

**DOCKETED**

<b>Docket Number:</b>	21-ESR-01
<b>Project Title:</b>	Energy System Reliability
<b>TN #:</b>	244875
<b>Document Title:</b>	Paul Lindsey Comments - Diablo Canyon Power Plant
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Paul Lindsey
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	8/12/2022 2:05:17 PM
<b>Docketed Date:</b>	8/12/2022

*Comment Received From: Paul Lindsey  
Submitted On: 8/12/2022  
Docket Number: 21-ESR-01*

## **Diablo Canyon Power Plant**

*Additional submitted attachment is included below.*

**From:** [Paul Lindsey](#)  
**To:** [Energy - Docket Optical System](#)  
**Subject:** 21-ESR-01 Diablo Canyon Power Plant  
**Date:** Friday, August 12, 2022 10:29:38 AM  
**Attachments:** [CAISO Wind and Solar 2021 cf.pdf](#)

---

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am a retired US Navy nuclear-propulsion officer with a MS in Mechanical Engineering. In the Navy, I supervised the operation and maintenance of the largest naval nuclear reactors installed on Nimitz-class aircraft carriers.

I strongly urge the California Energy Commission to fully support the continued operation of Diablo Canyon Nuclear Power Plant for as long as the NRC says that it is safe to do so. This power plant generates over 2,000MW of safe, carbon-free electricity that is unaffected by weather, hours of daylight, or the supply and cost of natural gas. In comparison, I have attached a file showing the capacity factors of wind and solar generation facilities supplying CAISO. These charts were created using publicly available CAISO 5-minute increment data. The wind power chart shows the inherent unreliability of wind power, requiring backup sources, typically natural-gas turbines or diesel generators. The solar chart shows that while solar is more predictable, it still produces less than 10% of the rated capacity 55% of the year. Nuclear power has neither of these limitations, and has been shown to be a reliable source of electricity when it is not constrained or shutdown for political reasons.

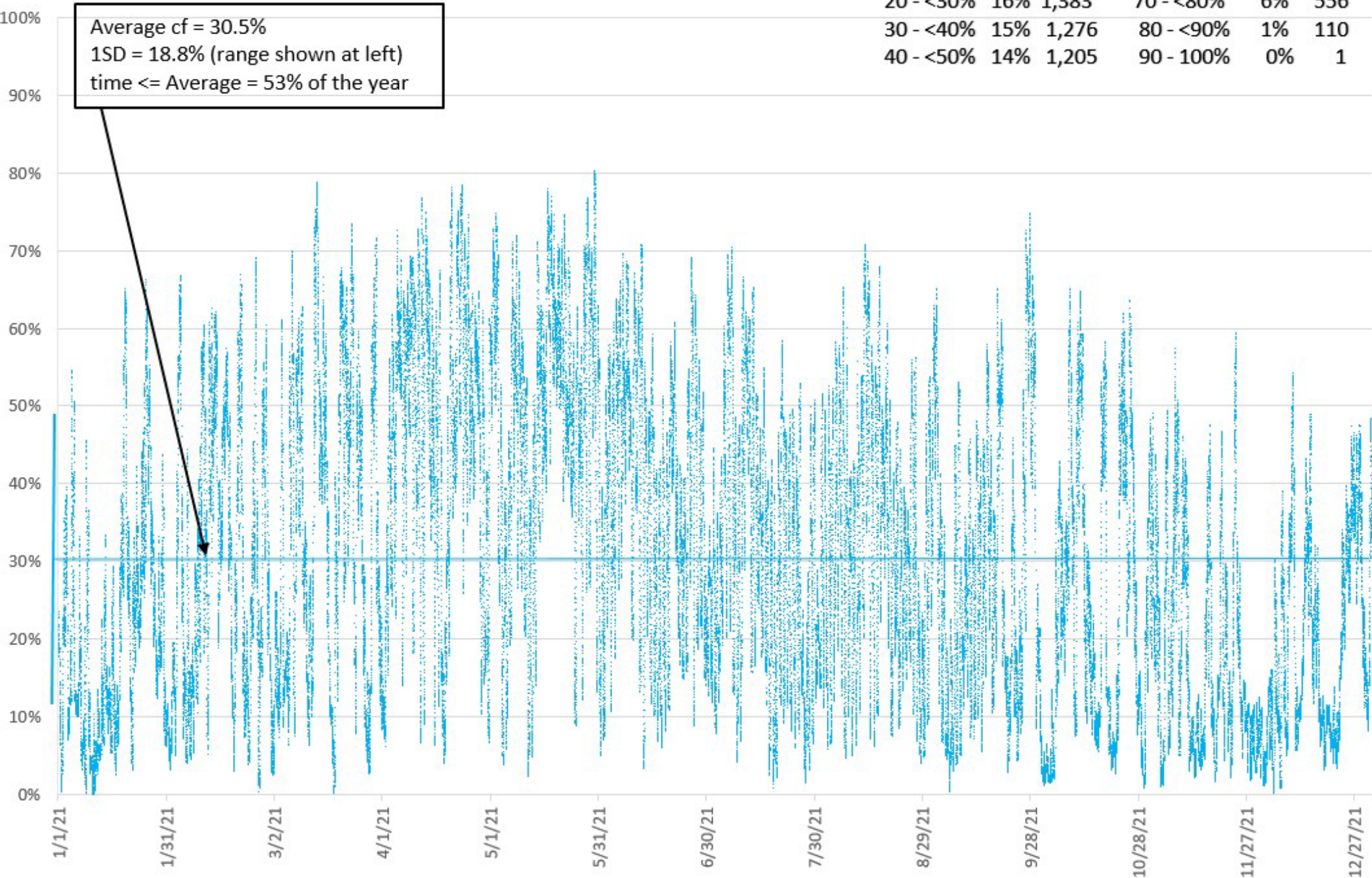
I attempted multiple times to submit this comment using the electronic submission form, but the form system failed.

Paul Lindsey  
908 Midway Dr.  
Alpine, CA 91901  
[plindseyusa@gmail.com](mailto:plindseyusa@gmail.com)

# California ISO Wind (7,144MW avg capacity) 2021 cf w/ Curtailment included (78.6 GWh, 0.4% of total output)

Time at cf ranges over the year

0 - <10%	16%	1,411 hrs	50 - <60%	12%	1,016 hrs
10 - <20%	21%	1,801	60 - <70%	9%	825
20 - <30%	16%	1,383	70 - <80%	6%	556
30 - <40%	15%	1,276	80 - <90%	1%	110
40 - <50%	14%	1,205	90 - 100%	0%	1



Average cf = 30.5%  
1SD = 18.8% (range shown at left)  
time <= Average = 53% of the year

# California ISO Solar (14,406MW average capacity) 2021 cf w/ curtailment added-in (1,426.3 GWh, 4.2% of total output)

Time at cf ranges over the year

0 - <10%	55%	4,823 hrs	50 - <60%	5%	435 hrs
10 - <20%	3%	246	60 - <70%	7%	617
20 - <30%	3%	246	70 - <80%	9%	784
30 - <40%	3%	258	80 - <90%	10%	838
40 - <50%	4%	319	90 - 100%	2%	195

Average cf = 28.2%  
1SD = 34.2% (range shown at left)  
time <= Average = 60% of the year

