

November 12, 2020

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Californians for Green Nuclear Power, Inc.

Complainant

v

The North American Electric Reliability Corporation, the Western Electricity Coordinating Council, the California Independent System Operator, the California Public Utilities Commission, the California State Water Resources Control Board, & the California State Lands Commission Respondents

(Docket No. EL21-13-000)

COMMENTS OF THE AMERICAN NUCLEAR SOCIETY

Pursuant to the Federal Energy Regulatory Commission's ("FERC" or "Commission") rules and the Notice of Complaint issued on October 26, 2020 in this docket, the American Nuclear Society ("ANS") ¹ respectfully submits these comments in support of the Complaint filed by the Californians for Green Nuclear Power, Inc. ("CGNP").

As the voice of America's nuclear professionals since 1954 and representing an active membership of more than 9,500 nuclear engineers and scientists, ANS supports a reconsideration of the 2016 decision² by California regulators and Pacific Gas and Electric Co.

¹ Established in 1954, the American Nuclear Society is an international professional organization of engineers and scientists devoted to the peaceful applications of nuclear science and technology. Its more than 9,500 members represent government, academia, research laboratories, medical facilities, and private industry. ANS's mission is to advance, foster, and spur the development and application of nuclear science, engineering, and technology to benefit society.

² CPUC Decision D.18-01-022

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("PG&E") to prematurely shutter Diablo Canyon Power Plant's Units 1 and 2 in November 2024 and August 2025, respectively.³

Closing California's only remaining operating nuclear power facility will threaten more rolling blackouts for the Golden State as Diablo Canyon reliably supplies approximately 10 percent of in-state power.⁴ Along with further weakening California's fragile power grid, the premature closure of Diablo Canyon will deprive California of its largest carbon-free energy resource and worsen the state's growing dependency on natural gas imports.⁵

During the August 2020 heatwave that strained California's already overloaded power grid, the California Independent System Operator ("CAISO") ordered rolling blackouts across the state to avoid a power supply shortage of 4,400 megawatts that would have left approximately 3.3 million in the dark without air conditioning.⁶ The rolling blackouts would have been far worse without Diablo Canyon's 2,240 megawatts of safe, reliable, fuel-secured and zero-emissions baseload power.

Despite the growing saturation of renewables on California's power grid, wind and solar farms are too weak and inconsistent to ensure grid reliability as their intermittent generation ebb and flow with weather conditions. Instead, the grid requires dispatchable, firm generation from

³ PG&E Letter DCL-18-015 to U.S. Nuclear Regulatory Commission, "Request to Withdraw the Diablo Canyon Power Plant License Renewal Application," dated March 7, 2018 (ML18066A937).

⁴ 25 August 2020, "A lesson from the blackouts: California may be too reliant on out-of-state energy imports," The San Diego Union Tribune, https://www.sandiegouniontribune.com/business/energy-green/story/2020-08-25/a-lesson-from-the-blackouts-california-is-too-reliant-on-out-of-state-energy-imports-and-the-problem-will-get-worse and PG&E, "Diablo Canyon Power Plant: About the facility," https://www.pge.com/en_US/safety/how-the-system-works/diablo-canyon-power-plant/about-the-diablo-canyon-power-plant.page

 ⁵ 6 December 2019, "Overpowered: Eyeing zero-carbon grid, California seeks a gas exit strategy," S&P Global Market Intelligence, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/overpowered-eyeing-zero-carbon-grid-california-seeks-a-gas-exit-strategy-52583512
 ⁶ 27 October 2020, "Diablo Canyon: an asset California can't afford to lose," Power Grid International, https://www.power-grid.com/2020/10/27/diablo-canyon-an-asset-california-cant-afford-to-lose/#gref

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conventional resources to keep the lights on, as dispatchable generators can adjust their power output on demand to ensure grid reliability.

However, as California's in-state dispatchable generators continue to retire and be mothballed, CAISO has warned that its market will have to lean more on neighboring regions to make up shortfalls in power supplies, including meeting peak demand after sunset when solar resources become unavailable.⁷

Without Diablo Canyon, America's largest state economy will be forced to import more out-of-state electricity and more natural gas via pipelines across earthquake-prone tectonic boundaries like the San Andreas fault. As noted by the Complaint, approximately 60% of California's dispatchable in-state bulk power supplies already come from natural gas-fired generation, with 95% of this greenhouse gas-emitting fossil fuel pumped in from out of state. According to CAISO, about 25% of California's total electricity needs are currently met by imports.

California's vulnerability to blackouts and pipeline disruptions – including those caused by wildfires and earthquakes – demonstrates the necessity in keeping Diablo Canyon's clean baseload power beyond 2025 for the safety and prosperity of 40 million Californians. In wake of any blackout or extreme event, Diablo Canyon's fuel-secured, reliable and safe baseload power will surely be needed to restore power in California.

^{7 &}quot;2019 Summer Loads & Resources Assessment," CAISO, pages 14 and 26, http://www.caiso.com/Documents/Briefing-2019-SummerLoads-Resources-Assessment-Report-May2019.pdf

⁸ Complaint on page 3 and 4 August 2015, "The Diablo We Know: The Case for Keeping California's Last Nuclear Plant," The Breakthrough Institute, https://thebreakthrough.org/issues/energy/diablo-canyon-nuclear-power-shutdown-risk

⁹ 20 August 2020, "California power shortages stem from lack of firm generation capacity: experts," S&P Global Market Intelligence, https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/082020-california-power-shortages-stem-from-lack-of-firm-generation-capacity-experts



ANS cautions the Commission to consider fully the negative consequences and reliability risks posed by a premature retirement of Diablo Canyon before taking action. We prefer the Diablo we know over the costs, risks and uncertainty of a power grid without it.

Respectfully Submitted,

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