costs and the forecast costs . . . for the remainder of the three-year pilot, BC Hydro expects that the revenue

collected will be greater than forecast costs," said Fred James, BC Hydro's chief regulatory officer, in the utility's application to amend the monthly rate rider.

If Hydro continued to collect at the monthly 25-cent rate, James said the account's surplus could reach up to C$7.9 million by April 30, 2021.

BC Hydro spokeswoman Tanya Fish said CCF program costs came in lower than expected for several reasons: the set-up costs were about half of what was originally expected and customer participation during the first year was lower than estimated largely due to Hydro not having a comparable program on which to base participation. Other jurisdictions with similar programs in Ontario and the U.S. were also used in estimating costs, she added.

In total, the CCF paid out just C$847,518 in the first year directly to 2,282 customers experiencing significant financial difficulty and unable to pay their electricity bills. That resulted in an average of $371 per customer while the CCF provides up to $600 per customer in grants.

The program was designed to help customers facing a financial crisis and possible disconnection, not those who are only behind in their electricity bills. Hydro was ordered by the BCUC to launch the pilot project after anti-poverty groups in Hydro's 2015 rate hearing expressed concerns over impacts on low-income groups from rising electricity costs. ***[B. L.]***

[8.8] Brief Mentions: News Roundup

Avista on Aug. 12 announced a number of near-term leadership changes to facilitate the CEO transition next March, when Scott Morris retires and Avista President Dennis Vermillon steps in. These include promoting Mark Thies from senior VP/CFO to executive VP/CFO; Heather Rosentrater from VP of energy delivery to senior VP of energy delivery; and Kevin Christie from VP of external affairs and chief customer officer to senior VP of external affairs and CCO. Also, Karen Feltes, Avista senior VP and chief human resources officer, will retire on Feb. 1 after serving for 21 years.

Gov. Jay Inslee appointed Pierce County sportsman James Anderson and Douglas County cattle rancher Molly Linville to the Washington Fish and Wildlife Commission, with terms that end Dec. 31, 2024. Linville fills a vacant seat on the nine-member council and Anderson replaces Jay Holzmiller, of Asotin County, who had served on the commission since 2013. New appointees must be confirmed by the state Senate, which will reconvene in January, but can serve and vote on the commission prior to Senate action.

The Northwest Power and Conservation Council on Aug. 14 renewed the appointment of an Independent Scientific Review Panel member and appointed a new member. Stan Gregory, a professor emeritus of fisheries at Oregon State University, was reappointed to serve on the panel through Sept. 30, 2023. Thomas Quinn, a University of Washington professor with expertise in salmon and trout ecology, predator-prey interactions and selective effects of fisheries and artificial propagation, was appointed to his first term from Oct. 1 through Sept. 30, 2022. Funded by BPA, the 11-member team of scientists offers independent analyses of the Council's Fish and Wildlife Program projects.

The Council also on Aug. 14 approved a letter to the U.S. Army Corps of Engineers supporting its proposed rapid response plan if quagga or zebra mussels are detected in the Northwest (CU No. 1912 [14]). Under the proposal, cost of response is split between federal and state governments. The letter urges the Corps to move quickly to implement the plan once the comment process is complete. Council member Jim Yost said Idaho has concerns about jurisdiction and primary response under the plan, but supported sending the letter. He said their concerns would be raised separately. ***[C. U.]***

[8.9] CORRECTION: Court Ruling Doesn't Trigger NorthWestern Energy Fine

A recent story (CU No. 1914 [11]) incorrectly stated that a decision by a Montana state district court judge automatically resulted in a $2.5 million fine for NorthWestern Energy. While the court's decision overturned a Montana PSC order, any fines must be imposed by the commission. We regret the error. ***[C. U.]***

[8.10] CORRECTION: NW Natural Did Not Make a $7M Gift in Q2

A second-quarter earnings story in the previous issue (CU No. 1914 [6]) erroneously stated, "NW Natural gains even with pension fund disallowance and $7 million philanthropic gift." It should have read, "NW Natural gains even with pension fund disallowance." The gift was made by Avista during Q2, and was described in a separate story in the same issue. We apologize for any confusion this may have caused. ***[C. U.]***

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Opinion & Perspectives

Bearing Down

[9] The NW Has Lost a Powerful Voice, Strong Advocate for Competition

Robert Kahn passed away the morning of Aug. 8 after a short battle with cancer. He was kept alive long enough for his kids to get back to Seattle to say goodbye.

It's hard to imagine Northwest energy policy without Bob's articulate and passionate voice. He was warrior, poet and a master strategist. He enjoyed doing battle with monopoly utilities, and many times over the years he'd call to rehash testimony he had given, or tell me about a conversation he had. He loved his work, and said so many, many times.

Early in his career he was a research assistant for the late architect and philosopher Buckminster Fuller, and like his mentor, Bob had a tireless and free-ranging curiosity.

"Up until the day he died he had wonderful childlike curiosity, he had a sense of wonder and a sense of joy in meeting new people, an openness to hearing their stories and trying to figure out what makes them tick," Rob Harmon, a longtime friend and colleague of Bob's told me. "He had an enthusiasm to connect with people, no matter where they were from or what language they spoke."

Harmon introduced Bob in 2007 when his work in renewable energy and energy independence was recognized by the Jewish National Fund. Harmon described him as living the "definition of Enthusiasm—en theos—possessed, or inspired by God."

"It's what made him tick, it was really a spiritual thing with him, and it was as deep in him as his Judaism," Harmon said.

Bob loved history, music, baseball, wine, cigars and politics. He could go on about Abraham Lincoln, or something he read on HistoryLink, where he was on the board for many years, and then send you a link to a live broadcast of the Telluride Music Festival or some obscure performance by the Kinks.

He was a controversial figure, another role he relished. He was a free-market advocate, environmentalist, Democrat, and somewhere in there was an outlaw rock-and-roll guitar player with his middle finger in the air and the amp turned up to 10.

Bob was complicated, but thoughtful in his beliefs and always presented clear and clever arguments. He loved to share music and bitch about the Mariners.

He was fun guy to drink with.

He loved learning and debating Northwest energy policy, and was a regular at the Oregon PUC and Washington UTC, as well as FERC. Utility lawyers and regulators may not have always liked what he said, but they knew him as an intellectual power and orator who they had to be prepared for. Bob was never afraid to throw high and inside.

"He could be a pain the neck, but the truth is I loved Bob for everything he was," said Rachel Shimshak, retired executive director of Renewable Northwest, an organization Bob helped start and served in as a board member for many years.

"He was driven and committed, but he didn't love compromise," she said. "But you know, he always made for a lively docket."

Bob was tenacious, "like a dog with a bone," he just wouldn't let up, Shimshak said. "And sometimes, it was clearly not in his interest to keep going and he was not making friends. But it kind of didn't matter, because he was so committed."

Bob was born in Oak Park, Ill., and proudly wore the burdens and joys of being a Cubs fan. He studied religion at Colgate University and earned a doctorate in education from the University of Massachusetts at Amherst and never stopped learning.

He was studied, wise and thoughtful. He wanted to make big, sweeping changes that shattered the status quo. He was never satisfied with just nipping at the edges of any problem.

"He was a controversial figure for sure," Shimshak said,

"He fiercely believed in competition, and was an advocate for competition in a regulated world for most of his life. He was also an advocate on behalf of the environment; the two were very related in his mind."

Harmon said that "even when he made choices that folks didn't agree with, you knew they were principled choices."

The Northwest and Intermountain Power Producers Coalition will hold its annual meeting in a little less than a month. Tim Killian and Fibi Duke will "carry on," as Bob used to say. There will likely be a few tears shed and some somber moments.

But Bob was not a somber guy. He liked the sound of clinking glasses, steel guitars and rancorous debate. He was, above all else, an energy guy who believed in the power of ideas. He loved big thinking, deep and passionate conversation; and being with friends who laughed, talked and were living with the throttle open.

Just like he did.

[Steve Ernst]

Photo: Rob Harmon

Price Report

Western Power Prices Perk Up

Peak power prices across the West picked up between $4 and as much as $18.25 in trading this week, a portion of which can be attributed to greater California demand and extreme heat across the Southwest.

Between Aug. 12 and Aug. 15, California ISO demand increased about 15 percent, with what should prove the week's high of 44,129 MW reached Aug. 15.

Total renewables on the CAISO grid reached 15,849 MW Aug. 10, providing roughly 49 percent of demand. Thermal generation sources fulfilled 21,215 MW, or about 48 percent, of demand Aug. 14.

Daytime power prices in the region added as much as $18.25 in Aug. 8 to Aug. 15 trading. Palo Verde experienced the greatest gains, adding $18.25 to reach $51.75/MWh.

Temperatures in the Desert Southwest climbed above averages for this time of year to around 110 degrees Fahrenheit Aug. 14 and 15. Some daytime highs approached records, according to Accuweather, which is forecasting near-record heat again Aug. 19 and 20 in areas such as Palm Springs, Phoenix and Las Vegas.

Following suit, Western nighttime values picked up between $1 and as much as $10 by the end of trading. The Palo Verde off-peak price added $10 to reach $33.75/MWh. Nighttime power prices ranged from $24/MWh at Mid-Columbia to $33.75/MWh at South of Path 15.

Meanwhile, Western natural gas prices added between 9 cents and as much as $1.34 in Aug. 8 to Aug. 15 trading. El Paso-Permian Basin natural gas added the most, jumping $1.34 to $1.55/MMBtu. Alberta natural gas was the exception, tumbling 76 cents to 38 cents/MMBtu.

Henry Hub gas spot prices added 3 cents in trading to end at $2.14/MMBtu.

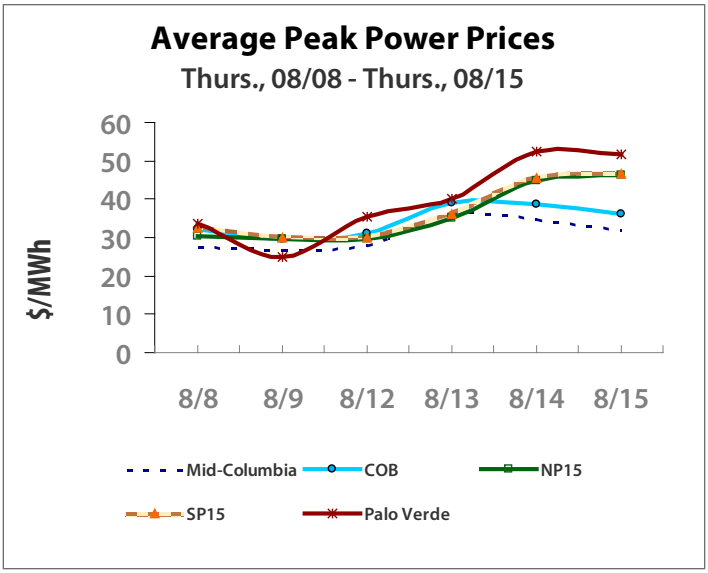
Working natural gas in storage was 2,738 Bcf as of Aug. 9, according to the U.S. Energy Information Administration. This is a net increase of 49 Bcf compared with the previous week.

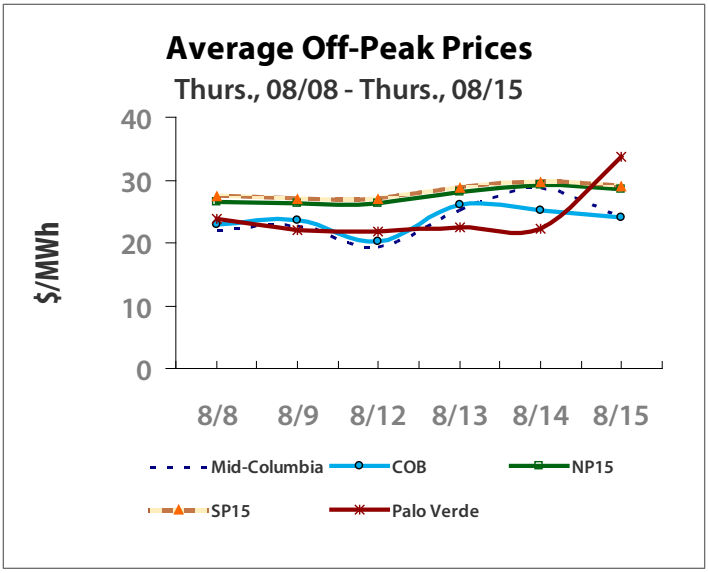
"Prices in Southern California traded in a wide range of $1.31/MMBtu throughout the report week as a result of continued supply constraints in the area," the EIA said in its weekly report. SoCal CityGate ended above $3 at $3.11/MMBtu. PG&E CityGate closed the trading period at $2.58/MMBtu, and SoCal Border ended at $2.56/MMBtu.

Nationally, the EIA said, natural gas production set a new record of 92.1 Bcf per day Aug. 5. Production levels have continued increasing in August despite relatively low natural gas spot prices.

Agency analysts also noted that natural gas spot prices "have been on a downward trend since early spring," with Henry Hub spot gas prices at a multiyear low. The spot price at the hub was $2.02/MMBtu, the lowest recorded since May 30, 2016, EIA said.

[Linda Dailey Paulson]



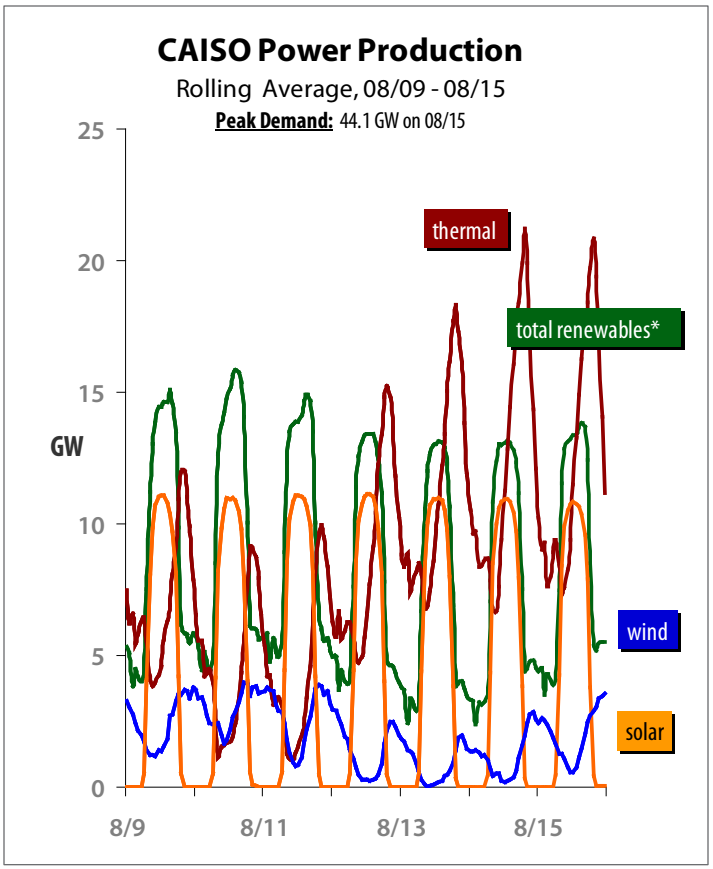


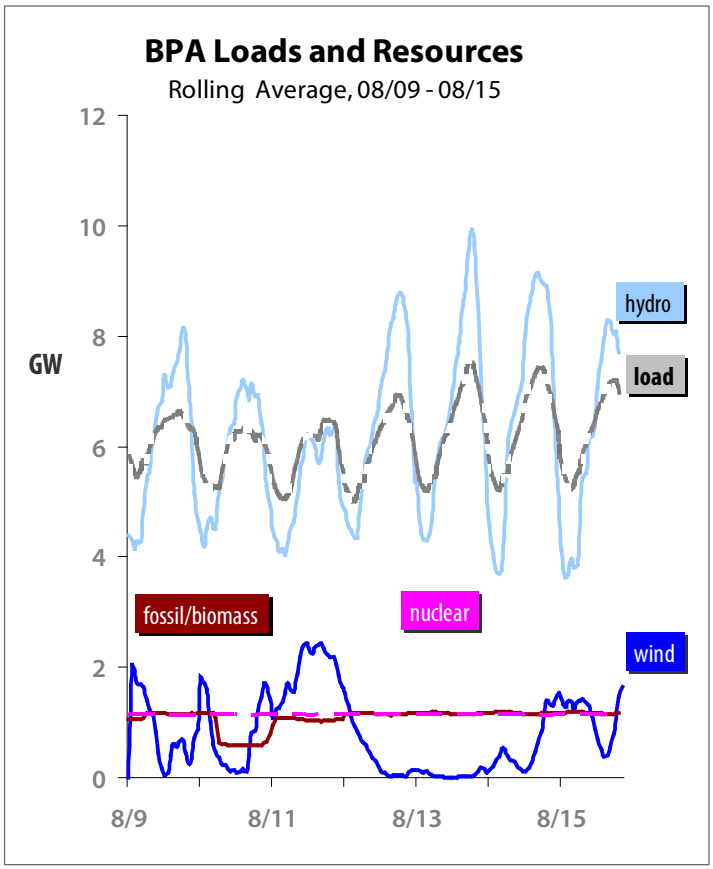
Average Natural Gas Prices ($/MMBtu)

	Th., 08/08	Tue., 08/13	Th., 08/15
Henry Hub	2.11	2.18	2.14
Sumas	1.81	1.96	1.93
Alberta	1.14	1.06	0.38
Malin	1.87	1.98	1.98
Opal/Kern	1.84	1.96	1.93
Stanfield	1.84	1.95	1.95
PG&E CityGate	2.46	2.57	2.58
SoCal Border	2.35	2.93	2.56
SoCal CityGate	2.75	3.27	3.11
EP-Permian	0.21	1.12	1.55
EP-San Juan	1.71	1.87	1.83

Power/gas prices courtesy of *Enerfax*

Power Gauge





Sources: CAISO and BPA

* includes small hydro (<30 MW)

Supply & Demand

[10] Seattle Committee OKs 'Large' Solar Program, EIM Entry • *from [3]*

A pilot program aimed at commercial customers wanting to invest in intermediate-sized solar arrays was approved Aug. 15 by the Seattle City Council's Housing, Health, Energy, and Workers' Rights Committee.

Seattle City Light calls the solar arrays at issue "large," with ratings between 100 kW and 2 MW. They're too small to be considered utility-scale systems with negotiated wholesale power contracts, and too large to fall under the 100 kW cap of the state's net-metering laws.

This presents a "policy gap," according to proposed Council Bill 119516, which would enact the program.

In a presentation to the committee, Brendan O'Donnell, SCL manager of strategy, planning and analytics, said the two-year pilot program offers a standardized set of terms to replace the current "one-off" contracts.

The program provides a "clear decision framework" for investing in large systems, and streamlines the business process for City Light while also minimizing cost-shifting to customers that don't participate in the program.

Under its terms, commercial customers will be paid 7.7 cents/kWh for energy consumed on site, and an "export rate" of 3.5 cents/kWh for energy sent to SCL's system to account for the power and grid benefits it provides.

The export rate will be updated every other year and is based in part on monthly Mid-C-market forward prices weighted by an expected monthly shape for a typical solar photovoltaic system in Seattle.

In contrast, under net metering, excess energy from small systems is banked over the course of a year, and then credited at retail rates in place at the time of generation, which is 8.89 cents/kWh or 13.06 cents/kWh for residential customers, which make up the bulk of rooftop systems in City Light's system. Currently, O'Donnell said, there around 3,000 such systems with a total of capacity of 20 MW.

The committee approved an amended version of CB 119516 based on stakeholder comments.

The changes include increasing the cap on eligible system size from 1 MW to 2 MW; providing a guaranteed 15-year term with a minimum export price of 1.8 cents/kWh, and customer retention of the generation's RECs.

REC retention was requested by stakeholders who want to use them for corporate sustainability goals and building certification, O'Donnell said. The utility had originally proposed paying customers for them.

Another change was the provision of a higher incentive for Living Building Challenge buildings

that have solar arrays under 250 kW.

The challenge is a sustainable building certification program (CU No. 1764 [13]) that requires, among other things, generating more energy than is used.

The carve-out for such buildings, which are "highly efficient and have large solar systems" was provided because the original policy would have been "a bit punitive," O'Donnell said, forcing them to overgenerate to meet the certification's sustainability requirement due to the relatively low incentive level.

Offering the more lucrative net-metering structure instead "made a lot of sense," he said, because it supports the Living Building Challenge, which is part of Seattle's climate policy.

Also changed was the export rate, which was originally proposed as 2.57 cents/kWh and condemned in public comments as "very low" and "disappointing" by Steve Gelb, the local director of Emerald Cities, a nationwide clean energy and equity collaborative with a particular focus on bringing renewable energy to affordable housing.

This low rate, Gelb said, would discourage more investment in renewable energy systems, and "doesn't seem to take climate change and future capacity needs into account."

But he said he did support the amended version, with its 3.5 cents/kWh rate.

The committee also approved City Light's 2020 entry into the Western EIM by passing CB 119571, the final legislative piece of an effort started in 2016, when the council authorized participation in the EIM implementation process.

Originally shooting to join in April 2019, SCL pushed that to 2020—new members are accepted only once a year on April 1—after determining it needed software upgrades and replacements, and ultimately selected Open Access Technology International to provide the systems required for both EIM participation and energy trading and risk management.

OATI is no stranger to the Northwest, having developed an intra-hour transaction accelerator platform (CU No. 1433 [9.5]) and a faster and expanded dynamic scheduling system (CU No. 1435 [22]) for the region on behalf of the Joint Initiative, a venture involving WestConnect, ColumbiaGrid, Northern Tier Transmission Group, some Western utilities and other participants (CU No. 1369 [18]).

The company has also provided EIM-related software to a fair number of current participants, including NV Energy, Portland General Electric, Idaho Power and Sacramento Municipal Utility District.

Sarah Davis, SCL EIM program manager, announced to the committee that on Aug. 1 they successfully cut over to the new energy trading and risk management system, which she described as a "critical software piece" the utility uses to conduct transactions in bilateral markets.

Over the eight-plus months before going live in the EIM on April 1, SCL will configure and test EIM-specific software; perform connectivity testing in September with California ISO, which hosts and operates the market; and conduct several readiness tests.

Both bills will come before the full council for consideration on Sept. 3, the first meeting after the summer break. ***[Rick Adair]***

[11] PacifiCorp to Repower One of Region's Oldest Wind Facilities • *from [6]*

One of the region's oldest wind facilities is about to get a makeover and a new lease on life.

PacifiCorp announced Aug. 13 that it had acquired sole ownership of the 41.4 MW Foote Creek I wind facility in Carbon County, Wyo., and will rebuild the project to increase its energy output by 60 percent, and keep it in service for another 30 years.

Foote Creek I was permitted in 1999, making it one of the oldest wind facilities in the region, and was PacifiCorp's first utility-scale wind project. Back then it was billed as a "demonstration project," and was jointly owned with Eugene Water and Electric Board. It was financed with a power purchase agreement with BPA.

Bonneville terminated the contract in January, roughly five years earlier than planned, and after EWEB declared it "surplus" in August 2017. Those moves allowed PacifiCorp to take over Foote Creek I, and save Bonneville ratepayers "roughly $2 million per year on a nominal basis over the remainder of the contract period," or in the neighborhood of $10 million total, the agency said (CU No. 1879 [16]).

The success of the facility was the beginning of PacifiCorp's wind portfolio, which today stands at 2,085 MW it owns or has under contract, with another 1,150 MW in development, giving PacifiCorp the largest wind portfolio among regulated utilities in the West.

"Twenty-one years ago, PacifiCorp and its partners' development of Foote Creek I helped pave the way for utility-scale wind energy as an industry-defining demonstration project," said Stefan Bird, president and CEO of Pacific Power, in a prepared statement. "Today, this new investment in the project builds on our vision to even better harness wind energy and power the grid with increased efficiency, delivering even more low-cost, renewable energy to our customers."

PacifiCorp will replace the hardware at Foote Creek I with larger and more efficient, second-generation turbines that are essentially twice as big as the existing turbines. The current 269-foot tall turbines will give way to 492-foot structures with much larger blades. It will take just 13 of the new turbines to generate the facility's 41.1 MW capacity, as opposed to the current 68.

Photo: PacifiCorp

The acquisition of Foote Creek I is the latest in a string of wind and transmission investments that PacifiCorp is making in Wyoming.

The utility will invest $1.5 billion in four wind projects selected from the company's request for proposals for wind energy released in September (CU No. 1819 [21]).

PacifiCorp announced Feb. 20 that it would be acquiring 1,311 MW of wind capacity from four projects in Wyoming, as part of its Energy Vision 2020 plan. The projects will almost double Wyoming's current generating capacity of 1,489 MW, according to the American Wind Energy Association.

The $3.1 billion Energy Vision 2020 plan calls for developing 1,150 MW of new wind energy capacity and building a new 140-mile transmission line in Wyoming, while repowering roughly 900 MW of existing wind turbines in Wyoming and Washington that will boost output by 25 percent and extend the life of the turbines.

The majority of the repowering projects are planned to be completed this year, and the remainder in 2020. PacifiCorp also expects to complete the new wind and transmission projects in 2020.

Work on Foote Creek I is expected to start Aug. 26, but the existing turbines will be kept running until April, when they will be decommissioned. ***[Steve Ernst]***

Courts & Commissions

[12] CAISO Defends EIM Market-Power Mitigation Plan • *from [2]*

California's grid operator is seeking federal approval of new market rules meant to address a bidding problem for Northwest hydro resources in the Western EIM, but is facing some resistance from state regulators.

The California ISO, hydro owners and others are defending CAISO's proposed local market-power mitigation enhancements, currently being reviewed by FERC *[ER19-2347]*.

Also showing support is CAISO's Department of Market Monitoring (DMM), which raised concerns about aspects of the mitigation proposal but approves of it overall.

The California PUC filed a protest July 23 at FERC over CAISO's proposal, saying it doesn't account for the value of transmission capacity. One provision in the new proposal would allow hydro units to base their bids on prices at distant geographic hubs.

"The CPUC is concerned that, under the current proposal, resource owners could use future prices at distant high-value hubs to set local hub prices through their default energy bids," the state agency told FERC in its protest. "The proposal could allow resource owners with transmission rights (or a pattern of buying transmission rights in the past) to distort prices in their local areas and unfairly raise prices for ratepayers."

When power is transacted, the difference in prices between the origin hub and the distant hub should roughly equal the value of transmission between the two hubs, CPUC said. If a resource is in a low-priced area, but has transmission rights to a high-priced area, CAISO's proposal would allow the resource's default energy bid in the low-priced area to reflect the prices in the high-priced area.

"Because default energy bids can set prices when resources have market power, the use of this type of default energy bid can raise the resource's local price to be equal to or greater than the futures price at the distant high value hub," the CPUC said in its filing. "As the DMM explained in its comments, this would allow the value of transmission from point A to point B to be reflected in the price of energy at point A. This is not appropriate."

'The opportunity cost of forgone sales in a remote geographic location in the West cannot be captured by the price of the transmission alone.'

The ISO usually calculates default energy bids for hydro resources using formulas developed through confidential individual negotiations. But the current bid formulas do not always account for the many factors that can change the availability of water, such as environmental restrictions.

DMM's filing said the proposed changes should address the concerns about bid mitigation that have been raised by some entities considering whether to join the EIM.

"Some elements of the proposed changes involve potential trade-offs between the benefits of market power mitigation versus the potential for increased participation in the EIM by hydro resources," DMM said. But the market monitor said it supports the proposal on balance because of the specific nature of the hydro resources, the lack of a "must-offer" obligation in the EIM, and the potential benefits of bringing more hydro into the EIM.

But a group of Northwest hydro owners said in an Aug. 8 filing that several of them transact at dozens of locations throughout the region, at delivery points in CAISO, into the Desert Southwest, and as far away as Alberta. Canadian power marketer Powerex transacts at as many as 80 locations in the West in a given year, the Pacific Northwest Joint Commenters group said.

"The Joint Commenters believe that the CPUC's stated concerns are misguided and premised on an unduly narrow view of the opportunity costs of resources located outside of the CAISO," the group told FERC. The commenters include Eugene Water and Electric Board, Public Generating Pool, Public Power Council, Chelan County PUD, Powerex and Snohomish County PUD.

A default energy bid based only on current and future index prices at an external hydro resource's "default" geographic location, or closest local hub, has the potential to understate the value of the opportunities in other locations in the West where power could be sold. The group said that for resources in the Pacific Northwest, the prices at the most proximate hub, Mid-Columbia, often represent the lowest-value market opportunity.

Forcing hydro owners to inefficiently deplete hydro resources results in forgone sales at more profitable times and locations, which could discourage robust participation in the EIM, the group said.

The CPUC's opposition to this aspect of CAISO's proposal is based on its assumption that any price differential between a resource's local hub and a distant hub should equal the value of transmission, the group said. But that assumption is rooted in the dynamics of a regional transmission organization with locational marginal pricing, where the value of energy and transmission are fully de-linked, which does not apply to the Western markets outside of CAISO.

"The opportunity cost of forgone sales in a remote geographic location in the West cannot be captured by the price of the transmission alone, as is the case within an RTO," the group said.

CAISO's enhancements filed with FERC are aimed at addressing two problems. One is "flow reversal," when balancing authority areas in the EIM are forced to switch from importing to exporting power when their bid prices are mitigated.

The other is "economic displacement," exemplified by cases EIM participants have identified where market-power mitigation results in the market dispatching their hydro resources at prices below their marginal costs, and often in quantities greater than needed to resolve market power. ***[Jason Fordney]***

[13] Montana PSC: State District Court Rulings Aren't Binding Precedents • *from [5]*

The Montana PSC went against two recent state court decisions in its Aug. 12 order setting terms of a power purchase agreement between NorthWestern Energy and two wind farm QFs. The commission contended in its decision that the court rulings did not create generally binding principles, but rather applied only to the cases before the court.

On several other contested issues in the docket, the PSC's final order sided with the QF developer, citing NorthWestern's lack of documentation or insufficient evidence. The commission approved the order in a 4-0 vote on Aug. 6. Commissioner Randy Pinocci was excused.

Renewables developer Building Energy asked the PSC in February to compel NWE to sign PPAs with the two proposed wind QFs, Grizzly Wind *[D2019.2.8]* and Black Bear Wind *[D2019.2.9]*. The developer's attorney, Monica Tranel, alleged in the petition that the utility had not cooperated in negotiating contracts with the two 80 MW projects (CU No. 1888 [9.3]). The commission combined the two dockets, referring to them as Grizzly/Black Bear.

In its Aug. 12 order, the commission set 15-year levelized avoided costs at $19.45/MWh for off-peak energy and $26.94/MWh for on-peak. That is far from the flat rates ($50.56/MWh for Grizzly and $47.96/MWh for Black Bear) and 25-year contracts requested by the developer in a July response brief.

The commission also rejected the developer's request for a carbon adder in favor of the Montana Consumer Counsel's argument that carbon pricing has not materialized and puts consumers at risk of unnecessary costs. The PSC had allowed carbon adders until a 2016 docket involving MTSUN *[D2016.12.103]*.

In June, a Montana 8th District Court judge ruled that the PSC's elimination of a carbon adder in the MTSUN case was arbitrary and capricious (CU No. 1909 [14]). In April, the same judge reinstated a carbon adder for similar reasons in a related case, commonly called the QF-1 or Vote Solar case, involving Cypress Creek Renewables (CU No. 1896 [12]). Both cases have been appealed to the Montana Supreme Court (CU No. 1909 [14]).

Nonetheless, "the commission does not recognize the decisions of the Eighth Judicial District Court in MTSUN and QF-1 as settled questions of law beyond their clear binding effect in those cases," the PSC said in its Aug. 12 order.

The developer of Grizzly/Black Bear said in its initial petition to the PSC that a 15 year contract was acceptable, but it did not concede that the term was appropriate. However, following the district court's decisions requiring 25 year contracts for the MTSUN and QF-1 cases, the developer argued this was the correct length for its contract as well.

The spreadsheets provided in support 'are confusing and opaque.'

The PSC pointed to a state Supreme Court decision, *Krakauer v. State*, to argue that a district court decision does not set a generally binding precedent.

It also said in its Aug. 12 order that it "does not view the question of contract length as a generally applicable, pure-legal question, but rather one that is at least somewhat fact-dependent."

For this reason, the commission stated, contract lengths must be determined, at least in part, on a case-by-case basis.

The commissioners also agreed with the Montana Consumer Counsel that 15 years strikes the right balance between the interests of the developer and consumers.

Turning to NWE in the final order, the commission said the utility failed to offer sufficient evidence or documentation to support several positions it argued.

While the MPSC said it agreed "in principle" that the utility's proposal to use hourly averages for estimating avoided costs rather than monthly averages "more accurately reflects" NorthWestern's dispatches and procurements, it said the spreadsheets provided in support "are confusing and opaque," and that there was "insufficient documentation to justify a significant change."

Similarly, the PSC rejected NWE's position to include a declining heat rate in forward market prices used in cost calculations. The commissioners agreed that increased renewables could depress market prices but that could be offset by closure of thermal generation plants in the region. The utility's "assumption is unsubstantiated," and "the model cannot be validated because NorthWestern did not provide an auditable copy for review," the PSC said. ***[Dan Catchpole]***

Clearing It Up

[14] Study: Deep Decarbonization Achievable With Doubling of Electricity • *from [1]*

At an annual cost of roughly 1 percent of the region's gross domestic product, deep decarbonization of all energy sectors in the Northwest is achievable but would require greater energy efficiencies, a greater reliance on the electric grid and decarbonization of energy supplies, a study commissioned by the nonprofit nonpartisan Clean Energy Transition Institute concludes.

Under the study's Central Case pathway to decarbonization, 96 percent of the electricity in Washington, Oregon, Idaho and Montana would be clean by 2050, and demand from the electric grid would double to provide about 55 percent of the region's total energy needs, including transportation and energy used to heat and cool buildings.

Eileen Quigley, the Institute's executive director, and Gabe Kwok, principal of Evolved Energy Research, presented findings of the study to the Northwest Power and Conservation Council on Aug. 13.

"A really important lesson from the study is how radically the electric system is going to transform," Quigley told the Council.

"Meeting the Challenge of Our Time: An Economy-Wide Deep Decarbonization Pathways Study," is the first in the Northwest to include all energy sectors in all four states to develop a broad plan for reaching a 2050 decarbonization target, Quigley said.

That target is to reduce energy-related CO2 emissions to 86 percent of 1990 levels by 2050. Many states have a goal of reducing total greenhouse gas emissions to 80 percent of 1990 levels by 2050, and because it will be more difficult to reduce emissions in the nonenergy sectors, the energy sector must assume a higher burden of the reductions, she added.

The Institute was invited to share findings of the study with the Council, which is just beginning to develop a new power plan.

"Our hope is that the Council will consider the study's findings and the framework for reductions in framing the 8th Power Plan," Quigley and Kwok wrote in an email to Clearing Up. "Council staff are considering a variety of modeling exercises to inform the 8th Power Plan and we thought it would be worthwhile for the staff and Council members to be aware of the rich body of work that we had completed as it is possible that data from the NWDDP study may be useful to their modeling efforts."

The Clean Energy Transition Institute is an independent, nonpartisan, nonprofit organization and the study was designed to answer several questions without presupposing the answers, Quigley said. One of the main questions, she told the Council, was "How does the energy sector need to transform in the most technologically and economically efficient way?" Its findings could help policymakers understand what changes should be made, and the practical implications of making them, she said.

The study has several key findings:

Electricity must be 96 percent clean by 2050, and will be used to heat and cool buildings and power vehicles that now use fossil fuels. With those changes, demands on electricity will grow from 23 percent of the region's energy needs today to 55 percent of its needs in 2050.

Efficiency will be required to reduce total overall demand. Under the Central Case—even with a 30 percent increase in population—total energy demand will decrease by 34 percent due to energy efficiencies. The efficiencies will be from changes like switching from incandescent lights to LEDs, and from replacing inefficient equipment, which will lead to the use of things like heat pumps instead of gas-fired water heaters, or electric vehicles instead of fossil-fuel internal combustion engines.

The study assumes that by 2035, all new light-duty vehicles sold on the market, such as passenger cars, will be electric, along with about half of all medium-duty and a third of all heavy-duty vehicles. "As vehicles transition to electricity, liquid fuels decrease from one-half of today's energy demand to one-fifth by 2050," the study's key findings state.

It also finds that $11.1 billion can be saved over the next 30 years if the Northwest and California electric grids are integrated and expanded.

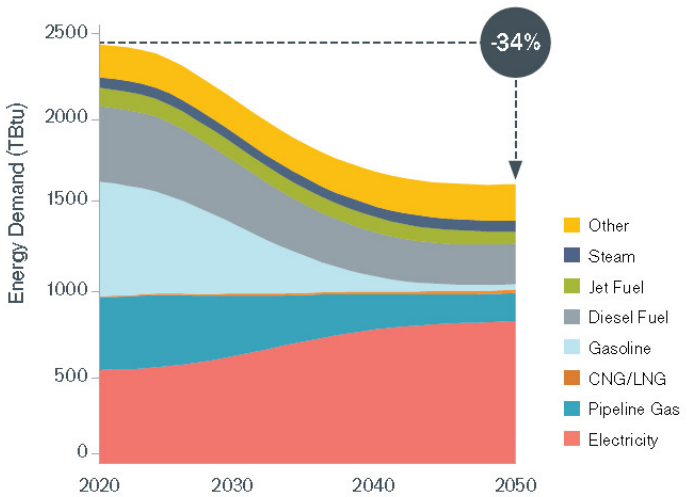
The study analyzed eight different models, comparing a "Business As Usual Case" with a "Central Case," and offering six other scenarios under the Central Case that represent supply and demand variables.

These scenarios include getting to a 100 percent clean energy grid (instead of 96 percent in the Central Case), prohibiting any new gas-fired power plants after 2020, and increasing the transmission between the Northwest and California.

All of the scenarios assume current hydropower generation will remain the same.

Costs are compared to the Business As Usual Case. Under the Central Case, the annual costs of

Energy Demand Down 34%, Electricity Share 55% of Total Demand



Source: Clean Energy Transition Institute

decarbonization increase incrementally each year starting in 2020, and peak at $9.8 billion above BAU in 2038. The costs then begin to decrease each year to about $6.1 billion above BAU by 2050.

"The cumulative costs of decarbonizing the energy system in the Central Case are 9.5 percent higher than the capital and operating expenses of the Business as Usual Case's energy system, roughly 1 percent of the region's total GDP in 2017 of more than $870 billion," the executive summary stated.

Quigley and Kwok added in their email, "We would expect the incremental costs to decline after 2050 due to: (a) projected fossil fuel prices continue to increase; and (b) the cost of low-carbon and efficient equipment continues to decrease."

The largest costs, by far, are from demand-side equipment, due to the number of vehicles, refrigerators, hot water heaters and other equipment that needs to be replaced. It does not include the cost of supply-side equipment, such as wind and solar power plants.

Council members expressed appreciation for the study. Council Vice Chairman Richard Devlin, of Oregon, said he appreciated its thoroughness, but noted there are serious roadblocks to achieving its goals.

As an example, Devlin noted how few electric vehicles there are on the market today, while the study assumes that 15 years from now all cars and SUVs sold on the market will be electric. "How we get from A to B is a lot more difficult," he said.

"We do not think this is easy," Quigley agreed. That's why getting the information to policymakers about what needs to happen is one of the Institute's next steps, she said.

In her email to Clearing Up, she added, "The study makes clear that with existing technologies and price-points, decarbonization is plausible but implementing low-carbon strategies is challenging.

"Having policymakers understand today in 2019 where we must be in 2030, 2040, and 2050 to decarbonize the Northwest energy economy, [and] which pathways should be pursued and which not, would ideally mean they will make decisions that will head us in the right direction." ***[K.C. Mehaffey]***

[15] Seattle City Council's Green New Deal Sets Ambitious Goals for City • *from [4]*

Seattle City Council on Aug. 12 adopted a resolution that lends Seattle's support to the Green New Deal movement, proposing a sweeping local platform of ambitious ecological, social and economic goals.

However, a few days earlier a council committee tabled a proposed ordinance establishing oversight holding Seattle city government to the goals.

Seattle Mayor Jenny Durkan praised the vote in a press release and signed an executive order directing city departments to evaluate how the city can meet the Green New Deal's goals and to find ways of more quickly implementing the city's 2018 Climate Action Plan (CU No. 1845 [21]).

Seattle's Green New Deal resolution's goals are far broader than federal legislation proposed in Congress, where it has made little headway. The city's version addresses issues as disparate as rent control and mass transit electrification.

The resolution states that while the city "has made some progress towards reducing its dependence on fossil fuels, that progress is insufficient to make the necessary changes to shift Seattle's economy to be more equitable and ecologically sustainable."

It calls for rapidly advancing renewable energy, energy efficiency and transportation electrification.

The resolution says Seattle should be "free of climate pollutants, meaning those that cause shifts in climate patterns, including carbon dioxide, black carbon, methane, nitrogen oxides, and fluorinated gases, by 2030."

It also says Seattle City Light should expand the amount of wind and solar generation in its portfolio "for export on energy markets to ultimately replace energy produced by utilities using natural gas, coal, and other fossil fuels."

It calls for reducing utility costs for low-income households.

Reducing greenhouse gas emissions from buildings is another theme in the resolution. More than one-third of Seattle's greenhouse gas emissions in 2016 came from energy used to heat, cool and power buildings, according to a GHG inventory released by the city in February.

Construction of new fossil-fuel infrastructure in the city and surrounding King County should be limited, according to the resolution. Further, it calls for supporting energy efficiency and weatherization in buildings and homes.

The resolution proposes several strategies for the city to address climate change, including requiring "proposed infrastructure projects that use city funding estimate upstream and downstream greenhouse gas emissions," and investing in electric grid modernization to improve efficiency and reliability.

Also called for is adoption of a plan to have ride-share and car-share services and for freight using only electric vehicles by 2025. Other parts urge establishing pilot programs to spur electric vehicle adoption, and say the city should aid King County Metro Transit in converting its fleet of buses to electric power (CU No. 1880 [12]).

While establishing a Green New Deal oversight board stalled in committee, it is not dead. Council member Mike O'Brien, who sponsored the resolution and the oversight ordinance, plans to propose a revised version in the coming weeks, reported Crosscut, a Seattle-based news outlet.

King County Council could see its own Green New Deal proposal, as well. County Council member Larry Gossett expressed interest in introducing a similar resolution, Crosscut reported. ***[Dan Catchpole]***

[16] POTOMAC: States, Cities Sue Over Clean Power Plan Replacement • *from [7]*

Twenty-two states, six cities and the District of Columbia on Aug. 13 sued in federal appeals court to challenge the Affordable Clean Energy rule, the Clean Power Plan replacement that the Environmental Protection Agency finalized on June 19.

The suit, filed in the U.S. Court of Appeals for the D.C. Circuit, alleged the rule violates the Clean Air Act.

Separately, 10 environmental organizations, including the Natural Resources Defense Council and Sierra Club, also filed suit against the rule in the D.C. Circuit court.

Mary Nichols, chair of the California Air Resources Board, said the rule "fails the tests of law and economics."

The rule "attempts to artificially narrow the EPA's regulatory authority under the Clean Air Act, which runs contrary to Congress' intent that the EPA have broad authority to address monumental sources of energy and air pollution," an announcement from California Attorney General Xavier Becerra said.

Becerra, one of 23 attorneys general who signed on to the litigation, said the rule would do too little to reduce carbon dioxide emissions from power plants by unlawfully not requiring "best systems of emission reduction."

Other Western states that joined the lawsuit include Colorado, New Mexico, Oregon and Washington. Six cities joined, including Los Angeles and Boulder, Colo.

New York Attorney General Letitia James said the rule's reliance on efficiency upgrades at coal-fired power plants would result in emissions reductions falling far short of cuts the Clean Power Plan would have achieved. James said ACE would result in CO2 emissions reductions of 11 million tons from power plants by 2030, compared with an estimated 415 million tons of cuts from the CPP.

The ACE rule gives states leeway to decide on CO2 emissions standards. States may consider the "remaining useful life" of power plants in setting standards. Under the rule, states will have three years to submit plans for reducing emissions through facility-specific requirements.

The CPP, which was stayed by the Supreme Court in 2016 and never implemented, adopted emissions performance standards for coal- and gas-fired plants and set emissions-reduction targets for states to meet with enforceable plans that could include steps such as dispatching gas ahead of coal and increasing acquisition of renewable resources. The CPP set a nationwide power plant emissions-reduction target of 32 percent below 2005 levels by 2030.

CPP opponents said the rule amounted to EPA dictating grid operations by regulating power plant emissions beyond fence lines, which they argued overstepped EPA's authority.

The ACE rule is backed by coal-industry groups. When EPA finalized the rule, the National Mining Association said it provides "a clear, legal pathway to reduce emissions while preserving states' authority over their own grids."

States Vow ESA Rules Battle

Two state attorneys general, including California's Xavier Becerra, vowed on Aug. 12 to fight the Trump administration's revamping of rules implementing the Endangered Species Act.

Becerra and Massachusetts Attorney General Maura Healey said they plan a court challenge.

Environmental organizations also are likely to sue. "We'll see the Trump administration in court," Drew Caputo, Earthjustice's vice president for land, wildlife and oceans litigation, said.

The new regulations, issued jointly by the Interior and Commerce departments, will take effect 30 days after publication in the Federal Register.

Interior Secretary David Bernhardt said the changes would make implementation of the law more efficient. "An effectively administered act ensures more resources can go where they will do the most good: on-the-ground conservation," he said in a statement.

Congressional Democrats attacked the rules as a rollback that would weaken wildlife protection. "This is one of the worst environmental moves by any president," Sen. Maria Cantwell (D-Wash.) said.

Rep. Raúl Grijalva (D-Ariz.), chairman of the House Natural Resources Committee, said the revisions would allow agencies to ignore long-term threats to species, such as climate change, and exempt unoccupied habitat from critical-habitat protections.

Sen. Tom Udall (D-N.M.) said, "We will consider stopping these regulations by any means-including the Congressional Review Act," a statute under which Congress can overturn regulations through a joint resolution. Such a resolution would have uncertain prospects, however, in the Republican-controlled Senate, and President Donald Trump would likely veto a resolution that passed Congress.

Republican lawmakers said the revisions would modernize regulations for carrying out the 1973 law. Rep. Rob Bishop (R-Utah), ranking Republican on the House Natural Resources Committee, said, "These final revisions are aimed at enhancing interagency cooperation, clarifying standards and removing inappropriate, one-size-fits-all practices."

Sen. John Barrasso (R-Wyo.), chairman of the Senate Environment and Public Works Committee, labeled the revisions a "good start," but called for legislation to "modernize" the ESA. Barrasso last year introduced a discussion draft of a bill that would give states a leading role in carrying out species-recovery plans.

The revisions drew praise from industry organizations, including the Western Energy Alliance, a trade group of oil and gas producers, and the American Petroleum Institute. The API noted the changes would promote "transparency" by disclosing the economic impacts of listings.

Michael Drysdale, an environmental attorney for the law firm Dorsey & Whitney, said the changes "are unlikely to have much effect on the day-to-day application" of the law.

The revised regulations, initially proposed July 25, 2018, would drop blanket protections under which the U.S. Fish and Wildlife Service automatically grants to species on the threatened list most of the same protections endangered species receive. Instead, the USFWS would issue "species-specific" rules, similar to the approach the National Marine Fisheries Service takes for ocean fish species on the threatened list.

A comment letter that Becerra and nine other attorneys general filed in September 2018 said the change "would leave threatened species without protections necessary to promote recovery."

Also, the revised regulations scaled back criteria under which the USFWS and NMFS can include under "critical habitat" areas unoccupied by listed species. The new regulations say the unoccupied areas can be included only if they are determined to be "essential for the conservation of the species." In a statement, USFWS said the change "reduces the potential for additional regulatory burden."

The AGs' comment letter said narrowing criteria for including unoccupied areas in critical habitat could limit protections needed for responding to climate change and other long-term threats.

The regulations revise the definition of "foreseeable future" for purposes of determining whether a species should be added to the threatened list. The statute defines a threatened species as any that is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The revised regulations define "foreseeable future" as extending "only so far into the future as the services can reasonably determine that both the future threats and the species' responses to those threats are likely." The term "foreseeable future" would be described case by case for each species considered for addition to the threatened list.

FERC Makes Rock Island Early-Action Determination

FERC made an "early action" determination on Aug. 9 for Chelan County PUD's Rock Island hydroelectric project, the first such finding made under 2018 legislation aimed at spurring investments in hydro projects.

Chelan filed a request for an early-action determination on June 10, asking the agency to take into consideration its investments in efficiency upgrades and fisheries projects during the next relicensing proceedings for Rock Island. The early-action provision was folded into broad water-projects authorization legislation, S. 3021 of the 115th Congress.

The commission determined that Chelan's $622 million investments in Rock Island's powerhouses 1 and 2, $4 million in planned spillway upgrades, and 2004 implementation of a habitat conservation plan "appear to meet" the requirements of the law. Chelan said it has spent $44 million on fish-passage studies, hatchery construction and operations, tributary protection and restoration, predator control and ongoing fish-passage maintenance.

FERC said it could not make an early-action finding for $40 million in planned upgrades of office, warehouse and storage facilities, but added that the PUD could submit additional information during relicensing proceedings.

Under the law, enacted Oct. 23, 2018, FERC must give equal weight in relicensing proceedings to upgrades that would comply with new license terms and upgrades beyond existing license terms that have improved capacity and efficiency, improved safety, or resulted in environmental protection or mitigation.

Chelan argued it has made investments in Rock Island beyond the requirements of the 40-year license the project received from FERC in 1989.

Chelan pushed for the legislative change for five years. When the bill was signed into law, PUD General Manager Steve Wright said, "Congress has recognized that it is good public policy to encourage hydropower licensees to make new investments during the existing hydro license term, rather than waiting for relicensing."

Lithium-Ion Batteries Face Tariffs

Lithium-ion batteries imported from China face 10 percent tariffs on Sept. 1, according to a list released Aug. 13 by the U.S. Trade Representative's office.

The Energy Storage Association raised concerns that battery tariffs could hamper development of grid storage projects. Kelly Speakes-Backman, the group's CEO, called on the trade representative to exempt lithium-ion batteries from tariffs because of their role in "electric-system resilience and energy security."

The list was published in connection with the Trump administration's announcement that imposition of tariffs would be delayed until Dec. 15 for some consumer products that are high-demand items for the holiday shopping season, including cellphones, laptop computers, game consoles and toys.

Other energy products on the Sept. 1 list include nickel-cadmium batteries, except those used in electric vehicles; electric instantaneous-storage water heaters; and electrical-filament lamps, designed for voltages both below and exceeding 100 volts.

Trump on Aug. 1 threatened to impose tariffs on $300 billion worth of Chinese goods exported to the U.S. starting Sept. 1, which would expand charges to virtually all products U.S. consumers and businesses buy from China.

The U.S. currently levies 25 percent tariffs on $200 billion worth of Chinese goods, including a broad range of energy goods and consumer appliances. In retaliation, China levies tariffs on $60 billion worth of U.S. goods, including a 25 percent charge on liquefied natural gas.

EIA: PV Imports Partially Recover After Tariffs

Imports of silicon solar-photovoltaic cells and modules have partially recovered from a low that followed imposition of tariffs in 2018, the Energy Information Administration reported Aug. 13.

Monthly imports averaged 644,000 kW in the first four months of 2019, up from a low below 300,000 kW after the tariffs took effect in February 2018, EIA said.

In the last six months of 2017, imports averaged nearly 1.08 million kW per month, according to EIA figures.

Trump approved a four-year tariff, starting at 30 percent for the first 12 months, then stepping down 5 percentage points per year for the remaining three years. The first 2.5 GW per year of imported cells are exempt from the duties.

DOE to Open Advanced Nuclear Center

The Department of Energy is launching a center for private companies to experiment with advanced nuclear energy technologies, DOE announced Aug. 15.

DOE said the Nuclear Reactor Innovation Center, to be housed at the Idaho National Laboratory, would help nuclear firms test and demonstrate reactor concepts, validate technologies, and overcome technical obstacles, shortening the time needed for licensing and commercialization.

DOE said legislation enacted last year, S. 97 in the 115th Congress, authorized a center to allow private companies to carry out nuclear research partly or wholly at their expense (CU No. 1868 [20]).

The law, sponsored by Sen. Mike Crapo (R-Idaho), also authorized DOE and the Nuclear Regulatory Commission to support the research by sharing technical information.

House Dems Urge Automakers to Join California Deal

Eight House Democrats, including two Californians, urged 14 automakers on Aug. 15 to join the tailpipe greenhouse gas emissions standards agreement four other car manufacturers struck with California last month.

The eight lawmakers, including Californians Alan Lowenthal and Doris Matsui, sent letters to CEOs of Aston Martin, Fiat Chrysler, General Motors, Hyundai, Jaguar, Kia, Mazda, Mercedes-Benz, Mitsubishi, Nissan, Porsche, Subaru, Toyota and Volvo.

Last month, California reached a "framework agreement" with BMW, Ford, Honda and Volkswagen to meet year-over-year increases in GHG tailpipe emissions limits at a nationwide annual average of 3.7 percent, from model years 2022 through 2026. Of the 3.7 percent, 1 percent of the annual improvement could be covered through credits earned by selling electric vehicles, including battery, hybrid, plug-in hybrid or fuel-cell drives.

The agreement also recognizes California's authority to establish its own emissions rules and set requirements for marketing zero-emission vehicles, including electric cars, in the state.

The Trump administration has proposed freezing emissions standards at 2020 levels through model year 2026 and blocking California from setting its own tailpipe GHG emissions limits. The proposal would undo a 2012 agreement between California and the federal government to harmonize fuel-economy and GHG emissions standards.

Automakers are concerned about having to build cars to comply with two sets of standards.

Efficiency Group Praises EPA Health Report

An EPA report quantifying public health benefits of energy efficiency drew praise Aug. 13 from the Alliance to Save Energy.

Jason Hartke, the group's president, said, "This is exactly the kind of information policymakers need to make better decisions that fully account for the many co-benefits of efficiency."

The report, published last month, recommended figures, in cents per kilowatt-hour, for quantifying the value of public health outcomes tied to energy efficiency and renewable energy. The figures are tailored for regions, including California, the Northwest, the Southwest and the Rocky Mountain states.

The estimated value of benefits is tied to reductions in air emissions, including nitrogen oxides, sulfur dioxide and particulate matter 2.5 microns or smaller.

In the Northwest, the report imputed a value of 1.13 cents/kWh for efficiency, 1.17 cents for solar and 1.13 cents for wind. For California, the report estimated the health benefits value at 0.48 cent for efficiency, the same figure for wind and 0.51 cent for solar.

The report said the figures could be used for estimating health benefits, "understanding cost-effectiveness" of efficiency acquisitions, and incorporating health benefits into policy analyses. It cautioned, however, that the numbers should not be used "to justify or inform federal regulatory decisions."

Court Sides With FERC in Pipeline Case

A federal appeals court on Aug. 1 rejected challenges to the Atlantic Sunrise gas pipeline, ruling that FERC adequately accounted for downstream GHG emissions, determined market need and considered an alternative route.

A three-judge panel of the U.S. Court of Appeals for the D.C. Circuit upheld FERC's certification of the Transco project, which went into operation in 2018. The pipeline runs from Pennsylvania's Marcellus shale fields across the mid-Atlantic and Southeast to Alabama. The pipeline has approximately 1.7 million MMBtu of capacity.

On downstream emissions, the court ruled that FERC estimated the CO2 emissions of gas the pipeline would transport and projected they would partially offset emissions from coal-fired power plants the gas would replace.

Panel Judges Merrick Garland, David Tatel and Patricia Millett said environmental and homeowner groups failed to identify "what more the commission should have said. That failure is fatal. Unsubstantiated objections are not enough to stop an agency's action." ***[Jim DiPeso]***