Secretary Jennifer Granholm U.S. Department of Energy 1000 Independence Ave., SW Washington, DC 20585 The.Secretary@hq.doe.gov

## Dear Secretary Granholm:

The one-hundred seventy-nine organizations signed below are extremely concerned about recent statements and media reports indicating that the Department of Energy (DOE) is negotiating with California Governor Gavin Newsom to misuse the Civil Nuclear Credit program (CNC) to dismantle the fossil-free phaseout and just transition plan for the Diablo Canyon Nuclear Power Plant.

The CNC was created by the bipartisan Infrastructure Investment and Jobs Act (IIJA) to mitigate potential greenhouse gas emissions (GHG) increases due to the closure of unprofitable nuclear reactors that operate in competitive electricity markets. Diablo Canyon is not eligible for funds under the CNC program because it does not meet the basic requirements of the IIJA, nor those of the CNC program guidance DOE published to implement the program less than three months ago:

- Diablo Canyon is not closing because it is unprofitable its owner, Pacific Gas & Electric (PG&E) operates it as part of its regulated utility and recovers all of its costs plus a regulated rate of return on investment through its regulated electricity rates.
- Diablo Canyon is closing because PG&E determined in 2016 that doing so would enable it to meet California's renewable energy standard (RES) and emissions standards more rapidly and cost-effectively.
- There will be no emissions increases due to Diablo Canyon's closure because state law mandates the California Public Utilities Commission (CPUC) and, by extension, PG&E to ensure that outcome.
- As a result of CPUC orders and state legislation, PG&E and other utilities and load-serving entities in California must, between 2021 and 2026, procure over 22,000 MW of renewable energy and electricity storage. This is several times more generation and capacity than is needed to replace Diablo Canyon, as well as several fossil fuel power plants that are also retiring. The vast majority will be online before the reactors at Diablo Canyon retire in 2024 and 2025.

• President Biden's June 6 executive order<sup>1</sup> lifting the embargo on solar panel imports from Southeast Asia while the US expands domestic supply chain manufacturing will enable solar installations in California to proceed as planned, to meet CPUC's procurement targets and the state RES.

There is no legitimate basis for DOE to entertain Gov. Newsom's request to modify the rules of the CNC program to subsidize Diablo Canyon and vacate its planned phaseout<sup>2</sup>. Extending Diablo Canyon's operation would require much more than modifying the CNC program guidelines and would, in fact, violate the express meaning and intent of the IIJA.

Diablo Canyon's closure will do much more for California's climate goals, local communities, and economic and environmental justice than the CNC program. The phaseout plan which California is implementing is a model DOE should promote instead of seeking to preempt it. The basis for the plan points to how phasing out nuclear power plants along with fossil fuel generation can help accelerate emissions reductions, the growth of the renewable energy economy, and a just and equitable transition for workers and communities.

## **Diablo Canyon Phaseout Agreement**

In 2016, PG&E published a report concluding that the continued operation of Diablo Canyon's 2,200 MW of inflexible baseload generation would cause severe congestion on the high-voltage transmission system as solar generation in California grows under the state's renewable energy standard and community choice aggregation programs.<sup>3</sup> This would force PG&E to export or curtail solar generation because Diablo Canyon's reactors cannot adjust their output quickly enough to relieve overloaded transmission lines. PG&E determined that retiring Diablo Canyon 1 and 2 when their licenses expire in 2024 and 2025 would mitigate the transmission bottleneck, lower consumer costs, and enable the utility to achieve 55% renewable energy by 2031, exceeding the then-existing state RES target.

Upon reaching this conclusion, PG&E entered into a settlement with IBEW Local 1245<sup>4</sup> (which represents 500 Diablo Canyon workers) and several environmental organizations, including Friends of the Earth, Natural Resources Defense Council, Environment California, and the Alliance for Nuclear Responsibility. The settlement resolved years of expensive, protracted legal

<sup>\</sup>frac{1}{https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/06/fact-sheet-president-biden-takes-bold-executive-action-to-spur-domestic-clean-energy-manufacturing/

<sup>&</sup>lt;sup>2</sup>https://static.ewg.org/upload/pdf/calif\_letter\_to\_DOE.pdf?\_ga=2.66025198.19902243.1653860374-927036638.1653860374

<sup>&</sup>lt;sup>3</sup> LaCount, Robert. *Joint Proposal for the Orderly Replacement of Diablo Canyon Power Plant with Energy Efficiency and Renewables*. M. J. Bradley & Associates. June 21, 2016. https://www.pge.com/includes/docs/pdfs/safety/dcpp/MJBA\_Report.pdf

<sup>&</sup>lt;sup>4</sup> Dalzell, Tom. "Diablo Canyon: A Just Transition for Workers and the Environment." UC Berkeley Labor Center. November 30, 2018.

https://laborcenter.berkeley.edu/diablo-canyon-just-transition-workers-environment/

and regulatory disputes over relicensing, seismic disaster risks, coastal ecosystem protection, and cooling system impacts.

Costs of Revoking the Settlement and Extending Diablo Canyon License Could Be Considerable In order for Diablo Canyon to operate beyond the planned retirement dates, several things would need to take place:

- PG&E would either need to win the assent of the settlement parties or pay them compensatory damages.
- PG&E may be required to reimburse its ratepayers for substantial costs they have already borne for implementation of the phaseout and just transition plan.
- PG&E will need to submit a relicensing application and supplemental environmental impact statement to the U.S. Nuclear Regulatory Commission and endure a protracted administrative law process due to challenges by intervenors.
- PG&E will need to apply for water permits and approvals from the Coastal Commission and Water Resources Board, as well as a lease extension from the State Lands Commission.

The latter would entail large investments to convert Diablo Canyon's once-through-cooling (OTC) system to mechanical draft cooling towers, a capital cost likely to exceed \$1 billion. The Coastal Commission granted PG&E an exemption from that requirement in 2016 as a result of the phaseout agreement and PG&E's decision to retire the reactors in 2024 and 2025. A decision to continue operation of Diablo Canyon could also result in PG&E incurring financial liability for the incremental damage the plant's cooling system has caused to California's coastal waters over the intervening years.

In total, PG&E's up-front expenses to abandon the settlement agreement and continue operating Diablo Canyon would exceed \$1 billion and could approach \$2 billion or more.

It would be nonsense for DOE to consider expending such a large share of the \$6 billion appropriation for the CNC program merely to extend the operation of one nuclear power plant for what has been suggested as only a short duration of a few years.<sup>5</sup> Awarding CNC funds to PG&E for Diablo Canyon would be arbitrary, capricious, and wasteful in the extreme, especially due to the overwhelming evidence that Diablo Canyon does not meet the eligibility criteria in the plain language of the IIJA and the guidance DOE issued for the CNC program.

<sup>&</sup>lt;sup>5</sup> Gov. Newsom's Cabinet Secretary, Ana Matosantos, in her May 23, 2022 letter to Secretary Granholm, says, "the state is evaluating a temporary delay of the planned retirement" of Diablo Canyon, implying a period of extended operation significantly shorter than the 20 years typically authorized through NRC's relicensing process. Even so, PG&E would have to submit a relicensing application for any continued operation because the current licenses expire, respectively, on November 2, 2024, and August 26, 2025. <a href="https://static.ewg.org/upload/pdf/calif\_letter\_to\_DOE.pdf?ga=2.66025198.19902243.1653860374-927036638.1653860374">https://static.ewg.org/upload/pdf/calif\_letter\_to\_DOE.pdf?ga=2.66025198.19902243.1653860374-927036638.1653860374</a>.

# **CNC Funding for Diablo Canyon Would Violate Economic and Environmental Justice Principles**

Misusing the CNC program to fund Diablo Canyon's extended operation would also betray the Biden administration's commitments to climate and environmental justice. CPUC orders and state law authorize implementation of the phaseout plan, which includes a just transition program for power plant workers and the host community that could and should be a model for the entire country.

Under the phaseout plan, as authorized by state law<sup>6</sup> and approved by the CPUC,<sup>7</sup> Diablo Canyon workers are being provided with economic support through the closure of the plant in 2025 and local governments are being provided transitional revenue payments to protect the tax base. PG&E ratepayers have already been paying for these programs since 2018. To ensure an adequate skilled workforce at Diablo Canyon until it closes, workers are being provided annual salary bonuses (averaging \$34,000 per employee per year), and those who serve until the reactors' retirement will receive severance payments of \$115,000 each. On average, workers will receive \$353,000 in bonuses and severance by 2025 to support themselves and their families through their employment transition. In addition, PG&E will offer its nuclear workers the option of retraining and continued employment in the 10- to 20-year radiological decommissioning project at Diablo Canyon, another expense for which ratepayers are paying. The phaseout plan also includes stable property tax payments to municipalities through 2025 despite the rapidly depreciating value of the power plant, amounting to \$50 million in transitional revenue for local governments over seven years.

In total, PG&E customers have already been charged upwards of \$200 million for these just transition costs. If DOE were to grant Diablo Canyon Civil Nuclear Credits, would the award also include reimbursing ratepayers for the costs they have incurred?

Unraveling such a model agreement would not only undermine the goal of building a just and equitable clean energy economy, it would also exacerbate environmental justice impacts. In its first report in May 2021, the White House Environmental Justice Advisory Council identified "procurement of nuclear power" in a list of "Types of Projects That Will Not Benefit" environmental justice communities.<sup>8</sup> The operation of nuclear power plants, and the entire nuclear fuel chain from uranium mining to waste disposal, entails severe environmental justice impacts. Subsidizing the continued operation of Diablo Canyon would undermine the

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M205/K423/205423920.PDF

CPUC Decision 18-11-024 (November 29, 2018).

 $\underline{https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M246/K081/246081285.PDF}$ 

<sup>&</sup>lt;sup>6</sup> California Senate Bill 1090, enacted September 18, 2018.

 $<sup>\</sup>underline{https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\_id=201720180SB1090}$ 

<sup>&</sup>lt;sup>7</sup> CPUC Decision 18-01-022 (January 11, 2018).

<sup>8</sup> https://www.epa.gov/sites/default/files/2021-05/documents/whejac\_interim\_final\_recommendations\_0.pdf

Biden-Harris administration's entire case for advancing the transition to a clean energy economy and violate commitments to environmental justice.

## Closing Diablo Canyon Meets California's Climate Goals

Subsidizing Diablo Canyon's continued operation would also undermine the very climate rationale for the CNC program: to mitigate GHG emissions. The criteria of the CNC funds requires that the closure of eligible nuclear power plants would result in a documented increase in GHG emissions. Diablo Canyon does not meet this requirement because the phaseout agreement includes a firm commitment by PG&E to meet California's GHG reduction targets and to exceed the state's RES. That commitment is reinforced by CPUC orders, as well as state legislation enacted in 2018 requiring that the retirement of Diablo Canyon not contribute to increases in GHG emissions:

(b) The commission shall ensure that integrated resource plans are designed to <u>avoid any</u> <u>increase in emissions of greenhouse gases</u> as a result of the retirement of the Diablo Canyon Units 1 and 2 powerplant.<sup>9</sup> (emphasis added)

In order to meet that goal, the CPUC ordered PG&E to ensure the GHG-free phaseout of Diablo Canyon through comprehensive system planning. State legislation and CPUC orders will guarantee both adequate electricity supply and phaseouts of both Diablo Canyon and 3,700 MW of fossil fuel power plants. Between 2021 and 2026, California will bring online over 22,000 MW of new renewable energy and storage capacity, many times more electricity than the retiring nuclear reactors provide.

The CPUC has publicly attested to this in a recent op-ed by the agency's interim deputy executive director for Energy & Climate Policy, Peter Skala:

It is highly inaccurate to suggest that the State plans to replace Pacific Gas and Electric Company's (PG&E) Diablo Canyon Nuclear Power Plant mostly with Wyoming coal-fired generation. In fact, the State has ordered an unprecedented amount of new clean energy procurement—11.5 gigawatts—to replace the retirement of Diablo Canyon (along with other aging gas plants that are retiring). This includes wind, solar, batteries, geothermal, and long duration storage that will be online starting in 2023. (emphasis added)

http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab 2501-2550/ab 2514 bill 20100820 amended sen v90.html

https://capitolweekly.net/letter-to-the-editor-cpuc-responds-to-inaccurate-commentary/?fbclid=IwAR2hi6TqKPBUwrMnuViu5YJhsX1MWrbORioc52os0XhaIvVRHH2xmCwawcI

<sup>&</sup>lt;sup>9</sup> Energy Storage Targets - Publicly Owned Utilities - AB 2514 <a href="https://www.energy.ca.gov/data-reports/reports/energy-storage-targets-publicly-owned-utilities">https://www.energy.ca.gov/data-reports/reports/energy-storage-targets-publicly-owned-utilities</a> Assembly Bill 2514 (2010)

The CPUC stated this clearly when it issued the June 2021 order requiring utilities and load-serving entities to procure 11,500 MW of capacity by 2026–including 2,500 MW of firm renewable capacity<sup>11</sup> by 2025, specifically to account for the retirement of Diablo Canyon:<sup>12</sup>

The California Public Utilities Commission (CPUC) ... today approved a historic decision ordering utilities to procure 11,500 megawatts (MW) of new electricity resources to come online between the years 2023 and 2026, enough to power approximately 2.5 million homes, with all of the resources procured coming from preferred resources, such as distributed energy resources (including energy efficiency and demand response), renewables, and zero-emitting sources. This represents the largest capacity procurement ordered at a single time by the CPUC, and is the largest requiring only clean resources.

Today's decision facilitates the integration of high amounts of renewables required to meet the state's renewable and clean energy goals and ensure reliability. The decision is a foundational investment in meeting the state's goal of 100 percent clean electricity by 2045.

The resources required to come online in the years 2023 through 2026 are needed to respond to more extreme weather events, while replacing electricity generation from more than 3,700 MW of retiring natural gas plants and 2,200 MW from Pacific Gas and Electric Company's retiring Diablo Canyon Power Plant. At least 2,500 MW of zero-emitting resources were ordered specifically to replace generation from Diablo Canyon, which is in addition to capacity already procured over the past several years for the same purpose. The CPUC has been planning to replace power from Diablo Canyon for many years through modeling, workshops, extensive public input, and earlier decisions. In 2019, the CPUC ordered significant amounts of new renewables and storage, which will result in a tenfold increase in batteries coming online this summer and next summer. (emphasis added)

The words of CPUC Commissioner Clifford Rechtschaffen demonstrate the commission's intent in issuing the order:

https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-orders-clean-energy-procurement-to-ensure-electric-grid-reliability

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<sup>&</sup>lt;sup>11</sup> Defined as renewable generation sources that can operate at an average annual capacity factor of at least 80%, such as geothermal power stations. This tranche of the procurement will entail projects with a total capacity greater than Diablo Canyon's, generating at least as much electricity on an annual basis.

The procurement we ordered is <u>equal to output of four large nuclear power plants</u> or 20 natural gas plants. Included is solar, wind, geothermal, and long duration storage—pumped hydro facilities or other emerging technologies that can <u>store energy for eight hours or longer</u>. Our actions today will ensure that we can keep the lights on during periods of greatest demand, even as we <u>retire Diablo Canyon and other natural gas plants</u>. (emphasis added)

The 11,500 MW procurement plan will be on top of more than 10,500 MW of renewable energy and storage capacity already mandated by previous CPUC orders, state legislation, and California's RES:

- A 2019 CPUC order resulting in 3,710 MW of renewable energy and storage between 2021 and 2023.<sup>13</sup>
- State legislation enacted in 2010 requiring 1,325 MW of battery storage by 2023. 14
- CPUC orders requiring another 1,500 MW of storage capacity to mitigate wildfire risks. 15
- 4,000 MW of renewables to comply with the 2024 RES target.

As a result of these measures, California will have added more than 18,500 MW of new renewable energy and storage capacity by the time Diablo Canyon unit 1 retires in 2024, and over 20,000 MW when Diablo Canyon unit 2 retires in 2025. Over 70% of that capacity will be in the form of renewable generation, including 2,500 MW of firm renewable capacity specifically to replace Diablo Canyon.

Furthermore, retirement of Diablo Canyon will enable further GHG reductions by freeing up existing pumped hydro storage capacity, which will displace additional fossil fuel generation. PG&E's 1,212 MW Helms pumped storage plant has been dedicated to providing "spinning reserve" backup capacity for Diablo Canyon since it was built in 1984. Doing so has enabled PG&E to reduce reliance on fossil fuel generation as the spinning reserve for the nuclear power plant, a secondary source of emissions resulting from reactor operation in many parts of the country. Once Diablo Canyon retires, most if not all of Helms' capacity will be available to provide zero-emissions peaking power, voltage support, and other grid reliability services.

https://www.energy.ca.gov/data-reports/reports/energy-storage-targets-publicly-owned-utilities Assembly Bill 2514 (2010)

http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab 2501-2550/ab 2514 bill 20100820 amended sen v90.html

 $\frac{https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-orders-clean-energy-procurement-to-ensure-electric-grid-reliability}{}$ 

<sup>&</sup>lt;sup>13</sup> CPUC. "Status Update on Procurement in Compliance with D.19-11-016 (IRP Procurement Order)." August 2021

 $<sup>\</sup>frac{https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/ed_staff_review_of_feb2021_data_in_compliance_with_d1911016.pdf$ 

<sup>&</sup>lt;sup>14</sup> Energy Storage Targets - Publicly Owned Utilities - AB 2514

Despite this overwhelming record, some have argued that extending Diablo Canyon's operation is nevertheless necessary because California solar projects may be delayed by a U.S. Department of Commerce tariff embargo on imported solar panels. If there had been any basis for this concern, President Biden's June 6, 2022 executive order lifting the embargo and tariffs on imported solar panels has resolved it.<sup>16</sup>

In addition, the Bureau of Ocean Energy Management (BOEM) announced on May 26, 2022, that it will hold an auction for offshore wind leases in California, projected to result in 4,500 MW of renewable capacity—more than twice Diablo Canyon's capacity and generating approximately the same amount of electricity each year.<sup>17</sup> Rather than expend billions of CNC dollars to unravel the Diablo Canyon phaseout plan, DOE should work with California and the Department of the Interior to accelerate the development of these offshore wind projects and California's industrial infrastructure and workforce development.

In conclusion, Diablo Canyon does not qualify for the CNC. Awarding CNC funds to Diablo Canyon would be a massive failure on all fronts and for all parties. It would damage the integrity and conflict with the purpose of DOE's CNC program. It would interfere with the policies and plans to enact California's climate and RES goals. Critically, it would undo a major success that is the just transition outlined in the joint proposal approved by the CPUC.

We urge you to follow through with the Biden administration's commitment to environmental justice and climate action and honor the agreement to close Diablo Canyon. Bailing out old nuclear power plants is not the way to spark the energy transition we need to save the climate, create good jobs, build a strong economy, and advance environmental justice.

## Sincerely,

Timothy Judson
Executive Director
Nuclear Information and Resource Service
6930 Carroll Ave., Suite 340
Takoma Park, MD, 20912
timj@nirs.org
301-270-6477

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https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/06/memorandum-on-presidential-determina tion-pursuant-to-section-303-of-the-defense-production-act-of-1950-as-amended-on-solar-photovoltaic-modules-and-module-components/

 $\frac{\text{https://www.doi.gov/pressreleases/biden-harris-administration-proposes-first-ever-california-offshore-wind-lease-sale}{\text{e}}$ 

<sup>&</sup>lt;sup>17</sup> Department of the Interior. "Biden-Harris Administration Proposes First-Ever California Offshore Wind Lease Sale" May 26, 2022.

## **National Groups**

Beyond Nuclear

Kevin Kamps, Radioactive Waste Specialist

Takoma Park, MD

Center for Biological Diversity

Roger Lin, Senior Attorney, Energy Justice

Program Oakland, CA

Clean Water Action

Janet Tauro, NJ Board Chair

Brick, NJ

Food & Water Watch

Mitch Jones, Managing Director of Advocacy Programs and Policy

Washington, DC

Institute for Policy Studies Climate Policy

Program

Basav Sen, Climate Policy Director

Washington, DC

Malach Consulting

Steven Emerman, Owner

Spanish Fork, UT

Movement Rights

Pennie Opal Plant, Co-founder

Desert Hot Springs, CA

Musicians United for Safe Energy

Cree Miller, CFO

Studio City, CA

North American Water Office Lea Foushee', EJ Director

Lake Elmo, MN

Nicaragua Center for Community Action

Diana Bohn, Co-Coordinator

Berkeley, CA

North American Climate, Conservation and

Environment (NACCE)

Jerry Rivers, Environmental Scientist

Roosevelt, NY

Nuclear Hotseat Podcast

Libbe HaLevy, Producer/Host

Los Angeles, CA

Nukewatch

John LaForge and Kelly Lundeen,

**Co-Directors** 

Luck, WI

Physicians for Social Responsibility

Jeff Carter, Executive Director

Washington, DC

Protect All Children's Environment

Elizabeth O'Nan, Director

Chapel Hill, NC

Rachel Carson Council

Robert K. Musil, President & CEO

Bethesda, MD

Resource Renewal Institute

Chance Cutrano, Director of Programs

Fairfax, CA

Samuel Lawrence Foundation Bart Ziegler PhD, President Del Mar, CA

San Clemente Green Gary Headrick, Co-founder San Clemente, CA

Solartopia.org Harvey Wasserman, organizer Los Angeles, CA

SUN DAY Campaign Ken(neth) Bossong, Executive Director Takoma Park, MD

## **State Groups**

#### Alaska

Alaska Community Action on Toxics Pamela Miller, Executive Director Anchorage, AK

## Arizona

Physicians for Social Responsibility--Arizona Chapter Russell Lowes, Board Member Tucson, AZ

Don't Waste Arizona Stephen Brittle, President Phoenix, AZ

### California

350 Bay Area Action Nora Privitera, Chair, Federal Climate Action Team Oakland, CA

350 Conejo / San Fernando Valley Alan Weiner, Chapter Lead Agoura Hills, CA

350 Ventura County Climate Hub Jan Dietrick, Policy Team Leader Ventura, CA

Biodiversity First! Linda Seeley, Secretary San Luis Obispo, CA

Coalition for Nuclear Safety Alice McNally, Public Outreach Del Mar, CA

CODEPINK SF Bay Area Cynthia Papermaster, Chapter Coordinator Berkeley, CA

Committees for Land, Air, Water and Species (CLAWS) Nancy Black, Board President Santa Barbara, CA

Ecologistics, Inc. Stacey Hunt, CEO Los Osos, CA

Extinction Rebellion San Francisco Bay Area Leah Redwood, Action Coordinator Berkeley, CA Humboldt Unitarian Universalist Fellowship's Climate Action Campaign Sue Lee Mossman, Chair Arcata, CA

Idle No More SF Bay Isabella Zizi, Decision Maker Richmond, CA

Indivisible: Rapid Response Team SLO John Lamb, Coordinator Paso Robles, CA

Keane Enterprise Stephen Keane, CBO San Diego, CA

Local Clean Energy Alliance Al Weinrub, Coordinator Oakland, CA

Long Beach Alliance for Clean Energy Dave Shukla Long Beach, CA

Los Angeles Alliance for Survival Bruce Campbell Santa Monica, CA

Media Alliance Tracy Rosenberg, Executive Director San Francisco, CA

NeverAgainCA Jill Cooper, Member Solana Beach, CA North County (San Diego) Residents For Safe Energy Ace Hoffman, Director Carlsbad, CA

North County Watch Susan Harvey, President Templeton, CA

Parents Against Santa Susana Field Lab Melissa Bumstead Los Angeles, CA

Physicians for Social Responsibility-Los Angeles Denise Duffield, Associate Director Los Angeles, CA

Physicians for Social Responsibility/Sacramento Harry Wang, President Sacramento, CA

Redwood Alliance Michael Welch, Director Arcata, CA

San Francisco Bay Physicians for Social Responsibility Robert Gould, MD, President San Francisco, CA

San Luis Obispo Mothers for Peace Jill ZamEk, Board member San Luis Obispo, CA

SLO Clean Water Jean'ne Blackwell, Director San Luis Obispo, CA SoCal 350 Climate Action Jack Eidt, Co-Founder Los Angeles, CA

Social Justice Ministry of Live Oak Unitarian Universalist Congregation Carolyn Chaney, Chair Goleta, CA

Sunflower Alliance Jean Tepperman, co-coordinator Berkeley, CA

Sustainable Systems Research Foundation Ronnie Lipschutz Santa Cruz, CA

Synergistic Solutions Robert Perry, Principal Consultant Simi Valley, CA

Tri-Valley CAREs Marylia Kelley, Executive Director Livermore, CA

Women's International League for Peace and Freedom, San Francisco and East Bay Branches Regina Sneed San Francisco, CA

Coalition for Nuclear Safety Paul McEneany, Consultant San Diego, CA

Call 4 Change Sylvia Russell, Founder Ross, CA Dreamcloud Productions James de Cordova, CEO Santa Monica, CA

Electric Vehicle Assn of CA Central Coast Beverly DesChaux, President Santa Cruz, CA

Guacamole Fund Paula Ash, Executive Director Truckee, CA

International Marine Mammal Project of Earth Island Institute Mark J Palmer, Associate Director Berkeley, CA

CA Dem Party Environmental Caucus Igor Tregub, Chair Berkeley, CA

California Against Nuclear Power & Radiation
Laura E Lynch, Administrator
Santa Barbara, CA

California Alliance for Community Energy Erika Morgan, Operations Director San Diego, CA

Californians for Energy Choice Eric Books, Campaign Coordinator San Francisco, CA

Ecological Options Network Mary Beth Brangan, Co-Director Bolinas, CA Oceanic Preservation Society Courtney Vail, Campaign Director Greenbrae, CA

Western States Legal Foundation Jacqueline Cabasso, Executive Director Oakland, CA

Women's Energy Matters Jean Merrigan, Executive Director Fairfax, CA

Mercury Press International Nancy Black, Cofounder and Producer Santa Barbara, CA

## Colorado

San Luis Valley Ecosystem Council Christine Canaly, Director Alamosa, CO

#### Connecticut

In the Shadow of the Wolf August Allen, Executive Director Greenwich, CT

#### Florida

Earth Action, Inc. Mary Gutierrez, Director Pensacola, FL

Waterway Advocates Caleb Merendino, Co-Executive Director Fort Lauderdale, FL

## Georgia

Georgia WAND Cee' Cee' Anderson, Research Scientist Atlanta, Georgia

Women Changing The World Cee' Cee' Anderson, Research Scientist Atlanta, Georgia

#### Hawaii

350Hawaii Sherry Pollack, co-founder Kaneohe, HI

#### Idaho

Snake River Alliance Leigh Ford, Executive Director Boise, ID

#### Illinois

Citizens Against Ruining the Environment Ellen Renduilich, Director Lockport, IL

Nuclear Energy Information Service (NEIS) David Kraft, Director Chicago, IL

Stand Up/Save Lives Campaign Maureen Headington, President Burr Ridge, IL

Frack Free Illinois Lora Chamberlain, Lead organizer Chicago, IL

## Indiana

Valley Watch, Inc John Blair, President Evansville, IN

Citizens Action Coalition of IN KerwinOlson, Executive Director Indianapolis, IN

## Kentucky

Friends For Environmental Justice Elaine Tanner, Program Director Deane, KY

## Massachusetts

Citizens Awareness Network Deb Katz, Executive Director Shelburne Falls, MA

Going Beyond Sustainability Shel Horowitz, Tranformpreneur Hadley, MA

SCIG Ken Kipen, Director Ashfield, MA

Animals Are Sentient Beings Inc Sarah Stewart, President Watertown, MA

## Maryland

Environmental Justice Team Cedar Lane UU Church Kathleen Holmay, Team Leader Bethesda, MD Chesapeake Physicians for Social Responsibility Gwen DuBois, President Baltimore, MD

#### Maine

Peace Action Maine Martha Spiess, Chair Portland, ME

Radio Free Maine Roger Leisner, Founder/Owner Augusta, ME

## Michigan

Alliance To Halt Fermi-3 Keith Gunter, Board Chair Livonia, MI

Citizens Resistance At Fermi Two (CRAFT) Jesse Deer In Water, Community Organizer Redford, MI

Coalition for a Nuclear Free Great Lakes Michael Keegan, Chair Monroe, MI

Michigan Stop the Nuclear Bombs Campaign Vic Macks, Steering Committee St. Clair Shores, MI

NMEAC Ann Rogers, Chair Traverse City, MI Occupy Traverse City

Michael Paul, Group Administrator

Traverse City, MI

Straits Area Concerned Citizens for Peace,

Justice, Environment

David and Anabel Dwyer, Members

Mackinaw City, MI

Ban Michigan Fracking

LuAnne Kozma, President

Charlevoix, MI

Don't Waste Michigan

Alice Hirt, Co-Chair

Holland, MI

Don't Waste Michigan-Sherwood Chapter

Kathryn Barnes, Board of Directors, Don't

Waste Michigan

Sherwood, MI

## Minnesota

MN350

Tee McClenty, Executive Director

Minneapolis, MN

Vote Climate

Jean Ross, Board President

Minneapolis, MN

## Missouri

Mid-Missouri Peaceworks

Mark Haim, Director

Columbia, MO

## Mississippi

MS Communities United for Prosperity

(MCUP)

Romona Taylor Williams, Executive

Director

Duck Hill, MS

## North Carolina

NC Council of Churches

Susannah Tuttle, Program Director

Raleigh, NC

NC Interfaith Power & Light

Susannah Tuttle, Director

Chapel Hill, NC

## **New Hampshire**

Seacoast Anti-Pollution League

Doug Bogen, Executive Director

Portsmouth, NH

## **New Jersey**

Occupy Bergen County

Sally Jane Gellert, member

Woodcliff Lake, NJ

Bergen County Green Party

Patricia Alessandrini, Secretary

Teaneck, NJ

## **New Mexico**

Alliance for Environmental Strategies

Rose Gardner, Co-founder

Eunice, NM

Concerned Citizens for Nuclear Safety Joni Arends, Co-founder and Executive

Director

Santa Fe, NM

Multicultural Alliance for a Safe

Environment

Susan Gordon, Coordinator

Albuquerque, NM

Nuclear Watch New Mexico Scott Kovac, Research Director

Santa Fe, NM

Taos Environmental Film Festival

Jean Stevens, Director Ranchos de Taos, NM

Citizen Action New Mexico

David Mccoy, Executive Director

Albuquerque, NM

Citizens for Alternatives to Radioactive

Dumping (CARD)

Janet Greenwald, Coordinator

Dixon, NM

ComminGroundRising.org

Elaine Cimino, Director

Rio Rancho, NM

Nevada

Native Community Action Council

Ian Zabarte, Secretary

Las Vegas, NV

New York

Council on Intelligent Energy &

Conservation Policy Michel Lee, Chair

Scarsdale, NY

Eco-Logic of WBAI-FM

Ken Gale, Producer

New York City, NY

Fossil Free Tompkins

Irene Weiser, Coordinator

Ithaca, NY

Hudson River Sloop Clearwater

Manna Jo Greene, Environmental Director

Beacon, NY

**Indian Point Safe Energy Coalition** 

Marilyn Elie, Organizer

Cortlandt Manor, NY

Manhattan Project for a Nuclear-Free World

Mari Inoue, Co-founder

New York, NY

NYC Safe Energy Campaign

Ken Gale, Founder

New York City, NY

ResistSpectra

Marie Inserra, Member of Coordinator

Group

Peekskill, NY

Safe Energy Rights Group (SEnRG)

Nancy Vann, President

Peekskill, NY

Save the Pine Bush Grace Nichols, Solidarity Coordinator Albany, NY

Shut Down Indian Point NOW! (SDIPN!)
Paul Corell, Vice-Chair of SDIPN!
New York City, NY

Sisters of St. Dominic of Blauvelt, New York Sister Joan Agro, Congregational Secretary Blauvelt, NY

Syracuse Peace Council Carol Baum, Organizer Syracuse, NY

Western New York Drilling Defense Charley Bowman, Chair Buffalo, NY

Western New York Environmental Alliance John Whitney, Chairperson Buffalo, NY

Yoga For Peace, Justice, Harmony With the Planet: Amazing Amy - Eccentric Yoga Entertainer Amy Harlib

New York, NY

Coalition Against Nukes

Priscilla Star, Founder, Director Sag Harbor, NY

Earthkeeper Health Resources Amy Rosmarin, Executive Director North Salem, NY Grassroots Environmental Education Patricia Wood Port Washington, NY

Alliance for a Green Economy Andra Leimanis Communications & Outreach Director Syracuse, NY

Citizens Campaign for the Environment Adrienne Esposito, Executive Director Farmingdale, NY

NYPIRG Anne Rabe, Environmental Policy Director Albany, NY

### Ohio

National Nuclear Workers for Justice (NNWJ)
Vina Colley, Co-founder
Portsmouth, OH

Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) Vina Colley, President Portsmouth, OH

Protect Biodiversity in Public Forests Gwen Marshall, Network Coordinator Cincinnati, OH

Toledo Coalition for Safe Energy Terry Lodge, Convenor Toledo, OH Ohio Green Party

Daryl M Davis, Member Ohio Green Party

State Central Committee

Cleveland, OH

Ohio Nuclear Free Network Patricia Marida, Coordinator Toledo, OH

#### Oklahoma

The Carrie Dickerson Foundation Marilyn McCulloch, Executive Director Tulsa, OK

## Oregon

Oregon Conservancy Foundation (OCF) Cathryn Chudy, Board Director Boring, OR

Stop Nuclear WorkGroup Bonnie McKinlay, Active Member Portland, OR

Oregon Physicians for Social Responsibility Kelly Campbell, Executive Director Portland, OR

## Pennsylvania

Citizen Power, Inc. David Hughes, President Pittsburgh, PA

Three Mile Island Alert Maureen Mulligan, Planning Council member Lebanon, PA

### South Dakota

Black Hills Clean Water Alliance Lilias Jarding, Executive Director Rapid City, SD

#### Tennessee

ECAN-Erwin Citizens Awareness Network, Inc. Linda Modica, President Jonesborough, TN

#### Texas

Dallas Peace and Justice Center Mavis Belisle, Co-Chair, Nuclear Free World Committee Dallas, TX

Energía Mía San Antonio, Texas Alice Canestaro, Volunteer San Antonio, TX

Peace Farm Lon Burnam, Convener of the Board Panhandle, TX

Turtle Island Restoration Network Joanie Steinhaus, Gulf Program Director Galveston, TX

SEED Coalition Karen Hadden , Executive Director Austin, TX

Terra Advocati Timothy Duda, Director San Antonio, TX

#### Utah

Uranium Watch Sarah Fields, Program Director Monticello, UT

#### Vermont

New England Coalition on Nuclear Pollution, Inc. Lorie Cartwright, Trustee Brattleboro, VT

198 methods Drew Hudson, Founder Rochester, VT

Vermont Citizens Action Network Chris Williams, President Hancock, VT

Vermont Yankee Decommissioning Alliance Debra Stoleroff, Steering Committee chair Montpelier, VT

## Washington

Heart of America NW Peggy Maze Johnson, Board Member Seattle, WA Parallax Perspectives Glen Anderson, Founder/Organizer Lacey, WA

Seattle Fellowship of Reconciliation Mary Hanson, Chair of SFOR Seattle, WA

Build Back Better Fuels John Alder, member Spokane, WA

Waste Action Project Greg Wingard, Executive Director Seattle, WA

#### Wisconsin

Peace Action WI Pamela Richard, Office Manager Milwaukee, WI

Physicians for Social Responsibility Wisconsin Hannah Mortensen, Executive Director Madison, WI

## Appendix: Planned Additions of Renewable Energy and Storage Capacity to Replace Diablo Canyon Units 1&2 and Reduce Power Sector GHG Emissions (2021-2026)

Dates	Capacity (MW)	Sources/Eligible Sources	Authorization	
2021-2023	3,968 MW • 2021: 1,771 MW • 2022: 720 MW • 2023: 1,477 MW	<ul> <li>93.5% Renewables + Storage</li> <li>3,259 MW = Battery Storage and Hybrid Renewables/Storage<sup>18</sup></li> <li>289 MW = Solar (289 MW)</li> <li>162 MW = biomass(2 MW), geothermal (14 MW), wind (128 MW), and demand response (18 MW)</li> <li>258 MW = Sutter Natural Gas Plant (existing plant, no long-term contracts)</li> <li>Imports limited to 20% of procured capacity</li> </ul>	CPUC Decision 19-11-016 <sup>19</sup>	
2023	1,325 MW	Energy Storage	Assembly Bill 2514 (2010) <sup>20</sup>	
2021-2023	1,500 MW	Energy Storage	CPUC orders <sup>21</sup>	
2024	4,000 MW	Renewable Energy	RES and other state policies	
2023-2026	11,500 MW  • 2023: 2,000 MW  • 2024: 6,000 MW  • 2025: 1,500 MW  • 2026: 2,000 MW	Renewable Energy and Storage, including  • 2,500 of firm renewable generation (80% capacity factor)  • 1,000 MW of	CPUC Decision 21-06-035 <sup>22</sup>	
TOTAL	22,293 MW	98.8% Renewables + Storage 1.2% existing gas generation		

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/ed\_staff\_review\_of\_feb2021\_data\_in\_compliance\_with\_d1911016.pdf

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K825/319825388.PDF

https://www.energy.ca.gov/data-reports/reports/energy-storage-targets-publicly-owned-utilities Assembly Bill 2514 (2010)

http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab 2501-2550/ab 2514 bill 20100820 amended sen v90.html

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M389/K603/389603637.PDF

<sup>18</sup> 

<sup>&</sup>lt;sup>19</sup> CPUC Decision 19-11-016 (November 7, 2019).

<sup>&</sup>lt;sup>20</sup> Energy Storage Targets - Publicly Owned Utilities - AB 2514

<sup>&</sup>lt;sup>21</sup> https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M389/K478/389478892.PDF

<sup>&</sup>lt;sup>22</sup> CPUC Decision 21-06-035 (June 24, 2021).

## **Annual and Cumulative Additions of Capacity (2021-2026)**

Source	2021	2022	2023	2024 <sup>23</sup>	2025 <sup>24</sup>	2026	TOTAL
Renewables	179	117	136	5,000 <sup>25</sup>	1,500	1,000	7,932
Storage	745	302	2,422	1,500		1,000	5,969
Hybrid Renewables + Storage	562	300	2,249 <sup>26</sup>	5,000 <sup>27</sup>			8,111
Demand Response	13	1	5				18
Fossil Fuel	258						258
TOTAL Fossil-Free Capacity	1,499	720	4,812	11,500	1,500	2,000	22,031
Cumulative Fossil-Free Capacity	1,499	2,219	7,031	18,531	20,031	22,031	

<sup>&</sup>lt;sup>23</sup> Planned closure of Diablo Canyon unit 1 on November 2, 2024 https://www.nrc.gov/info-finder/reactors/diab1.html

24 Planned closure of Diablo Canyon unit 2 on August 26, 2025 https://www.nrc.gov/info-finder/reactors/diab2.html

<sup>&</sup>lt;sup>25</sup> Includes 4,000 MW of aggregate renewable energy standard resources from 2021-2024, as well as 1,000 MW of the 2,500 of firm renewable energy sources the CPUC ordered by 2025 in Decision 21-06-035 (June 24, 2021).

<sup>&</sup>lt;sup>26</sup> Includes 2,000 MW of unspecified renewables, storage, and hybrid renewables+storage resources, per Decision

<sup>21-06-035. &</sup>lt;sup>27</sup> Includes 5,000 MW of unspecified renewables, storage, and hybrid renewables+storage resources, per Decision 21-06-035.