

State of California

Memorandum



Date: June 28, 2023

To: Integrated Resource Planning (IRP) stakeholders

From: Energy Division staff, CPUC

Subject: Incremental Effective Load Carrying Capabilities (ELCCs) to be used for Mid-Term Reliability Procurement for 2026-2028 Compliance Dates and Energy Division Staff's Direction for Out-of-State Wind Resources Not Explicitly Listed in ELCC Studies

Summary

With this June 2023 Staff Memo, Energy Division staff is finalizing the Incremental Effective Load Carrying Capabilities (ELCCs) to be used for Mid-Term Reliability (MTR) Procurement for 2026-2028 compliance dates. Pursuant to Decisions [D].21-06-035 and D.23-02-040, load-serving entities (LSEs) and stakeholders should refer to the specific content within the "Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update)"¹ by CPUC consultants, E3 and Astrapé (2023 MTR ELCC Study) Energy Division staff posted on February 10, 2023.

The 2023 Staff Memo released in February 2023 indicated that the 2023 MTR ELCC Study contains results that could be applicable to procurement requirements that were considered in the January 13, 2023, Proposed Decision regarding Supplemental Mid-Term Reliability Procurement² (PD). Since Energy Division staff released the 2023 Staff Memo and the 2023 MTR ELCC Study, the Commission adopted procurement considered in the January PD with D.23-02-040. That decision requires LSEs to procure an additional 4,000 MW of new net qualifying capacity (NQC). This June 2023 Staff Memo confirms that the values Energy Division staff released in the previously issued 2023 MTR ELCC Study are still effective and directs LSEs to use these values for applicable contracts.

¹ See here: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/20230210_irp_e3_astrape_updated_incremental_elcc_study.pdf

² See here: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M501/K102/501102663.PDF>

Additionally, this June 2023 Staff Memo also clarifies which ELCCs stakeholders should use for out-of-state wind resources not explicitly mentioned in the 2023 and 2021 MTR ELCC Studies.

IRP (Rulemaking 20-05-003) Procedural Context, Process, and Use Case for ELCCs

This June 2023 Staff Memo provides direction in addition to what Energy Division staff has previously released. It should be read in conjunction with both the 2023 Staff Transmittal Memo³ posted on February 10, 2023, and the 2021 Staff Transmittal Memo⁴ posted on October 22, 2021 (2021 Memo). Both the 2023 Staff Memo and the 2021 Memo remain in effect. Additionally, Energy Division staff's responses to Frequently Asked Questions⁵ (FAQ Guide) also remain in effect.

Recapping the procedural context described in the 2021 Memo, the MTR Procurement D. 21-06-035 Ordering Paragraph (OP) 15 requires:

Commission staff shall publish on our web site marginal effective load carrying capability values to be used for the 2023 and 2024 compliance dates in this decision by no later than August 31, 2021 and for the 2025 and 2026 compliance dates by no later than December 31, 2022.

D.21-06-035 gave some discretion to Energy Division staff about the scope of both the 2021 MTR ELCC and 2023 MTR ELCC studies. Excerpts from section 9.2:

This first set of marginal ELCCs will be provided for energy storage at various durations, solar, solar plus storage of various durations and configurations, and wind in various regions, and may also include demand response, in order for LSEs and developers to be able to rely on those values for the 2023 and 2024 capacity required in this order.

In addition, Commission staff will provide guidance on what resource counting LSEs should assume for geothermal, long duration storage, out-of-state wind, and offshore wind for online years through 2028.

³ See here: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2023-02-irp_mtr_elccs-public_transmittal_memo_v1.pdf

⁴ See here: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/20211022_irp_mtr_elccs_staff_transmittal_memo.pdf

⁵ Available on the IRP's Procurement Track page: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/more-information-on-authorizing-procurement/irp-procurement-track>

For all other resource types, counting will be in accordance with the system resource adequacy NQC [net qualifying capacity] counting rules at the time the contract for the new resource or capacity added to an existing resource is executed.

D.23-02-040 provides guidance to Energy Division staff about finalizing ELCCs for procurement ordered in the decision. Excerpt from section 2.3:

Commission staff may provide final compliance ELCCs for resources to meet the procurement being required here, if necessary, by no later than June 30, 2023, and will notify stakeholders via a notice to the service list of this proceeding. Preliminary values have already been published. For resource types not addressed by additional guidance from Commission staff, NQC counting will be in accordance with the system resource adequacy NQC counting rules at the time the contract is executed for the new resource or capacity added to an existing resource.

Energy Division Staff summarizes the use case for the MTR ELCCs, per the direction given by D.21-06-035 OP 15, section 9.2, and other decision direction as follows: the ELCC values are to be used to convert the nameplate capacity of a resource into NQC terms for the purpose of assessing an LSE's compliance with its procurement requirements.

ELCCs for 2026-2028 Compliance Dates

D.23-02-040 ordering Supplemental MTR procurement requires LSEs to procure 2,000 MW NQC in 2026 and 2,000 MW NQC in 2027, in addition to the 11,500 MW NQC ordered in D.21-06-035. The decision recognizes the difficulties in procuring long lead-time (LLT) resources by 2026, as required by D.21-06-035, and automatically extends the deadline for the ordered LLT resources to 2028.

For procurement impacted by D.23-02-040, Energy Division staff directs stakeholders to information provided in the 2023 MTR ELCC Study's Table 1 Tranche 4, Tranche 5, and Tranche 6 columns -

- Battery storage, for 4, 6, and 8-hour durations
- Pumped storage hydro, for 8 and 12-hour durations
- Solar – utility and BTM PV
- Wind CA
- Wind WY
- Wind NM
- Wind Offshore

Tranches 4, 5, and 6 (with 2026, 2027, and 2028 compliance dates, respectively) are applicable to newly ordered procurement and to LLT resources that were extended, per D.23-02-040.

Out-of-State Wind ELCCs for Regions not Explicitly Mentioned

For all out-of-state wind resources used to meet D.21-06-035 and D.23-02-040 compliance requirements, Energy Division staff directs stakeholders to use information provided in Table 1 of the 2023 and 2021 MTR ELCC Studies as follows:

- Wind CA – ELCC values for projects located in California.
- Wind NM – ELCC values for wind projects located in New Mexico and Arizona.
- Wind WY – ELCC values for projects located in western states, excluding California, New Mexico, and Arizona.

Conclusion

This June 2023 Staff Memo addresses D.23-02-040's requirement to provide final guidance on procurement adopted in that decision by no later than June 30, 2023. The June 2023 Staff Memo, in combination with the 2023 MTR ELCC Study and the 2023 Staff Memo, provides the information stakeholders should use for compliance with D.23-02-040 procurement. This Memo also gives directions on which ELCC values to use for out-of-state wind resources not explicitly named in the MTR ELCC studies.

For questions about other aspects of D.21-06-035 and D.23-02-040, please refer to the IRP Procurement Track website⁶ where Energy Division staff has provided a “Frequently Asked Questions” guide.

For additional questions, stakeholders can contact Energy Division staff at IRPDataRequest@cpuc.ca.gov.

⁶ <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/more-information-on-authorizing-procurement/irp-procurement-track>