Outdated SoCal power units still needed to avoid outages, state says

Environmentalists, others dispute claim that old gas-fueled coastal generators are necessary.

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California's steady move toward renewable energy and away from gas-fueled power plants has regulators worried the state could find itself without adequate electricity in peak hours as soon as next year.

That scenario could force widespread power outages in the evenings — blackouts entirely independent from recent "safety" outages because of red-flag fire conditions.

But a proposal to address the concern by extending the life of outdated natural-gas generators at four coastal Southern California power plants is drawing opposition from environmentalists, utility watchdogs, alternative energy providers and even one major electric company.

These opponents challenge the state's analysis that the generators should operate beyond their scheduled closure at the end of 2020.

"There's no need for any of these units to have their lifespans extended," said Bill Powers, a power systems engineer and board member of Protect Our Communities, which is fighting the proposal.

Additionally, environmental groups including the Sierra Club argue the extensions would unnecessarily harm marine life, air quality and efforts to meet carbon emission goals.

The California Public Utilities Commission staff, which is proposing the extensions, say a big part of the problem is that while solar and wind are growing contributors to the state's electrical grid, those sources aren't reliable around the clock.

"Older power plants are retiring, mostly being replaced by renewable resources that are intermittent and/or may not be available during peak periods when the system needs them most," said commission spokeswoman Terrie Prosper.

*But the complex tangle of data and conflicting analyses in **hundreds of comments and responses** by regulators and other interested parties make it difficult to assess the likelihood of such a shortfall. Even the Public Utilities Commission proposal acknowledges the determination is as much art as science.*

*"Procurement of the exact 'right' amount of system power is never possible, and requires a balancing act of reasonableness," commission staff writes in **its proposed decision**.*

Commission staff was still searching for that balance at recently as Monday, when it released revisions to its original proposal. Because of that, the commission vote on the issue scheduled for Thursday has been postponed to Nov. 7 and the comment period has been extended to Oct. 31.

Changes include a reduction in the length of the proposed extensions for two of the plants — a reduction the revised proposal says was in response to concerns. Because of the changes, the public comment period has been extended to Oct. 31.

Environmentalists said the shorter timelines were an improvement.

"The (commission's) revised decision shows that when Californians speak up for what they believe in — in this case a clean energy future that is free from fossil fuels — their voices can and will be heard," said Sierra Club staff attorney Katie Ramsey. "Although it is unfortunate that any of these once-through cooling gas units will see an extension, this updated (proposal) is definitely a move in the right direction.

Local closure plans

The locations with old generators proposed for continued use after their scheduled 2020 shutdown dates are AES plants in Huntington Beach, Long Beach and Redondo Beach, and the NRG Ormond Beach operation in Oxnard.

These plants' old generators, which pipe in ocean water for cooling the units, have a mandated closure deadline of 2020 as a result of a State Water Resources Control Board policy to eliminate the ongoing damage the cooling process inflicts on marine life.

The plants in Redondo Beach and Oxnard are scheduled to shut down entirely. Air-cooled replacement units at Huntington Beach and Long Beach, which are expected to require half as much natural gas to produce the same amount of energy, have been erected adjacent to the old generators and are expected to go online next year.

The original commission proposal called on old generators at all four plants to remain operating for as much as three years after their scheduled closure. Monday's revision shortened the proposed extensions for Redondo Beach to two years and for Oxnard to one year.

AES has said there are no obstacles to keeping the old generators running at its plants but has remained neutral on whether they should continue to operate.

If the commission approves the proposed extensions, the State Water Resources Control Board would then have to approve allowing the generators to operate after 2020.

Future of renewables

In its effort to reduce carbon emissions, the state has set goals for electricity production that would call for renewable resources to supply at least 33% of power by 2020 and 60% by 2030, with a final target for 2045 of 100% carbon-neutral sources for retail electricity sales.

So far, so good. Renewables accounted for 32% of the electricity generated in state in 2018 and 31% when imported energy was included, according to the California Energy Commission. Natural gas accounted for 35% of electricity sources in 2018, part of a steady downward trend from 44% in 2015.

The biggest growth in renewable sources is in solar power, which accounted for 14% of the electricity pool in 2018. Wind was second at 7%.

But by November 2018, the Public Utilities Commission had realized that the closure of gas-powered plants and the lack of solar power in peak evening hours conspired to create the potential for insufficient power availability as early as 2021, according to the commission's Prosper.

The California Independent System Operator, the agency that coordinates the purchase of energy used by about 85% of the state, believes the shortfall could occur as soon as next year, according to spokeswoman Anne Gonzalez. The agency supports the commission proposal.

Extending the use of old generators is particularly key in meeting the goal of a 15% reserve margin for emergency contingencies such as power plant outages, windless

days, lack of availability of imported power and electric demands heightened by unusually hot days, according to Prosper.

"It is likely we would only have a … system emergency in a situation where more than one contingency was occurring," she said.

"Having very tight power supplies also creates the potential for … higher prices, causing unnecessary costs for consumers, which the (commission) also seeks to avoid," she added.

Alternatives to old units

While some opponents argue that there's no need for the old generators to continue operating, others offer alternatives for goosing up available power supplies as ocean-cooled generators are shuttered throughout the state.

Protect Our Communities is among those who've suggested that the state could increase imported energy if needed during peak hours. Imported energy accounted for 32% of the state's electricity last year, according to the California Energy Commission.

Public Utilities Commission staff says it's wary of relying on more imported energy. It says there's increased volatility in availability because other states also are transitioning away from gas-fueled plants and because of growing demands in those sources' home states. The agency also notes that climate change is making hydroelectricity, among import sources, less reliable.

Additionally, the Natural Resources Defense Council is among the environmental groups unenthusiastic about increasing imports, noting that the practice could simply relocate the source of greenhouse gas emissions from California to other states.

Jose Torres of the California Environmental Justice Alliance, which filed comments jointly with the Sierra Club, also supports more imports but also calls on a greater emphasis on solar energy, batteries to store that energy and more wind energy.

"The most reasonable solution I've seen is solar storage," Torres said.

Prosper responded, "Storage is among the potential resources that would likely be procured under the proposed decision's requirements."

She also downplayed the likely impact on the environment that might come if traditional power stations remain online.

"The old generators would likely not run very much, (would) only be available when supplies are short," she said.

This story was update Oct. 23 with details of the Oct. 21 changes to the commission proposal.