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Executive Director **Federal** Update –September/ October 2021

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WAPA Desert Southwest Region Agrees to Participate In CAISO's Real-Time Energy Market

September 19, 2021

The California Independent System Operator (CAISO) on Sept. 15 signed an implementation agreement with the Western Area Power Administration Desert Southwest (WAPA DSW) region to participate in CAISO's real-time energy market in 2023.

Operated by CAISO, the Western Energy Imbalance Market (EIM) footprint currently includes portions of Arizona, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming, and extends to the border with Canada.

WAPA DSW sells federal hydroelectric power and provides transmission service to nearly 70 municipalities, cooperatives, Native American tribes, federal and state agencies, and irrigation districts. One of those cooperatives, the Arizona Electric Power Cooperative (AEPCO), is comprised of six electric distribution cooperatives and five public power entities that combined serve more than 420,000 residential, agriculture, business and industrial customers.

The agreement applies to WAPA's DSW region and Western Area Lower Colorado Balancing Authority. The latter includes generation resources in the Boulder Canyon and Parker-Davis projects (PDP) and the transmission systems of the Central Arizona Project, PDP and the Pacific-Northwest-Pacific Southwest Intertie Project.

In addition to the AEPCO sub-Balancing Authority area, participating Balancing Authority entities include the Central Arizona Water Conservation District, Southwest Public Power Agency and other DSW customers in Arizona, southern California and southern Nevada.

By 2023, the Western EIM will have 22 entities representing 84% of the demand for electricity in the Western Electric Coordinating Council (WECC), a non-profit corporation that works to advance a reliable electric system in 14 Western states, Northern Baja Mexico, and two Canadian provinces.

WAPA annually markets and transmits more than 25,000 gigawatt-hours of renewable power from 57 federal hydroelectric powerplants owned and operated by the Bureau of Reclamation, U.S. Army Corps of Engineers and International Boundary and Water Commission in 15 western and central states. WAPA also owns, operates and maintains a more than 17,000 circuit-mile high-voltage transmission system in the West. It is part of the Department of Energy.

Regan: Rule To Slash Methane Emissions Coming Soon

By Kelsey Brugger

08/31/2021

EPA Administrator Michael Regan declared that next month he will unveil stronger restrictions on methane emissions, an issue that has garnered recent attention for their severe heat-trapping potential and contribution to climate change.

“Next month we are going to focus on the oil and gas industry and look for deep cuts in the emission of methane,” Regan said.

Other actions he noted include a proposal underway on super-pollutant hydrofluorocarbons, or HFCs, and the agency’s attempt to improve air and water pollution in disenfranchised communities — as 6 million to 10 million homes in the U.S. have lead service pipes.

While most of Regan’s comments were in line with his regular talking points, his assertion on the methane rule stood out. Environmentalists have been calling on the administration to focus on methane as the “clearest strategy to decrease global warming in the next 30 years.”

The Trump administration had pared down the EPA methane rule, but earlier this year President Biden and Congress reinstated the 2016 Obama regulation using a somewhat rare maneuver — the Congressional Review Act.

Greens are eager to see how the Biden administration will go further to tackle methane as a number of recent reports, both domestic and international, have underscored its impact. Sarah Smith, an expert at the Clean Air Task Force, said she will be looking for the new EPA rule to be “comprehensive” and include frequent leak repair.

Smith added she hopes the administration will target super emitters and build on statewide rules in Colorado and New Mexico that seek to fully end routine flaring by next spring.

The comment signals the agency is on track with its spring regulatory plan known as the Unified Agenda, often a guide rather than a hard deadline. But the administration has yet to issue nationwide methane goals, even as Biden officials continue to hint that they are coming (Energywire, Aug. 10).

More broadly, at the event yesterday, Regan offered few details on how EPA might take on the power sector, which has ping-ponged from the Obama to Trump years.

Is Biden’s 40% Solar Blueprint Achievable?

By David Iaconangelo, Lesley Clark

09/09/2021

An aggressive Biden administration blueprint released yesterday aims to give solar an unprecedented role in reaching a carbon-free grid, but its feasibility may hinge on local and state action, Congress and trade policy shifts, according to researchers.

The Department of Energy analysis said getting to a carbon-free grid by 2035 would require solar to contribute 37 to 42 percent of all power, making it the largest carbon-free electricity resource. That share would tip upward to 45 percent in 2050, if the U.S. wants to decarbonize its entire energy system.

Annual additions of solar would need to double in the 2020s, from current levels, then double again in the 2030s, in order for those 100 percent carbon-free scenarios to pan out, according to the blueprint’s modeling.

The DOE blueprint emerges at a time of new challenges for solar's growth.

The price of new solar projects, for instance, is likely to go up this year for the first time in a decade, thanks to the rising cost of metals and a ban on imports made with forced labor in China's Xinjiang region, according to a recent report by Wood Mackenzie analysts (Energywire, Sept. 7).

Solar manufacturers are also pressing the Biden administration to extend tariffs onto panel imports coming from Southeast Asia, prompting an uproar from the industry's main trade group, the Solar Energy Industries Association. That group's CEO, Abby Hopper, recently said the industry is facing "difficult times" in a note to members (Energywire, Aug. 18).

Those trade policy issues, rooted in larger geopolitical disputes between the U.S. and China, show few signs of a rapid resolution. Some researchers point to homegrown problems for solar as well.

Within the United States, solar developers have encountered increasing trouble when building big installations in rural areas, with locals often working to stop projects that they see as an eyesore. Utilities have had trouble accommodating rapid growth in the number of new energy projects seeking to connect to the grid, delaying solar's entry. Grid researchers also say the country needs to build out far more transmission to extend the reach of solar and other renewables.

Technological progress in solar and storage, like a 60 percent drop in the cost of photovoltaic electricity by 2030, could offset the rising costs of project build-out, according to the document. A 95 percent carbon-free electricity system could be achieved without increasing electricity prices, found DOE researchers.

The blueprint also suggests that solar developers could minimize conflicts with local opponents by focusing on sites that are already "disturbed" by development, like grazing and farming areas or artificial bodies of water, or contaminated lands that aren't suitable for other purposes.

What to Watch This Fall At DOE, Interior, FERC

By Miranda Willson, Lesley Clark, Heather Richards 09/14/2021

The Biden administration is expected to make pivotal decisions at federal agencies this fall that could steer its clean energy agenda for years, but its efforts may be thwarted by senior positions that are not yet filled, regulations that are running behind and Congress, observers say.

The administration is backing Democratic efforts to pass a \$3.5 trillion budget resolution that would include provisions impacting federal agencies, but it's not clear whether the votes are there to pass the measure (E&E Daily, Sept. 13).

That puts a spotlight on what the administration may do at the departments of Energy and the Interior to move its agenda with existing purse strings — and how quickly it needs to move this year to reach some of its long-term goals, such as decarbonizing the power sector by 2035. The Federal Energy Regulatory Commission also is weighing policies that could swing whether some Biden plans — such as higher levels of renewables — fully come to fruition.

Whatever emerges from Congress also could transform how energy agencies operate in the next three years.

The working version of the resolution in the House, for instance, includes a Clean Electricity Performance Program operated through DOE. The concept would push electric utilities to replace fossil fuel assets with carbon-free alternatives and has the potential to transform the energy and electricity sectors, analysts said.

As the package faces obstacles in Congress, some of the administration's existing policies aimed at reducing fossil fuels, such as a moratorium on new oil and gas leases on federal lands, also have run up against legal hurdles.

Still, the Biden administration has made progress this year with some of its stated objectives, such as rolling back Trump-era rules impacting energy efficiency and in advancing renewable energy projects on federal land, observers said. The administration may also clarify its approach to some critical issues later this year, such as how it will address the country's nuclear waste. But it's uncertain it will have the staff or meet expected deadlines that would set the pace for the rest of the president's agenda.

Eight months into Biden's term, here's a look at where key energy issues at three agencies may be headed:

DOE: Vacancies, rules and nuclear waste

Pending congressional action, DOE could find itself flush with cash to help carry out Biden's ambitious climate change goals — but without several of the permanent leaders it may need to do so.

As one example, the department's innovation arm — the Advanced Research Projects Agency-Energy (ARPA-E) — is without a Senate-confirmed director. The White House also has not nominated an assistant secretary for the department's electricity office, and its Office of Energy Efficiency and Renewable Energy has an acting director, as does its Office of Nuclear Energy.

With Biden championing two congressional spending bills that could boost DOE's coffers beyond an expected increase in the federal budget, some advocates are raising alarm. Both a \$1 trillion infrastructure bill that has support from Democrats and Republicans in the Senate and the \$3.5 trillion budget resolution package include more spending to boost research on clean energy at DOE.

The White House and DOE declined to comment on the nomination process.

The infrastructure bill funds Biden's request for a new Office of Clean Energy Demonstrations, which would focus on bringing innovative technology to market. DOE would also play a central role in developing a Clean Electricity Performance Program, and its nuclear office could also get a massive boost to focus on deploying advanced reactors.

With ARPA-E, although the administration isn't taking any longer to nominate a director than either Presidents Obama or Trump, the division is "very central" to this administration's approach, said Addison Killean Stark, a former fellow and acting program director at ARPA-E.

Schulman attributed the current vacancies to a variety of factors, including the Trump administration's initial reluctance to turn the reins of government over to Biden, the administration's pace at selecting nominees, and a poorly functioning and increasingly politicized Senate confirmation process.

Clean energy analysts also are watching how DOE advances its stated objectives through reports and regulations.

With energy efficiency, DOE is expected by the close of the year to propose new standards for household appliances and continue to roll back the Trump administration's efforts to ease efficiency standards.

Advocates over the summer had fretted that the administration was moving too slowly to turn back the Trump rules if it wanted to finish the process by the close of the year.

In a report to Congress last month, DOE detailed its efforts on energy efficiency measures and noting that nearly all the Trump-era rollbacks are being addressed. As to the standards that the previous administration missed, Kelly Speakes-Backman, the acting assistant secretary for energy efficiency and renewable energy, said in the report that the department is working "as expeditiously as possible" to complete them.

DOE plans to publish 31 actions related to energy conservation standards by the end of 2021, including four final rules, Speakes-Backman said.

Also due this fall, according to Granholm, are details on how the administration will address more than 80,000 metric tons of nuclear waste stored across the country.

Granholm told the Senate Energy and Water Development Appropriations Subcommittee in June that the department was expected to issue a request for information as soon as the end of summer to help define how DOE should approach a consent-based interim storage site.

Granholm has backed an interim storage approach to addressing the nation's nuclear waste in accordance with recommendations from a commission that backed such a strategy in 2013, in addition to siting a new repository.

The nation's waste strategy has been in limbo since the Obama administration in 2010 opted to cancel the controversial Yucca Mountain facility in Nevada. Both the Trump and Biden administrations decided to maintain that closure.

Where new interim storage facilities will exist remains to be seen. A pair of private companies are seeking Nuclear Regulatory Commission approval for interim storage sites in southeastern New Mexico and West Texas. But officials from both states have expressed formal opposition to those plans.

FERC: Deadlines, delays, transmission and gas pipelines

Federal Energy Regulatory Commission headquarters.

At the Federal Energy Regulatory Commission, monthly meetings will be back in full swing next week after a two-month hiatus, albeit without the full complement of five commissioners.

The political makeup at FERC — two Democrats and two Republicans — could delay action on some issues, such as reforms to the independent agency's process for signing off on new natural gas pipelines.

Democratic Chair Richard Glick has called for updating the commission's 1999 "certificate policy statement," its blueprint for gas pipeline reviews. But analysts don't expect Republican Commissioners James Danly and Mark Christie to agree with Glick's view that greenhouse gas emissions and environmental justice impacts should be strongly considered when FERC weighs pipeline proposals. That could mean Glick, who sets the commission's agenda as chair, might wait to finalize the review.

Democrat Willie Phillips, Biden's pick to fill the vacancy at FERC, could lend Glick a critical third vote on climate issues alongside sitting Democratic Commissioner Allison Clements. But Phillips, who is currently chair of the District of Columbia Public Service Commission, still needs Senate confirmation and may not be sworn in at the agency for several months.

In the meantime, the commissioners face deadlines over the next few months on at least two proceedings with broad implications for the energy industry.

This morning, FERC granted a temporary certificate to the embattled Spire Inc. STL pipeline, a project the commission initially authorized in 2018 but that a court found to be unlawful earlier this year.

In June, the U.S. Court of Appeals for the District of Columbia Circuit tossed out FERC's approval of the Spire pipeline in an unprecedented decision, with the court having found flaws in the commission's analysis that determined the need for the project. In an application for a temporary emergency certificate, filed shortly after the ruling, Spire argued that shutting down the project would jeopardize gas service for hundreds of thousands of customers in St. Louis.

In their order today, the majority of commissioners — except Danly, who dissented — opted to grant a temporary certificate that allows the 65-mile-long pipeline to operate for 90 days while FERC evaluates what to do in response to the ruling.

Separately, the nation's largest grid operator has asked the commission to accept a proposed new market rule by Sept. 28 that would replace its controversial minimum offer price rule.

Approved by FERC in 2019, the MOPR established a price floor for state-subsidized resources that participate in the PJM Interconnection wholesale power market, which spans 13 states and the District of Columbia. The MOPR's opponents have said the rule unfairly hurts renewable energy resources, which receive subsidies under some states' clean energy programs or renewable portfolio standards.

Glick, a longtime critic of the MOPR, said in a recent interview that there is "significant pressure" from states and other parties for the commission to reassess the policy in the coming months.

Analysts expect PJM's proposed replacement, which would largely eliminate provisions targeting state-subsidized resources, to go into effect this year. It's unclear how Commissioner Christie — the newest member of the commission who was previously a utility regulator in Virginia — will vote on the issue. But legal experts said PJM's filing would go into effect by law even if the commission deadlocked in a vote.

FERC's recent initiatives targeting transmission infrastructure could also see movement this year, although analysts don't expect major changes until 2022.

In November, FERC will hold its first meeting with 10 state commissioners as part of a new joint state-federal task force. The task force is focused on improving the process for siting, planning and paying for new high-voltage power lines that could help support renewable energy projects and harden the grid during extreme weather events.

The commission may host a technical conference on a broader inquiry into transmission planning reforms by the end of next year, Glick said in a recent interview.

Meanwhile, individual natural gas projects may face continued scrutiny from the commission, in sharp contrast to FERC's relatively swift approval of dozens of natural gas pipelines and liquefied natural gas

projects in recent years. There are 21 proposed natural gas pipeline projects and six proposed LNG export terminals pending before FERC.

Earlier this year, the commission began preparing full environmental impact statements for a wide range of natural gas projects, including smaller proposals that in previous administrations would likely have been subject to less-detailed environmental assessments, industry groups said. Groups are therefore keeping a close eye on how and when new projects move forward.

Interior: Renewable goals, fossil fuel problems

The Interior Department this fall is expected to make pivotal decisions about renewables and fossil fuels, but the pace of those decisions will be guided in no small way by reports pending from the Biden administration.

Answers could be revealed soon on a Biden review of the federal oil and gas program, but the administration is late in meeting its stated deadlines.

The preliminary report on the federal oil program review was originally promised for early summer. That review may recommend higher royalties to account for the downstream climate damages of public oil and gas resources, but Biden officials say they are taking a comprehensive approach to this review that could take some time.

In the near term, however, the Biden administration may be forced to carry on with the old oil and gas program.

The White House placed a moratorium on new oil and gas leasing shortly after Biden took office, but it was ordered to resume auctions by a Louisiana judge this summer.

While that preliminary injunction is on appeal, Interior is preparing for several lease sales across the West, in Alaska's Cook Inlet and in the Gulf of Mexico.

The start of leasing has enlivened the debate over the practice, with oil and gas interests accusing the administration of dragging its feet. All but one of the lease sales, in the Gulf of Mexico, are in preliminary planning stages.

Congressional Western Caucus Chair Dan Newhouse (R-Wash.) said in a statement last month that cutting U.S. production will only increase dependency on foreign oil, calling the White House's efforts to cut emissions through curbing drilling "hypocrisy at its finest."

But environmental groups are also incensed at the White House and view any lease sale as a capitulation in the bitter feud.

Activists and miners in Western coal fields are also anticipating Interior's review of its coal leasing program, though unsure of when that may come out. The review, launched last month, will take place as the aging U.S. thermal coal industry contracts and is the first such study since the 1980s.

The federal coal program's effect on human-caused climate change will be a key part of the review, as will the potential to adjust royalty rates. It could also consider ways to help miners and communities cope with the clean energy transition (Greenwire, Aug. 17).

A spokesman for Interior declined to provide updates on the timing of the fossil fuel reviews but highlighted the administration's action on clean energy.

While fossil fuel fights have drawn much of the attention of the Biden era, Interior is also at the forefront of advancing Biden's renewable energy targets.

The Bureau of Land Management, for example, is working to approve three new photovoltaic power projects in California that, if built, would have the potential to produce up to 965 megawatts of electricity, or enough to power roughly 300,000 homes.

The Arica and Victory Pass solar projects, along with the larger Oberon solar project, would all be located within the 22.5-million-acre Desert Renewable Energy Conservation Plan (DRECP) area that has already been deemed suitable for commercial-scale projects (E&E News PM, Aug. 6). The Trump administration essentially ignored the DRECP after Obama's Interior partnered with California to establish it in 2016, just months before the change in administration.

Biden's BLM is also using Native American tribal lands to advance solar power and provide economic opportunities.

Biden's Jan. 27 executive order addressing climate change includes a section on "renewable energy on public lands and in offshore waters" that directs the Interior secretary to "engage with Tribal authorities regarding the development and management of renewable and conventional energy resources on Tribal lands." Interior Secretary Deb Haaland, a member of the Pueblo of Laguna in New Mexico, has publicly discussed the benefits of clean energy as an economic driver for Native American communities.

Interior's Bureau of Indian Affairs is expected in the coming weeks to issue a record of decision approving the 400-MW Southern Bighorn Solar Project on the Moapa Band of Paiutes' reservation northeast of Las Vegas (E&E News PM, June 3). Interior already announced earlier that it would study the 700-MW Chuckwalla Solar Project on the same reservation.

But the focus on renewables is perhaps most apparent with Interior's offshore wind strategy.

Biden promised to clear 16 offshore wind projects through permitting by 2025, the end of his first term. So far this year, the department has advanced or started the central environmental review process for nine projects, including the approval of Vineyard Wind, the first large-scale offshore array in the country.

Others expected soon include a notice to review Atlantic Shores, the 1,510-MW wind array planned off the coast of New Jersey. Others are expected to move closer to full approval this year, like Ørsted's South Fork offshore wind farm.

South Fork would be the second offshore wind farm of scale to receive federal approval, but the 12-turbine planned project off the coast of the Hamptons may prove the first large-scale wind array to finish construction and come online. A record of decision from Interior is expected soon.

Hardy acknowledged there are time pressures on Biden to get a lot done before the end of his first term. But he said the industry is moving toward a point where it will need less political favor. Right now, in addition to the White House, what the industry needs to get to that point is legislative support, Hardy added.

As with DOE, the outcome of budget negotiations in Congress could have ripple effects at Interior. Several influential Democrats share the administration's priority of reforming fossil fuel programs on federal lands, cutting emissions and protecting public natural resources from industrial development.

Already the House Natural Resources Committee has advanced its \$25.6 billion portion of the Democrats' budget reconciliation package — \$31 billion with revenue raisers — with several provisions to reform federal land oil and gas. Significant among these reforms would be axing the Arctic National Wildlife Refuge oil and gas program.

Biden campaigned on a promise to kill the program, passed by the Republican-led Congress in 2017. Haaland has ordered a supplemental environmental analysis before letting any activity proceed, which could greatly curtail the access drillers have to the remote coastal plain. But the administration's goal to keep oil out of the refuge may need congressional authority.

Nicole Whittington-Evans, director of Defenders of Wildlife's Alaska program, said stopping ANWR drilling through reconciliation would remove the leasing program from federal budget law, where it is a mandate that the administration is tasked to carry out.

What A Clean Electricity Payment Plan Means For Gas, CCS

By Carlos Anchondo, Lesley Clark 09/15/2021

Natural gas could still count as a clean power source under House Democrats' \$150 billion clean electricity proposal, but only with the widespread adoption of technologies like carbon capture and storage, according to analysts.

Yesterday, the House Energy and Commerce committee advanced plans for a Clean Electricity Performance Program (CEPP), which would be implemented through the Department of Energy. Under the House proposal, the CEPP would give out grants to electricity suppliers that increase the amount of clean electricity they supply to customers by at least 4 percent over the previous year (Energywire, Sept. 10).

While the CEPP under consideration doesn't bar the use of any electricity source, it defines clean electricity as generation with a carbon intensity of less than 0.1 metric ton of carbon dioxide equivalent per megawatt-hour — effectively ruling out natural gas on its own.

However, gas producers could get around that by blending in low-carbon fuels such as hydrogen or biomethane, while natural gas plants would need to be outfitted with carbon capture and storage (CCS) technology to meet the standard, experts said.

But the ability to use natural gas and still achieve the House standard could face cost and scale-up challenges, and Webber said he expects the language will be the subject of considerable negotiation between the House and the Senate.

Under the House plan, electricity suppliers that increase their share of "clean electricity" by 4 percent would receive \$150 for "each megawatt-hour above 1.5 percent of the previous year's clean energy generation," according to a fact sheet from the Energy and Commerce Committee. Suppliers unable to meet that target would have to pay \$40 per megawatt-hour based on their clean energy shortfall.

The path for gas to meet the standard at scale would be no small feat: Worldwide, there is currently only one operating carbon capture project on a power plant — at the Boundary Dam coal-fired plant in Canada.

Still, carbon capture is popular with both Democrats and Republicans in Congress, and Biden has nominated leading carbon capture advocates to top positions at the Energy Department (Energywire, Sept. 3).

The CEPP's standard could provide a "test" for the oil and gas industry's stated enthusiasm for carbon capture, said Andrew Logan, senior director of oil and gas at the sustainable finance nonprofit Ceres.

Another issue, Logan said, is how natural gas producers might incentivize utilities to build carbon capture projects at power plants "if utilities can instead choose from other low-carbon technologies that don't require the large capital investment" needed for carbon capture.

Lobbying frenzy

On a visit to the National Renewable Energy Laboratory yesterday, President Biden called on Congress to pass the climate change provisions, arguing that the United States doesn't have a lot of time to address the crisis.

In the interim, the CEPP is creating a lobbying frenzy, underscoring the political challenges facing the president.

Congress should include a tougher carbon intensity standard to make sure that gas plants don't qualify for payment under the CEPP, said Steve Clemmer, director of energy research for the Union of Concerned Scientists. The bill should also adopt language to ensure that "upstream" emissions of methane, which are released during the drilling and transportation of gas, are counted as part of a power plant's emissions, he said.

The Union of Concerned Scientists has done research showing that carbon capture would be more effective in other industries, such as steel manufacturing.

Representatives from the country's leading oil and gas trade groups pushed back against the CEPP concept.

National Coalition Urges Additional Water, Conservation Resources in Reconciliation Package

Additional resources are necessary to improve long-term management and resilience of water resources and the natural environment

With over 80 percent of the West currently experiencing severe, extreme or exceptional drought conditions, and more than 2.2 million acres of land already burned across the Western states, a national coalition representing agriculture, public water agencies and the environmental and conservation communities urged Congress to include resources for additional water, forestry and ecosystem restoration programs as it considers another package of investments using the reconciliation process.

On August 10, the Senate passed the Infrastructure Investment and Jobs Act, which included more

than \$8 billion to address critical Western water supply needs, including to repair aging dams and canals, build new surface and groundwater storage and conveyance facilities, fund water conservation and recycling projects, and enhance watershed management and improve ecosystems.

On Friday, the Environmental Defense Fund, Irrigation Association, The Freshwater Trust, and Trout Unlimited joined the Western Water Infrastructure Coalition in a letter to Congressional leadership calling out funding gaps that remain in areas critical to counteracting the historic drought and wildfire currently gripping the West.

“Additional resources are necessary to improve the long-term management and resilience of water resources and the natural environment amongst changing climate and hydrological conditions,” the coalition letter said.

In the letter, the coalition identified additional funding needs for the U.S. Department of Agriculture (USDA) and U.S. Department of the Interior (DOI) to accelerate the pace and scale of restoration that improves ecosystem resiliency, reduces the risk of uncharacteristic wildfire, deploys water technology, boosts conservation programs, and responds to the ongoing drought emergency.

The following is a list of specific funding requests included in the letter:

- **Double funding** for USDA’s Natural Resources Conservation Service (NRCS) programs, which promote a variety of practices that can aid in drought protection of agricultural operations.
- **\$30 billion** for USDA’s Forest Service to accelerate restoration actions that reduce hazardous fuels and improve overall forest and watershed health.
- **\$170 million** for DOI technology deployment programs that allow for better water management and decision making at the Bureau of Reclamation and U.S. Geological Survey.
- **\$1.5 billion** for emergency drought response activities, including relief for dry groundwater wells, compensated water use reductions, environmental response, and power costs.

In addition to increasing funds for these critical priorities, the coalition urged that the funds be deployed with a focus on achieving durable and quantifiable watershed resilience outcomes, which can be achieved by working across federal funding silos and ensuring that projects are coordinated and combined to achieve the greatest benefit for the least cost.

The letter concluded by noting that timely federal investments in a mixed water management portfolio will spur economic recovery and prepare our country to meet the diverse water infrastructure needs of the next generation.

Feds Issue Warning About Drought Threat to Electricity Supplies

By Hannah Northey, Ester Wells 09/24/2021

A crippling drought that continues to batter the West could have far-reaching implications for the power sector, with some experts warning of waning hydroelectric power across the nation next year.

U.S. electricity generation from hydropower is expected to drop 14 percent this year compared to 2020 as states like California in the Pacific Northwest see their energy capacities decline, according to a report yesterday from the U.S. Energy Information Administration.

EIA, the Energy Department’s independent research arm, found drought and a record-breaking heat wave in July reduced reservoir storage levels in Columbia River Basin states, including Washington, Oregon,

Idaho and Montana. In 2020, hydropower generation in the four states totaled 136 billion kilowatt-hours of electricity — 54 percent of the country's hydropower that year.

But in March and April of 2021, hydropower in both Washington and Oregon fell 10 percent below the 10-year range between 2011 and 2020, EIA found. And California, which contains 13 percent of U.S. hydropower capacity, saw its second-largest reservoir hit a historic low of 35 percent in August, causing the Edward Hyatt Power Plant — the state's fourth-largest hydroelectric producer — to go offline for the first time since 1967.

This year, EIA expects California's hydropower to be 49 percent lower than in 2020.

EIA's findings arrive on the heels of increasingly dire federal projections for water in the West.

The Bureau of Reclamation this week declared the first-ever shortage on the Colorado River, meaning that Arizona, Nevada and Mexico will get less water than normal next year. The agency's projections show a 3 percent chance Lake Powell will hit a level at which Glen Canyon Dam, which holds back lake waters, won't be capable of producing electricity as early as July 2022 if the region has another dry winter.

Lakes Powell and Mead, the largest man-made reservoirs in the nation, largely rely on melted snow, but have been hit hard by persistent drought as temperatures climb.

But experts have warned that the drought could affect more than just the hydroelectric sector.

Record-setting heat and dry conditions are also posing a threat to fossil fuel power plants and nuclear reactors that rely on enormous amounts of fresh water for their operations (Energywire, June 28).

Across the nation, more than 70 percent of the 1,100 gigawatts of U.S. power plant capacity relies on cooling, and half of that supply comes from fresh surface water.

Overall, power plants suck up almost half of the fresh water used nationwide, and those operations can be curtailed if water levels in reservoirs, lakes or rivers drop too low or discharges of heated water from plants raise water temperatures too high.

Reconciliation Bill Steers Billions To 'Climate-Smart' Farming

By Marc Heller 09/27/2021

E&E DAILY | The details of congressional Democrats' \$28 billion agriculture conservation proposal are beginning to emerge after days of suspense — and farmers who tackle climate change in their fields appear to be winners.

The proposal would pay farmers \$25 per acre to plant cover crops, which are grown when the main crop isn't in the ground in order to keep soil intact and reduce erosion, as part of a new \$5 billion program, according to information circulating among farm groups.

Still greater amounts would go to programs such as the Environmental Quality Incentives Program, the Conservation Stewardship Program and the Regional Conservation Partnership Program, all of which help farmers with conservation practices.

The legislation, which could reach a vote in the House this week, still isn't final, and Democrats didn't make any official announcement about the conservation programs — a key element of climate policy that was left out of the \$94 billion measure approved by the Agriculture Committee earlier this month (*E&E Daily*, Sept. 14).

But farm groups said EQIP would receive \$9 billion, the Conservation Stewardship Program \$4 billion and the Regional Conservation Partnership Program — a favorite of Senate Agriculture Chair Debbie Stabenow (D-Mich.) — \$7.5 billion.

Stabenow praised the measure in a statement. "We are leading the way on helping farmers tackle the climate crisis with a historic investment of \$28 billion in the Build Back Better Budget for climate-smart agriculture — the largest investment in conservation since the Dust Bowl," Stabenow said.

The Department of Agriculture's "climate hubs" program, which highlights climate impacts and conservation by region, would receive \$50 million. The Biden administration has pledged to beef up the program, which dates to the Obama administration and continued during Donald Trump's presidency.

The legislation would also devote \$6 million to efforts to quantify greenhouse gas emissions and carbon sequestration in agriculture. Farm policy insiders told E&E News the proposed agriculture funding would target climate-related conservation, which suggests a reordering of priorities since some practices don't specifically address carbon sequestration or emissions.

One example will be in the details of programs such as EQIP and CSP. EQIP, for instance, steers some funding toward large livestock operations to help farmers manage manure, but sustainable agriculture groups and some lawmakers say that's not a climate-friendly way of farming in the first place.

The budget reconciliation measure would leave out a 50 percent set-aside for livestock farms that's been part of EQIP. But lawmakers didn't bar program funds from the biggest livestock farms, called concentrated animal feeding operations, groups said, and a description given to farm groups cites nutrient management as an element of climate-smart agriculture. However lawmakers settle on final language, USDA has leeway through rulemaking to direct money in certain ways.

Groups such as the National Milk Producers Federation have pushed for a continued role for such farms in the conservation programs, including incentives for farmers to reduce carbon emissions through different types of feed.

Democrats are also making a calculated effort to wrap new conservation measures into the forthcoming 2024 farm bill. They're doing so by tilting most of the funding for years after fiscal 2023, as the budget measure's funding carries to fiscal 2026. That would allow for a bigger "baseline" for the 2024 farm bill, groups said.

Republicans criticized the limited details of the conservation measure that they'd seen. Rep. Glenn Thompson (R-Pa.), ranking member of the House Agriculture Committee, called the measure a "Trojan horse" in a news release and criticized Democrats for shifting funding to later years, affecting the farm bill.

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California Governor Signs Offshore Wind Legislation Into Law

September 27, 2021 Paul Ciampoli

California Gov. Gavin Newsom recently signed into law a bill that directs state agencies to develop a strategic plan for offshore wind resources in California.

Newsom on Sept. 23 signed into law **AB 525** by Assemblymember David Chiu.

Under the new law, the California Energy Commission (CEC) has until June 1, 2022, to evaluate and quantify the maximum feasible capacity of offshore wind “to achieve reliability, ratepayer, employment, and decarbonization benefits and shall establish megawatt offshore wind planning goals for 2030 and 2045.”

The law also calls for the CEC, in coordination with the California Coastal Commission, Department of Fish and Wildlife, Ocean Protection Council, and State Lands Commission, to work with stakeholders, other state, local, and federal agencies, and the offshore wind energy industry to identify suitable sea space for wind energy areas in federal waters sufficient to accommodate the offshore wind planning goals.

In May 2021, the Biden administration, in conjunction with Newsom, **announced an agreement identifying** regions off the California coast that could support the administration’s goal of deploying 30 gigawatts (GW) of offshore wind energy by 2030.

According to a **recent report**, California has enough offshore wind power potential to meet 157% of the state’s 2019 electricity use.

How Biden's NEPA Plan Could Change The Energy Sector

By Niina H. Farah 10/07/2021

New White House guidance on a landmark environmental law may ease uncertainty about the federal review process for energy projects, even as it leaves unanswered questions about legal cases and how agencies analyze climate and environmental justice, observers say.

The Council on Environmental Quality announced a proposed rule to revise regulations for how federal agencies should implement reviews under the National Environmental Policy Act. The plan will affect the assessment of projects ranging from pipelines and compressor stations to oil and gas leases on public lands.

The proposal is the first in a two-part CEQ rulemaking on NEPA expected under President Biden, and it comes after the Trump administration had finalized rules altering NEPA guidance that dates back to 1978. When Trump proposed his own NEPA changes, he said his plan would bring an end to "mountains and mountains of bureaucratic red tape."

The Biden administration's proposals include restoring agencies' obligation to consider the indirect and cumulative impacts of projects, including climate change, as well as giving the green light for agencies to assess less environmentally harmful project alternatives (Greenwire, Oct. 6).

CEQ noted that this first phase of Biden NEPA rulemaking focused on provisions aiming to return to the original 1978 standards, meaning the agency interpretations would revert to the status quo before the Trump administration's 2020 regulations.

The proposed rule "clarifies that the agency regulations are a floor, not a ceiling," said Rosalie Winn, a senior attorney at the Environmental Defense Fund, one of the organizations challenging the Trump NEPA rules in court.

Having a proposed rule in place is important for agencies that have known for months that the Biden administration planned to alter the Trump plan but did not know the specifics, observers said.

This summer, CEQ issued a rule giving agencies two years to propose their own NEPA regulations (Greenwire, June 28).

One ongoing issue is defining what projects are exempt from further NEPA analysis if they were previously found to have minimal environmental impacts. The Trump administration had made changes to what projects qualified.

These categorical exclusions were not mentioned in yesterday's proposed rulemaking, said Randi

EPA Power Plant Rules Could Be Part of Bigger Initiative

By Jean Chemnick 10/07/2021

When EPA proposes its power plant rules for carbon dioxide they might be part of a larger package.

EPA officials who are crafting the next generation of Clean Air Act climate regulations have signaled publicly and in conversations with outside groups that the agency is preparing a broader "initiative" or "strategy" to address pollution.

Acting air chief Joe Goffman told POLITICO in June that EPA Administrator Michael Regan had directed EPA offices to "think broadly across the different pollutants in the different media that are affected by the power sector" and develop an electric industry "strategy."

Goffman, who oversees the EPA office responsible for regulating CO₂ and hazardous and smog-creating pollutants at power plants, has talked about an electric utility "initiative" in conversations, industry sources say.

Those sources say EPA may take an integrated approach to power sector rules, laying out the regulatory tools at its disposal to reduce CO₂ and other pollutants from fossil fuel units, while setting goals for an industry shift in line with President Biden's commitment to produce 80 percent clean energy by 2030.

The package would include new Clean Air Act rules for CO₂ but also EPA's next regulatory steps on mercury and pollution that crosses state lines. National ambient air quality standards that affect power plants indirectly might or might not be candidates for inclusion. EPA could also weave in rulemakings from other offices, like Clean Water Act limits on pollution entering streams from power plants or the regulation of coal ash disposal under the Resource Conservation and Recovery Act.

Opponents of tighter EPA regulation say this approach is designed as a backstop for the agency's power plant carbon rules, which they predict won't stand up to scrutiny by a Supreme Court that has moved further right since 2016, when it halted the Obama-era Clean Power Plan. The court didn't issue a decision, but its stay was interpreted as a rebuke of EPA's attempt to regulate the power system as a whole rather than individual generating units.

Strong non-CO₂ regulations can get the same job done, regulatory opponents say, by making coal plants so costly to operate that they're forced into early retirement.

But a packaged approach would also give industry a road map for all of the regulations expected during Biden's first term. White House climate adviser Gina McCarthy and EPA officials have asked for industry input. McCarthy, a former EPA administrator who is overseeing Biden's climate agenda, met virtually with members of the board of the Edison Electric Institute, the industry's trade association, early this year.

"If the agency was able to put out a slate of upcoming standards and also think through with the industry — and the states and the environmental community — how could this phasing work in a way that enables utilities to plan to meet all these standards in the most cost-effective way possible, that would make both environmental and economic sense and certainly be appealing to the utilities," a former EPA official said.

It might also allow utilities in regulated markets to recover investments that prepare them to meet the coming standards, the former official said.

Western Senators Question Biden Admin's Drought Response

By Jeremy P. Jacobs 10/07/2021

Western senators yesterday pressed Biden administration officials for what steps they are taking as their region faces a deepening and historic drought.

Sen. Mark Kelly (D) said that 90 percent of the American West is currently experiencing drought conditions, and the problems are particularly acute in his home state of Arizona. He noted that Arizona will lose about 18 percent of its allocation from the Colorado River next year since the Bureau of Reclamation formally declared a shortage for the first time ever in August.

The Colorado River serves 40 million Americans and millions of acres of cropland. But it is currently enduring a more than 20-year "megadrought" that has many scientists questioning whether "aridification" is taking place in the region, leading to a consistently drier future (Greenwire, Aug. 16).

In particular, the seven-state Colorado River Basin's two main reservoirs, Lake Powell and Lake Mead, are at their lowest levels since they were initially filled decades ago. "Lake Mead and Lake Powell are the poster children for Western drought," Kelly said.

Kelly pressed Tanya Trujillo, the Interior Department's assistant secretary for water and science, on what the Biden administration is doing to respond. She said that since January, the administration has provided funding to more than 220 drought-related programs and "reprogrammed" \$100 million for drought purposes.

Kelly focused much of his questioning on how roughly \$8.3 billion in drought funding tucked into the bipartisan infrastructure bill that the Senate has passed would be used.

He noted that it is intended to repair infrastructure, deploy more water recycling and desalination, and improve watershed health. That bill has yet to clear the House, where it has been caught up in negotiations over the Biden administration's broader reconciliation package on climate and social programs.

Trujillo didn't offer many specifics, but said that the money will go toward continuing to "build upon the good collaborative success that we've had in the basin."

Tom Buschatzke, director of the Arizona Department of Water Resources, said the basin must grapple with an uncertain future in which the river's flows continue to dry up.

The basin's states, 30 Native American tribes and Mexico are beginning to negotiate new operating guidelines for the river that must be finalized by 2026.

Buschatzke said those negotiations will be difficult but that "we will get there" because no stakeholder wants the Interior Department or a court to "dictate winners and losers."

DOE commits \$20M to create green hydrogen from nuclear power with Palo Verde project

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Scott Van Voorhis - [WikiMedia](#)

Dive Brief:

- The U.S. Department of Energy on Friday unveiled plans to spend \$20 million on research into the production of clean hydrogen from nuclear power.
- The money will help pay for a demonstration project by PNW Hydrogen at the Palo Verde Nuclear Generating Station in Phoenix.

The rollout of the Arizona project is part of the DOE's H2@Scale initiative, which looks to spur research into clean hydrogen and its potential use not just in the utility industry, but across a range of sectors.

To that end, DOE has launched a "Hydrogen Shot" initiative to reduce the price of clean hydrogen, also known as green hydrogen, over the next decade to \$1 per kilogram.

Green hydrogen currently costs three to five times that amount, from \$3/kg-\$6.55/kg, [according to S&P Global Market Intelligence](#).

While the United States currently produces 10 million metric tonnes of hydrogen each year, most of it is still made through the use of natural gas, though clean alternatives, such as electrolysis, "are rapidly increasing," according to DOE.

PNW Hydrogen will lead the project, with DOE's Office of Nuclear Energy contributing \$8 million to the venture, while DOE's Hydrogen and Fuel Cell Technologies Office will provide another \$12 million for a total of \$20 million.

"Using nuclear power to create hydrogen energy is an illustration of DOE's commitment to funding a full range of innovative pathways to create affordable, clean hydrogen, to meet DOE's Hydrogen Shot goal, and to advance our transition to a carbon-free future," said Deputy Secretary of Energy David Turk, in a press release.

The plan calls for using six tonnes of clean hydrogen to generate 200 MWh of electricity at periods of high demand, with the hydrogen also potentially being used to produce other fuels and chemicals.

The aim of the project is to learn more about "integrating nuclear energy with hydrogen production technologies" that in turn will help with deploying "future clean hydrogen production deployments at scale," according to DOE.

"Nuclear produced hydrogen can either be used as fuel for generators based on combustion or sold for industrial purposes," Amy Roma, a partner in the regulatory practice of Hogan Lovells, said in a blog post.

The steady nature of nuclear-produced hydrogen can also offset the variable and weather-dependent nature of renewable sources like wind and solar, Roma wrote.

"The operational flexibility and reliability enable nuclear plants to respond to seasonal demand shifts, hourly market pricing changes, and make a nuclear hydrogen combination appealing," Roma states.

The Arizona project drew praise from home state Senator Kyrsten Sinema (D).

Sinema noted the \$1 trillion bipartisan infrastructure plan includes \$9.5 billion to help build up a green hydrogen sector through "national clean hydrogen hubs, hydrogen manufacturing and recycling programs, and programs to lower the cost of clean hydrogen."