

Subject: **The Goal in California Energy Policy is to Increase Dependency on Natural Gas**
From: **Californians for Green Nuclear Power, Inc.** Date: **August 17, 2020**

There is significant media interest in the ongoing California power emergency. Warm temperatures triggered Californian Independent System Operator's (CAISO's) first Stage 3 system emergencies on Friday, August 14 and Saturday, August 15. This evening, CAISO declared a Stage 2 system emergency. Nonprofit independent CPUC Intervenor Californians for Green Nuclear Power, Inc. (CGNP) advocates for the many benefits of California nuclear power, which operates independently of California's aging and vulnerable natural gas distribution and storage system. CGNP learned that 95% of California's natural gas is imported from out-of-state by a system of corroding large-diameter natural gas pipelines. CGNP is planning on making an important filing before a federal regulator that will clarify this dangerous overdependency within a week. Here's a summary spreadsheet CGNP extracted statistics from a 2018 California Energy Commission (CEC) tabulation regarding **dispatchable** (meaning it can be turned ON or OFF when needed) California power. Note the important role of nuclear power and large hydroelectric dams in providing large quantities of non-polluting power.

Fuel Type	California In State Dispatchable (GWh)	California Dispatchable %
Large Hydro	22,096	14.395%
Natural Gas	90,691	59.082%
Nuclear	18,268	11.901%
Zero-Emission	40,364	26.296%
Polluting	90,691	59.082%
Total	131,055	85.378%

Total 2018 in-state generation: 194,842 GWh. Imports added 90,646 GWh

Data Source

CEC 2018 Total System Electric Generation

<https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2018-total-system-electric-generation>

Data Retrieved 08 13 29 by CGNP

The problem is the role of natural gas interests in creating this dangerous overdependence on natural gas is not reported. A commercial reason for pushing for the elimination of safe, reliable, abundant, cost-effective and zero-emissions California nuclear power is to sell more natural gas, not to protect the environment.

Shutting down nuclear power represents a great market opportunity for natural gas interests. Replacing Diablo Canyon Power Plant (DCPP) with natural gas means annually selling more than \$313 million (at wholesale prices) of natural gas. CGNP's spreadsheet is available on request.

CGNP has been monitoring the California power emergency closely. During August, the increased natural gas burn even with DCPP's 2,240 MW on line 24/7 as it gets hotter, demanding more air

conditioning and water pumping is shown in CGNP's "CAISO Daily Peak Demand and Supply Charts August 2020.PDF" file. DCPD supplies about 10% of California's in-state generation now. Think about how much more prevalent rolling blackouts will be if the plan to voluntarily shut down DCPD in 2025 is implemented. DCPD currently meets the electric power needs of about 3 million Californians.

The fundamental problem is the failure to align inherently intermittent solar and wind power with the late afternoon and early evening daily load peak. Expensive curtailment of solar power occurred on Friday and Saturday while COVID-19 stay-at-home orders exacerbated the problem. An attached WSJ Editorial reveals, ...On Friday and Saturday CAISO reported about 1,000 mega-watt hours (MWh) were curtailed—enough to power 30,000 homes. This year 1.3 million MWh of power have been curtailed....

Batteries are not a solution as they are far too expensive on a grid scale - and they only last 7 to 10 years. Please see the cover of the June, 2018 Western Electricity Coordinating Council (WECC) report for an introduction to the \$12 billion to \$18 billion battery cost for southern California. WECC is a Federal Energy Regulatory Commission (FERC) regional entity. Please follow the link shown on the cover to learn more details on the indicated pages.

To recap CGNP's key points:

1. Natural gas is the dominant dispatchable power source in California. Per California Energy Commission statistics, natural gas supplies nearly 60% of California's dispatchable power.
2. The poor alignment of solar power output with demand means California is throwing away large amounts of solar power on days when Californians need the power later in the day.
3. Wind cannot be counted on to support reliability. On August 14, CAISO's chart shows the negligible contribution of wind power to meet California's power demand at the time of maximal need for dispatchable power. Solar output is essentially zero during the evening.
4. California is dangerously overdependent on natural gas as an energy source.
5. DCPD should continue to operate beyond 2025 to provide much-needed reliable power to Californians.

On Friday, August 14, CGNP filed Comments in a CPUC proceeding regarding natural gas system reliability. Given the significant transmission impairments on Sempra's Line 235-2 between Newberry Springs and Valencia, California and the recent withdrawal of over a billion cubic feet of natural gas from Sempra's Aliso Canyon Storage Field (ACSF,) some vulnerabilities of California's natural gas transmission and storage system are being revealed. CGNP's experts are available for reporters covering the California energy beat. Please contact CGNP using the information below.

P.S. Please read Michael Shellenberger's August 17, 2020 **Forbes** article at <https://www.forbes.com/sites/michaelshellenberger/2020/08/17/democrats-say-california-is-a-climate-model-but-its-blackouts-say-otherwise/>

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