

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Electric Integrated Resource Planning and
Related Procurement Processes.

Rulemaking 20-05-003
(Filed May 7, 2020)

**COMMENTS OF INDEPENDENT ENERGY PRODUCERS ON ADMINISTRATIVE
LAW JUDGE'S PROPOSED DECISION DETERMINING NEED FOR CENTRALIZED
PROCUREMENT OF LONG LEAD-TIME RESOURCES**

Sara Fitzsimon, Esq.
Policy Director
Independent Energy Producers Association
P.O. Box 1287
Sloughhouse, CA 95683-9998
(916) 606-3234
sara@iepa.com

August 8, 2024

TABLE OF CONTENTS

	<u>Page</u>
I. SUMMARY OF RECOMMENDATIONS	1
II. DECISIONS.....	1
III. INTRODUCTION	1
IV. DISCUSSION	3
A. Factual error: D.24-02-047 did not adopt a procurement standard of 2,000 MW of geothermal; the decision did not adopt a procurement standard for geothermal, instead it reiterated 1,000 MW procurement of “clean firm” resources as required by D.21-06-035.	3
B. Legal error: Market transformation for emerging technologies is not a requirement in AB 1373 and therefore does not warrant excluding conventional geothermal from central procurement that otherwise meets all other criteria within the statute.	4
C. Factual error: It is incorrect to state that “unlike conventional geothermal,” enhanced geothermal produces “little to no air emissions” because all geothermal is eligible under the Renewables Portfolio Standard, and conventional geothermal has reduced lifecycle emissions when paired with lithium extraction.	4
D. Factual error: Conventional geothermal is not being procured at sufficient rates for reasons identified in ALJ Fitch’s Ruling, dated April 26, 2024.	6
V. CONCLUSION.....	7

TABLE OF AUTHORITIES

Page

STATUTES

Public Utilities Code Section 399.11 5
Water Code Section 80810 5

DECISIONS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION

D. 21-06-035 passim
D. 23-02-040 1, 3, 4
D. 24-02-047 passim

OTHER AUTHORITIES

“Fervo Energy Announces 320 MW Power Purchase Agreements with Southern California Edison.” Accessed August 6, 2024..... 6
“With new geothermal project, it’s full steam ahead for 24/7 carbon-free energy.” Accessed August 6, 2024..... 6
Assembly Bill 1373..... 1, 2, 4, 6
California Energy Commission. “Blue Ribbon Commission on Lithium Extraction in California Submits Final Report to State Legislature.” Accessed August 7, 2024..... 5
Office of Energy Efficiency & Renewable Energy, “Geothermal FAQs.” Accessed August 4, 2024..... 5
Office of Energy Efficiency & Renewable Energy, “U.S. Department of Energy Analysis Confirms California’s Salton Sea Region to Be a Rich Domestic Lithium Resource.” Accessed August 4, 2024 5
Rules of Practice and Procedure 14.3 1

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Electric Integrated Resource Planning and
Related Procurement Processes.

Rulemaking 20-05-003
(Filed May 7, 2020)

**COMMENTS OF INDEPENDENT ENERGY PRODUCERS ON
ADMINISTRATIVE LAW JUDGE’S PROPOSED DECISION DETERMINING NEED
FOR CENTRALIZED PROCUREMENT OF LONG LEAD-TIME RESOURCES**

I. SUMMARY OF RECOMMENDATIONS

IEP recommends factual and legal corrections to the Proposed Decision that accurately cite prior procurement orders for geothermal, the eligibility criteria for central procurement under AB 1373, the renewable properties of geothermal resources, and the amount of geothermal procurement following the procurement orders within the decisions of this proceeding.

II. DECISIONS

- a. **D. 21-06-035**
- b. **D. 23-02-040**
- c. **D. 24-02-047**

III. INTRODUCTION

Pursuant to Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the Independent Energy Producers Association (IEP) submits the following comments on the proposed *Decision Determining Need for Centralized*

Procurement of Long Lead-Time Resources (“Proposed Decision”), issued July 19, 2024 by Administrative Law Judge Julie A. Fitch.

IEP supports ALJ Fitch’s finding of a need for central procurement of long lead-time resources (LLTRs) on behalf of all customers of load-serving entities (LSEs) under the Commission’s integrated resource planning (IRP) purview. However, IEP finds factual and legal errors within the “Need Determination” of conventional geothermal for central procurement.¹ Below, IEP summarizes the recommended changes to the Proposed Decision relating to factual and legal errors in the record:

- 1. Factual error: D. 24-02-047 did not adopt a procurement standard of 2,000 MW of geothermal; the decision did not adopt any procurement standard for geothermal, instead it reiterated 1,000 MW procurement of “clean firm” resources as required by D. 21-06-035.**
- 2. Legal error: Market transformation for emerging technologies is not a requirement in AB 1373 and therefore does not warrant excluding conventional geothermal from central procurement that otherwise meets all other criteria within the statute.**
- 3. Factual error: It is incorrect to state that “unlike conventional geothermal,” enhanced geothermal produces “little to no air emissions” because all geothermal has been eligible under the Renewables Portfolio Standard since 2002, and conventional geothermal has reduced lifecycle emissions when paired with lithium extraction.**

¹ Proposed Decision, p. 46.

4. Factual error: Conventional geothermal is not being procured at sufficient rates for reasons identified in ALJ Fitch’s Ruling, dated April 26, 2024.

IV. DISCUSSION

A. Factual error: D. 24-02-047 did not adopt a procurement standard of 2,000 MW of geothermal; the decision did not adopt a procurement standard for geothermal, instead it reiterated 1,000 MW procurement of “clean firm” resources as required by D. 21-06-035.

D. 24-02-047 implemented an “alternative procurement requirement” that stated “any LSE that does not meet its required LLT procurements requirements from D. 21-06-035 [1,000 MW of firm zero-emitting resources or RPS] as revised in D. 23-02-040 [decision required no geothermal procurement] will be required to procure the balance of its unmet LLT requirements through generic resource adequacy capacity procurement that otherwise meets the requirements of D. 21-06-035 ².”

Because D. 24-02-047 did not adopt a procurement standard of 2,000 MW of geothermal and instead only required the balance of unmet LLTR procurement as devised in D.21-06-035³, it is not factual to state that a need determination for “roughly half of the quantities shown in the PSP portfolio [D. 24-02-047] to be procured using the CPE mechanism,” is 1,000 MW of enhanced geothermal⁴ when there was no preference for enhanced geothermal within this decision or those preceding. D. 21-06-035 merely required 1,000 MW of “firm zero-emitting resources” or resources that “otherwise qualify for the RPS⁵,” further stating that this category could be filled by “biomass and geothermal,” but held there “may be other resources that meet the requirements as well.” Again, no differentiation was made between enhanced and

² D. 24-02-047, page 103.

³ D. 21-06-035, page 84.

⁴ “Proposed Decision,” page 46.

⁵ D. 21-06-035, pages 35-36.

conventional geothermal in this decision. D.21-06-035 was revised in D. 23-02-040; however, this revision did not include a geothermal procurement⁶ because additional procurement was not resource specific. The Proposed Decision is resource specific for logical reasons listed therein but splitting procurement orders between a resources' technological origins was not a part of D. 21-06-035, D. 23-02-040, or D. 24-02-047 and cannot serve as the basis for differentiating between enhanced and conventional geothermal in this procurement order.

B. Legal error: Market transformation for emerging technologies is not a requirement in AB 1373 and therefore does not warrant excluding conventional geothermal from central procurement that otherwise meets all other criteria within the statute.

The purpose of AB 1373 is to identify a need for central procurement of long lead-time resources to ensure the state meets its renewable and zero-carbon energy resources and reliability goals, not to ensure emerging technologies are procured above all else⁷. The emphasis on “market transformation⁸” within the Proposed Decision is legal error in that the criteria for central procurement does not include “market transformation” of that resource if centrally procured, nor does it emphasize the central procurement of nascent resources. Choosing enhanced geothermal as the resource requiring central procurement as opposed to conventional geothermal due to it being an emerging technology is not based in law. Geothermal, notwithstanding the technology, should be centrally procured because it is an “eligible energy resource” under AB 1373⁹.

C. Factual error: It is incorrect to state that “unlike conventional geothermal,” enhanced geothermal produces “little to no air emissions” because all geothermal is eligible under the Renewables Portfolio Standard, and

⁶ D. 23-02-040, page 55.

⁷ ALJ Fitch’s April 16, 2024 Ruling, pages 3-4.

⁸ “Proposed Decision,” pages 46, 49, 50, 51.

⁹ AB 1373, enacting Water Code subsection 80810 (e).

conventional geothermal has reduced lifecycle emissions when paired with lithium extraction.

Conventional geothermal is “a clean source of electricity,” releasing only “excess steam” and the production of solid materials that can be utilized in resale, adding to the environmental benefit to the state¹⁰. Further, geothermal is identified as a renewable resource under the Renewables Portfolio Standard (RPS), a program that prioritizes resources that produce little to no air pollutants or contaminants¹¹. Within the record, there is no evidence stated that determines conventional geothermal has more air emissions than enhanced geothermal beyond the July 19, 2024 Proposed Decision stating as such. Both enhanced and conventional geothermal offer little to no air emissions; differentiating the emissions of geothermal technologies without evidence and as a reason for choosing one over the other is factual error.

Additionally, conventional geothermal resources located within the Salton Sea will produce lithium as a byproduct of energy production, adding to the environmental benefit to the state¹². Utilizing lithium from geothermal extraction reduces the need for lithium mining outside the Salton Sea where this resource is abundant, providing a critical resource for the electrical transition as California policy has identified in the “Lithium Valley” activities of the California Energy commission¹³.

¹⁰ Office of Energy Efficiency & Renewable Energy, “Geothermal FAQs.” Accessed August 4, 2024:<https://www.energy.gov/eere/geothermal/geothermal-faqs#:~:text=Geothermal%20power%20plants%20largely%20release,the%20nation's%20zero%2Dcarbon%20future.>

¹¹ Public Utilities Code -§ 399.11.

¹² Office of Energy Efficiency & Renewable Energy, “U.S. Department of Energy Analysis Confirms California’s Salton Sea Region to Be a Rich Domestic Lithium Resource.” Accessed August 4, 2024: <https://www.energy.gov/eere/articles/us-department-energy-analysis-confirms-californias-salton-sea-region-be-rich-domestic.>

¹³ California Energy Commission. “Blue Ribbon Commission on Lithium Extraction in California Submits Final Report to State Legislature.” Accessed August 7, 2024:

D. Factual error: Conventional geothermal is not being procured at sufficient rates for reasons identified in ALJ Fitch’s Ruling, dated April 26, 2024.

Enhanced geothermal, rather than conventional geothermal, is filling in some of the 1,000 MW of firm zero-emitting resources ordered by D. 21-06-035, totaling 435 MW of out of state enhanced geothermal procurement¹⁴, stemming from Nevada and Utah contracts.

The procurement order identified within the April 16, 2024 Ruling [D. 24-02-047] states that if firm zero-emitting resources cannot be procured within the timeframe allotted, LSEs could fulfill the procurement amount with other, generic long lead-time resources. Because of the high cost of procuring geothermal resources, as stated in the Proposed Decision¹⁵, especially when procured as a midterm reliability resource, and the option to procure other resources, including generic long lead-time resources [D. 24-02-047], geothermal has not been “under contract at sufficient levels as shown in load-serving entities’ most recent individual integrated resources plans¹⁶” and would greatly benefit from central procurement. As detailed above by the out of state enhanced geothermal procurement contracts, in-state conventional geothermal is not being procured at the appropriate rate and should be included in the central procurement of the Department of Water Resources, not specifically excluded.

<https://www.energy.ca.gov/news/2022-12/blue-ribbon-commission-lithium-extraction-california-submits-final-report-state>.

¹⁴ 320 MW in Utah: “Fervo Energy Announces 320 MW Power Purchase Agreements with Southern California Edison.” Accessed August 6, 2024: [https://fervoenergy.com/fervo-energy-announces-320-mw-power-purchase-agreements-with-southern-california-edison/#:~:text=The%2015%2Dyear%20agreements%20for,will%20be%20operational%20by%202028](https://fervoenergy.com/fervo-energy-announces-320-mw-power-purchase-agreements-with-southern-california-edison/#:~:text=The%2015%2Dyear%20agreements%20for,will%20be%20operational%20by%202028;); 115 MW in Nevada: “With new geothermal project, it’s full steam ahead for 24/7 carbon-free energy.” Accessed August 6, 2024: <https://cloud.google.com/blog/products/infrastructure/google-fervo-geothermal-project-creates-carbon-free-energy>.

¹⁵ “Proposed Decision,” page 41.

¹⁶ AB 1373; ALJ Fitch’s April 16, 2024 Ruling, page 3.

V. **CONCLUSION**

IEP offers these comments on the proposed decision and looks forward to the factual and legal corrections within the record. IEP is supportive of central procurement of diverse resources that will ensure reliability within the state and is confident that with these corrections, central procurement of long lead-time resources will be a success.

Date: August 8, 2024

/s/ Sara Fitzsimon

Sara Fitzsimon, Esq.
Policy Director
Independent Energy Producers Association
P.O. Box 1287
Sloughhouse, CA 95683-9998
(916) 606-3234
sara@iepa.com