California Wind Energy Association
Informal Comments on Proposed Updates to the Busbar Mapping Methodology

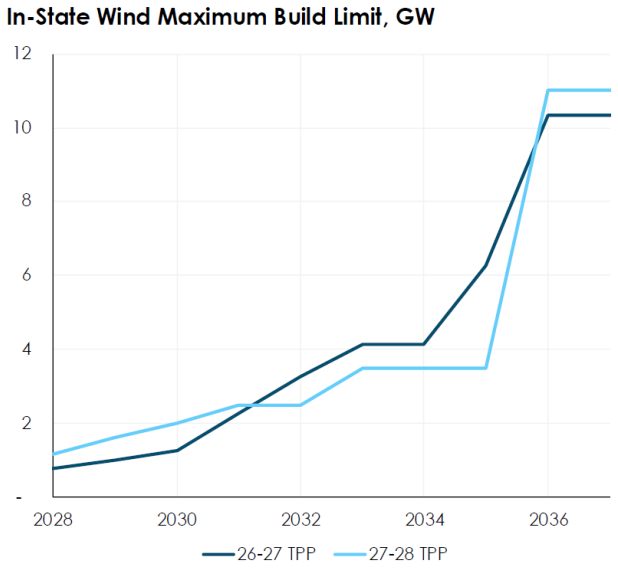
July 6, 2026

CalWEA appreciates this opportunity to comment on the Proposed Updates to the Busbar Mapping Methodology for the 2027-28 cycle of the Integrated Resource Planning (IRP) process, as discussed in the Modeling Advisory Group (MAG) Webinar on June 16, 2026. These comments are organized according to the webinar presentation.

I. Resource Potential Updates Impacting Busbar Mapping

A. Build Limits for In-State Wind (Slide 19)

The build-limit graphic on Slide 19 (reproduced below for reference) reflects "regional near-term build limits based on latest queue data (thru 2035)" and "generic wind (incremental to queue) with first available year in 2036." The generic, post-2036 wind reflects "Northeast CA (1,015 MW) and Baja California (1,910 MW) potentials updated to reflect latest commercial interest, totaling ~700 MW of additional resource potential by 2036."



As documented below, CalWEA requests that these figures be adjusted as needed[1] to (1) eliminate queue data for wind projects that (a) are already in construction, operating, or have TPD capacity, or (b) are lacking indications of development; (2) include all active queued wind projects within the near-term build data according to their planned CODs, and (3) include all of the most promising wind development areas in the generic, post-2036 wind energy capacity based on CalWEA's assessment.

[1] A project-by-project list associated with the figure in Slide 19 is not yet available, according to staff.

In sum, therefore, CalWEA recommends that near-term (pre-2036) wind energy capacity include 1,921 MW with CODs spanning 2027-2033 (primarily in Baja California and East San Diego County). A total of 2,688 MW should be included as post-2036 generic capacity (including 600 MW in Baja California and 1,015 MW in Northeast California – resources that are being actively prospected, and 750 MW in SCE Northern and 323 MW in SCE Eastern, where promising resources exist).

Summary of proposed changes:

	Staff Proposed	**CalWEA Recommended**
Regional Near-Term	~ 3,500 MW	1,921 MW
Generic	~ 7,500 MW	2,688 MW
Total	**~ 11,000 MW**	**4,609 MW**

Although each category and the total figures are lower than staff proposes, CalWEA recommends them as a more realistic maximum build by 2036, based on the most promising development and resource areas. Lamentably, the state's lack of support for in-state wind energy over the past decade has greatly diminished investor interest and development activity, and it is now essential to focus on the limited areas where development is most likely. (It will also be essential for the Commission to designate in-state wind as a "long lead-time" resource and request that CAISO reserve TPD capacity for it.)

Projects in Queue: Of the 22 "active" interconnection requests currently in the queue that specify "wind", only six (totaling 1,921 MW) appear to be greenfield wind projects under development. Six or seven have already been constructed. Three are repowers in development and have TPD capacity. Eight appear to be canceled, stalled, or converted to other technologies, with no discernible evidence of wind energy development. See CalWEA's categorization and commentary on queued wind projects in the table on p. 3, below.

Of the six projects under development, two are in Baja, California.[2] These wind resources do not rely on federal tax credits (which improves their cost-competitiveness relative to U.S. wind and solar resources without tax credits), and Baja resources no longer require U.S. Presidential permits to build cross-border transmission lines.[3]

[2] The Viento Fronterizo Project has two alternative CODs under its LGIA: an accelerated COD and an alternative COD, for each of three project phases. The accelerated CODs are 2031-2033 and the alternative CODs are 2035-2037.

[3] The Department of Energy released a new Presidential Permit Procedures Handbook in January 2026, intended to assist prospective applicants in their requests for Presidential permits to authorize the construction, connection, operation, and maintenance of electric energy transmission facilities at international boundaries. Under the revised framework, Presidential permits for cross-border energy infrastructure are now categorically excluded from NEPA review. Ignis Energy USA, for example, has had positive discussions with the DOE and an initial round of Q&A regarding the new Presidential Permit requirements for its 973-MW Baja wind project.

"ACTIVE" QUEUE (as of May 27, 2026)				
Project Name	**Greenfield or Repower?**	**Project Status/Notes**	**Queue Position**	**Wind MW**
Operational (or nearly)				
OCOTILLO EXPRESS	Greenfield	2012 COD	493	265.44
GONZAGA WIND FARM	Repower	2026 COD	1378	80
SOLANO 4 WIND	Repower	2024 COD (?)	1463	92.354
CIMARRON WIND	Greenfield	2026 COD, Baja CA	1660	300
GONZAGA HYBRID	Greenfield	2026 COD	1718	60.45
MONTEZUMA II	Greenfield	2012 COD	222	78
MONTEZUMA (HIGH WINDS III)	unknown	2024 COD (?)	22	38
Subtotal MW				**914**
In Development - Repowers w/FCDS				
MULQUEENEY RANCH WIND	Repower	Under construction	1277	114
MULQUEENEY RANCH WIND 2	Repower	Under construction	1459	62.5
SAND HILL C	Repower	Delayed to post-2030	1363	84.25
Subtotal MW				**261**
In Development - Greenfield				
ALTAMONT MIDWAY LTD (Sand Hill B)	Greenfield	Delayed to post-2030	1096	5
KEYHOLE WIND	Greenfield	2028 COD	1784	100
MOUNT LAGUNA WIND 2	Greenfield	2031 COD; East SD Co.	1429	400
VIENTO FRONTERIZO	Greenfield	2033 COD; EO; Baja CA	1824	1001
BOULDER BRUSH HYBRID	Greenfield	2031 COD (Cleanview); East SD Co.	2177	105.8
Energia Sierra Juarez 4	Greenfield	2030 COD; EO; Baja CA	2224	309.1
Subtotal MW				**1921**
Uncertain/Unidentified/Cancelled				
POTENTIA-VIRIDI	Battery only	See CEC for Potentia Viridi BESS	1702	408.8
WINDSTAR I ALTERNATE	unknown	COD 2030 (Cleanview)	100	120
MATTERHORN	unknown	Multi-technology optionality	2366	406.8
Toland Renewable Energy Park	unknown	COD 2029 (Cleanview)	2272	108
CPC WEST	Battery only?	Multi-technology optionality; 2026 COD	96	600
SANDSTORM WIND POWER	unknown	muti-technology optionality; 2030 COD	138	60
TULE WIND	Greenfield	cancelled (https://www.gem.wiki/Tule_wind_farm)	32	127.6
Subtotal MW				**1831**
Total Land-based wind in queue				**4927**

Generic in-state wind resources: CalWEA supports staff's previous inclusion of 323 MW in SCE Eastern (infill development in the San Gorgonio Pass area) and recommends at least 750 MW in SCE Northern. Regarding the latter, as we previously noted,[4] infill development is occurring on the Kern County side of this tremendous wind resource area. In addition, there is an opportunity to increase nameplate capacity when existing wind projects are repowered.

Further, significant resource potential exists on the Los Angeles County side of the same wind resource area, south of Tehachapi. The L.A. Board of Supervisors recently mandated a comprehensive update to its 2016 Renewable Energy Ordinance, requiring an evaluation of the current ban on utility-scale wind energy. County planning staff is now considering whether wind energy development should be allowed on a discretionary basis in certain areas.[5] Even if L.A.

[4] See CalWEA's Nov. 21, 2025, comments on busbar mapping (table). In Kern County, the 100-MW Keyhole Project is permitted with a GIA, and an additional infill project is under development.

[5] Renewable Energy Ordinance Update Technical Study," Prepared for Los Angeles County Department of Regional Planning, Aspen Environmental Group (March 2026), at pp. 2-4.

County does not relax these restrictions, the state legislature has strengthened the Energy Commission's ability to take a statewide view when reviewing clean energy projects, even where local restrictions may apply.[6]

CalWEA supports staff's proposed 1,015 MW of wind in Northeast CA (Slide 19). However, CalWEA recommends 600 MW of generic resources in Baja, California, post-2036, rather than 1,910 MW (Slide 19). In addition to the 1,310 MW of Baja wind resources in the queue, Sempra Infrastructure has 600 MW of Baja resources under development, with no further indication of Baja development activity at this time.

B. Transmission for Out-of-State Wind Resources (Slides 24, 26)

The assumed transmission development times for out-of-state wind, shown as 2037-2042 (10-15 years), are inconsistent with past experience. The SunZia transmission line took 20 years (17 years in the development and permitting phase (2006–2023) and nearly 3 years in construction (2006-2026).[7] Similarly, the 732-mile TransWest Express transmission line will have taken more than 25 years (16 years between application filing and permit, and 9 years expected in construction).[8] Particularly given federal permitting delays that are likely to continue through 2028, assumed development and construction times should reflect actual experience.

II. Busbar Mapping Criteria and Criteria Alignment

A. High Fire Threat Areas (Slide 53)

CalWEA continues to object to the High Fire Threat criterion for the reasons discussed in our comments on last year's busbar mapping updates:[9] fire risk is elevated across wide swaths of California; wind projects cannot be permitted without fully mitigating any elevated fire risk; there is no evidence of increased fire risk in existing wind project areas; California has recently permitted a wind project in a high fire zone; and areas with commercial-grade wind resources are very limited.

B. Land-Use Implications and Feasibility (Slide 55)

CalWEA has repeatedly called for reform of the Energy Commission's land-use screens, which remove land where wind is legally permissible without the benefit of any on-site studies necessary to determine compatibility with wind projects.[10] These projects disturb only about 3% of the project lease area, enabling careful micro-siting to avoid impacts. In response to a CalWEA

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[6] SB 254 (Becker, 2025) removed the laws, ordinances, regulations, and standards (LORS) conformance process from the opt-in process.

[7] https://www.latimes.com/environment/story/2026-06-18/after-nearly-two-decades-this-massive-new-mexico-wind-project-is-now-powering-california

[8] https://www.transwestexpress.net/about/timeline.shtml#:~:text=TransWest%20EIS%2FDevelopment%20Timeline%20Summary&text=2017%2D2020,the%20last%20received%20January%202020.

[9] See CalWEA's comments on last year's busbar mapping updates (Sept. 5, 2025).

[10] *Ibid.*

question during the webinar,[11] Energy Commission staff stated that its land-use screens are "high-level datasets intended to give estimates of resource potential in a given area and are not meant to preclude particular project siting." However, these estimates have greatly reduced, if not entirely eliminated, planning for wind resources in many areas, including L.A. County.

In the state-federal process that led to the federal Desert Renewable Energy Conservation Plan[12] ("DRECP"), Northern LA County was identified as a major "Development Focus Area" for wind and solar resources in the "Preferred Alternative" that was proposed by state and federal agencies in 2014, before private land was eliminated from the DRECP's scope. (See figure on p. 6, below.) That alternative identified between 2,375 MW and 7,193 MW of wind development potential in LA County, depending on the discount factors applied for potential restrictions.[13] At a minimum, the land-use screens should be used to pare down, not eliminate, the available wind resource in these areas. CalWEA believes that at least 1,000 MW of developable wind potential remains in L.A. County. As discussed on p. 3, above, Los Angeles County is now considering whether to enable wind development in this area.

Finally, the screens applied to in-state wind resources appear to be incongruous with those applied (if any) to out-of-state wind resources. Also, the significant seismic concerns associated with enhanced geothermal systems (EGS) have not been considered, even where EGS resources are near significant population areas. Staff should guard against treating in-state wind resources more harshly than other resource types.

C. Commercial Development Interest (slides 61, 70)

CalWEA supports staff's proposal to incorporate a broader set of supplemental data into the commercial interest criteria for the 2027-2028 TPP, to include projects that are not in the CAISO queue but have CEQA and NEPA applications. However, it is critical to appreciate that the current lack of permitting applications shown for in-state wind (slide 70) is due to weak state policy support over the past decade,[14] as well as the current federal administration's hostility to wind and solar projects on BLM land. The Commission and Energy Commission should now seek to promote greater resource diversity, including wind energy, and anticipate that the unique nature of current federal actions will subside by 2029. This requires planning now for promising generic wind resources in the post-2036 timeframe, even in the absence of permitting activity.

[11] Webinar Q&A Session, p. 7.

[12] See: https://www.blm.gov/programs/planning-and-nepa/plans-in-development/california/desert-renewable-energy-conservation-plan

[13] Draft DRECP and EIR/EIS (August 2014) at Appendix F-1, p. F1-5 (Box 1).

[14] For example, the Commission included a geothermal energy, but not a wind energy, requirement in its 2021 Mid-Term Reliability requirement without squarely evaluating the costs and benefits of all diverse resources.

Proposed Renewable Energy Development Focus Areas in 2014 Preferred Alternative for the Desert Renewable Energy Conservation Plan (Source: 2014 Draft DRECP and EIR/EIS)