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**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

**ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENTS  
ON NEED AND PROCESS FOR CENTRALIZED PROCUREMENT  
OF SPECIFIED LONG LEAD-TIME RESOURCES**

**Summary**

This ruling seeks feedback from parties on options for initial use of the centralized procurement mechanism created in Assembly Bill (AB) 1373 (Stats. 2023, Ch. 367), where the California Public Utilities Commission (Commission) may request that the California Department of Water Resources (DWR) procure electricity from certain types of resources, on behalf of customers of all load-serving entities (LSEs) under the Commission's integrated resource planning (IRP) purview.

Comments in response to this ruling are due by no later than May 24, 2024, with reply comments due by no later than June 5, 2024. Parties may also include specific centralized resource procurement proposals in their comments, if those proposals address all aspects of the process covered in Section 2 through Section 6 of this ruling.

**1. Background: Centralized Procurement Provisions of Assembly Bill 1373**

AB 1373 authorizes the Commission to request that DWR act as a central procurement entity (CPE) to conduct centralized procurement of certain eligible

long lead-time (LLT) energy resources until January 1, 2035. This statute adds an additional tool for the Commission potentially to use for procurement of LLT resources.

By September 1, 2024, the Commission is required to make an initial need determination for procurement by DWR. If a need is found, within six months the Commission may then make a request to DWR to exercise the centralized procurement mechanism. In the event that DWR performs centralized procurement on behalf of LSEs under the Commission's purview, the Commission must allocate the costs and benefits of any electric resource procurement conducted by DWR.

AB 1373 does not modify the Commission's existing authority to require investor-owned utilities (IOUs) to undertake centralized procurement. For example, the Commission designated Pacific Gas and Electric Company (PG&E) and Southern California Edison Company as CPEs for local resource adequacy purposes in Decision (D.) 20-06-002. The potential for DWR to act as a CPE also should not be confused with the centralized mechanism for backstop procurement that the Commission instituted in D.20-12-044, authorizing IOUs to procure on behalf of other LSEs who fail to meet their procurement obligations. Nothing would prohibit the Commission from assigning one or more IOUs to conduct centralized procurement of LLT resources in addition to, or instead of, the option to utilize the new mechanism of centralized procurement by DWR authorized in AB 1373.

To make a need determination for the exercise of centralized procurement by DWR, AB 1373, codified as Public Utilities Code Section 454.52(a)(4), directs that the Commission "determine if there is a need for the procurement of eligible energy resources based on a review of the integrated resource plans submitted

by load-serving entities in compliance with the requirements of this section and Section 454.53 and the progress towards meeting the portfolio of resources identified pursuant to subdivision (a) of Section 454.51.”<sup>1,2</sup>

## **2. Eligible Resources**

AB 1373, in the sections codified as Public Utilities Code Section 454.52(h)(1)-(2), defines criteria for resources that are eligible to be centrally procured, as follows:

- (1) Only a resource that meets all the following requirements is eligible to be procured by the Department of Water Resources pursuant to this section:
  - (A) The resource directly supports attainment of the goals specified in Section 454.53 without increasing the state’s dependence on any fossil fuel-based resources.
  - (B) The resource is determined by the Commission to not be under contract at sufficient levels as shown in load-serving entities’ most recent individual integrated resources plans submitted to and reviewed

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<sup>1</sup> Public Utilities Code Section 454.53 states, among other things:

It is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035.

<sup>2</sup> Public Utilities Code Section 454.51(a) states that the Commission shall:

Identify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy and resource diversity in a cost-effective manner. The portfolio shall be used by the commission to establish integrated resource planning-based procurement requirements that rely on zero-carbon-emitting resources to the maximum extent reasonable and be designed to achieve the state policy specified in Section 454.53 and any statewide greenhouse gas emissions limit established pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code) or any successor legislation.

by the Commission pursuant to this section to achieve the goals specified in Section 454.53.

- (C) The resource has a construction and development lead time of at least five years.
  - (D) The resource does not generate electricity using fossil fuels or fuels derived from fossil fuels.
  - (E) The resource does not use combustion to generate electricity, unless that combustion use is ancillary and necessary to facilitate geothermal electricity generation.
- (2) Resources from a pumped hydroelectric facility may be procured by the Department of Water Resources pursuant to this section if the pumped hydroelectric facility does not exceed 500 megawatts and has been directly appropriated funding by the state before January 1, 2023.

Generally, this ruling recommends that the Commission consider centralized procurement for an LLT resource that provides resource diversity, is needed to meet the goals of Public Utilities Code Section 454.53, and has already been identified as needed in a preferred system plan (PSP) portfolio, if it also provides one or both of the following benefits:

- Addresses procurement challenges for existing technologies, such as when LSEs are currently unable or unwilling to procure the resource individually or at the scale required, because of size and/or risk profile of the technology; or
- Supports market transformation for emerging technologies, where the initial procurement creates the potential for future cost reductions through economies of scale or learning about the best ways to conduct resource development.

Commission staff have initially identified four potential resource types that meet the criteria given in the statute. They are: offshore wind (OSW), geothermal, long duration energy storage (LDES), and out-of-state (OOS) wind.

Each of these resource types has already been identified as part of the most recently-adopted PSP portfolio in D.24-02-047. A variety of other resource types, including emerging technologies, such as some forms of non-lithium-ion battery energy storage or natural gas with carbon capture and storage (CCS), could also fit into the criteria and be centrally procured by DWR or IOUs, if the Commission finds a need in the future.

However, for purposes of developing the mechanism, staff analysis focused on the four resource types already identified in the PSP. Such resources have identified costs that were vetted with stakeholders and used in analysis leading to the PSP portfolio.

It should also be noted that the Commission has generally preferred, during the IRP process and procurement needs identified so far, to specify resource attributes rather than specific resource types that must be procured, in order to enhance competition and allow LSEs to choose their preferred resource types. In this situation, however, due to the nature of the resources, their costs, and their LLT for development, it appears to be appropriate to specify the resource type(s), in order to directly target development of resources that will provide the combined LSE portfolio of resources with diversity value that may not otherwise be developed due to cost, minimum contract size, and/or other market barriers. Further, many of these LLT resources are location-specific or constrained (*e.g.*, some geothermal, wind, and pumped hydro project development is inherently geographically limited, as is the transmission to support it). Moreover, procurement progress to date indicates the LLT resource procurement is proving difficult for LSEs, as recognized by the Commission in authorizing the LLT resource procurement deadline extensions in D.23-02-040

and D.24-02-047. Finally, AB 1373 appears to require specifying the resource type designated for centralized procurement, and not just the attributes.<sup>3</sup>

Figure 1 below presents some broad considerations with respect to the benefits above for the four resource types analyzed. Green shading indicates a favorable consideration for the resource type to be centrally procured; yellow is medium; and red indicates a less favorable justification for centralized procurement.

**Figure 1. Qualitative Analysis of Procurement Challenges and Market Transformation Impacts of Certain Resource Types**

Factor	OSW	OOS Wind	Geothermal	LDES
<b>Procurement Challenge</b>				
Mismatched size of resource and/or transmission between sellers and buyers	Large typical project sizes	Large transmission size, incremental small offtakers may be possible but creates financing challenges	Smaller and modular procurement sizes available, but some resource zones require high volumes	Large-scale projects, may be challenging to finance and build without single contract
Cost-effective across broad range of future scenarios, but not being procured in significant volumes	Cost-effectiveness depends upon scenario analyzed	Selected across all RESOLVE cases and currently being procured by LSEs	Selected across all RESOLVE cases and currently being procured, at least in small volumes, by LSEs	Selected across all RESOLVE cases but may not be cost-effective. Not currently being procured by LSEs

<sup>3</sup> AB 1373 states: “If the commission determines that there is a need for the procurement of eligible energy resources, the commission shall specify the eligible energy resources that should be procured to meet that need.”

Factor	OSW	OOS Wind	Geothermal	LDES
<b>Market Transformation</b>				
Large resource potential	Supporting infrastructure enables economies of scale for large resource	Large, high-quality wind resource available with transmission investment	Large resource potential with high capacity factor, especially in some resource zones	Project locations are generally limited by unique geographic characteristics, for some technologies
Serves a key role in future portfolios without readily available substitutes	Supports resource diversity. Substitutes exist but may face challenges (e.g., in-state or OOS wind)	Supports resource diversity. Substitutes exist but may face challenges (e.g., in-state or OSW)	Clean firm resource with high capacity factors emerging (e.g., gas with CCS), but unproven substitutes	LDES selected in future portfolios, but many existing and emerging alternatives exist
Emerging technology with likelihood of cost reductions through learning	New technology with low amount of deployment globally	Proven, established technology	Some emerging geothermal technologies benefit from learning; conventional geothermal does not	Emerging technologies benefit from learning; conventional technologies do not

Discussed below are some considerations with respect to the technologies analyzed and considered for potential centralized procurement by DWR. The analysis above indicates that there is a case for each of the four relevant resources categories to be procured centrally, though the particulars for each resource type may be different. Beyond this analysis, there are also specific differences between LLT resources that can be used to evaluate them, such as their emissions

reduction and reliability attributes, as well as their electric load carrying capability, firm capacity potential with respect to weather constraints, geographic diversity, and the necessity for developing transmission and other infrastructure to bring them online.

### **Offshore Wind**

As of the procurement data filings submitted on December 1, 2023, OSW also has not yet been procured at all by individual LSEs. This fact would simplify the process for allocation of costs and benefits to LSEs, as discussed in more detail in later sections of this ruling. It is also worth noting that as of the individual IRP filings in November 2022, many LSEs indicated that they planned to procure OSW at some point in the planning horizon. There may be many reasons why LSEs have not yet procured OSW projects, including insufficient port development, lack of turbine fabrication infrastructure, lack of installed offshore transmission infrastructure, or under-developed interconnection and permitting processes to accommodate OSW projects. These reasons may be compounded by the nascent global deployment of floating OSW technology, which may have culminated in developer bids that LSEs deemed to be unfavorable to their ratepayers.

There is also policy rationale for potentially selecting OSW as the initial case. According to the California Energy Commission (CEC), as part of its strategic plan in response to AB 525 (Stats. 2021, Ch. 231),<sup>4</sup> OSW has the potential to be a major part of the solution to reducing California's greenhouse gas (GHG) emissions from the electricity sector and reaching SB 100 (Stats. 2018, Ch. 312)

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<sup>4</sup> The Draft Strategic Plan is available at the following link:

<https://www.energy.ca.gov/data-reports/reports/ab-525-reports-offshore-renewable-energy>.

As part of developing the Draft AB 525 Strategic Plan, the CEC has set an "aspirational goal" of 25 GW by 2045.



goals. Separately, considerable public and private investment (in ports, manufacturing facilities, vessel construction) is being planned to support development of OSW. The CEC, through the implementation of AB 525, has contributed considerable resources to researching the suitability and potential development of locations (and their associated costs) for ports, fabrication facilities, and maintenance facilities for the OSW industry. In addition, the CEC has commissioned a study that developed a blueprint and estimated the cost of onshore and offshore transmission infrastructure necessary to support the OSW industry for resource development on the North Coast. Currently missing, however, is the element of how funding for these infrastructure costs will be allocated.

Investment in a first tranche of OSW in a centralized manner has the potential both to ensure that the technology is available/viable and to lead to cost reductions due to economies of scale and learning for later tranches of development that may be procured by individual LSEs, several LSEs collectively, and/or by a CPE such as DWR. Once both the technology and the transmission to support its delivery are developed, the potential for LSEs to come in later and procure smaller quantities in a more modular fashion could materialize, if initial centralized procurement and development goes well. Collective (centralized) procurement at a large scale initially could pave the way for individual LSE procurement at some future stages in the development of the resource when the market for it is more mature.

### **Out-of-State Wind**

For OOS wind, many LSEs are already investing in the resource, even though the transmission development component is what creates its LLT status and higher risk. Transmission lines are currently in the process of being

developed to support, at least in part, the OOS wind resource development. Though it can be argued that centralized procurement may help speed up transmission development, it also may not be necessary. In addition, centralized procurement has the potential to hurt competition rather than help reduce ratepayer costs, given the activity already in the market. Generally speaking, however, OOS wind offers certain benefits that may make it worthwhile for consideration, such as a high capacity factor and its ability to provide additional diversity benefit relative to in-state wind, due to its different location and timing of energy generation.

### **Geothermal Resources**

Geothermal resource development has been able to proceed recently through modest individual or collective LSE investment, even though it is a LLT resource with likely somewhat higher costs. Geothermal is unusual when compared with other LLT resources, because it has a very high capacity factor and is capable of producing energy that is not time-constrained. The Commission can continue to monitor its development the requirement for one gigawatt (GW) of high capacity-value LLT resources in D.21-06-035, later modified by D.23-02-040 and D.24-02-047. In addition, because geothermal resources are part of the mid-term reliability procurement orders, there is already a backstop procurement mechanism in place via the IOUs, as detailed in D.20-12-044 and D.22-05-015. Still, recent analysis of procurement data filings indicates difficulty for LSEs in procuring LLTs using the current IRP procurement paradigm. Geothermal resources may have longer permitting timelines, material supply constraints, interconnection challenges, and long construction periods that may be more challenging for LSEs to procure individually. Therefore, the resource may still benefit from centralized procurement.

### **Long-Duration Energy Storage**

The Commission has specified<sup>5</sup> that LDES must be able to discharge at maximum capacity over at least an eight-hour period from a single resource, though has also noted that 12 hours or more, as well as multi-day storage, would be even more favorable for grid reliability. These requirements may be met by a number of different and emerging technologies. Similar to geothermal, LDES technologies may compete for the additional 1 GW of LLT LDES requirements in D.21-06-035, as modified by D.23-02-040 and D.24-02-047. Though some LDES technologies may face challenges due to large project sizes, alternatives exist that do not face exactly the same risks or procurement challenges. For example, pumped storage hydro costs tend to be highly site-specific. Long-duration lithium-ion batteries and flow batteries are already commercialized alternatives. The 1 GW of LDES already required is also covered under the backstop procurement provisions, in the same manner as geothermal procurement.

In a more general sense, D.21-06-035 included justifications for the procurement of LLTs that are still relevant, particularly for “clean firm” and LDES technologies. These include mitigating for the risk of increased reliance on solar generation, the retirement of several once-through cooling thermal plants, and the closing of the Diablo Canyon Power Plant (Diablo Canyon).<sup>6</sup> The diminishing capability to dispatch firm resources must be met with a resource mix that provide more diversity. While diversity is justified by reliability needs and the centralized procurement function is justified for its emissions reduction

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<sup>5</sup> See D.21-06-035.

<sup>6</sup> D.21-06-035 at 35-36.

benefits, a more diverse resource mix in general can increase certainty in meeting both peak load and emissions reduction targets.

### **2.1. Questions for Parties**

1. Please comment on whether Figure 1 above outlines the appropriate criteria for considering whether a resource should be procured via the DWR centralized procurement mechanism. Are these the right criteria or are there others that should be added or substituted?
2. Should other resource types (beyond OSW, OOS wind, geothermal, and LDES) also be considered for centralized procurement through DWR at this time? Provide rationale if you suggest other resources should be included.
3. In addition to the list of criteria for eligible resources in the AB 1373 statute, are there additional criteria that should be taken into account by the Commission when determining which resources should be procured through the DWR centralized procurement mechanism? Specify.
4. AB 1373<sup>7</sup> contains specific criteria for eligible pumped hydroelectric facilities. What particular projects currently under development can meet the criteria and should they be procured centrally by DWR?
5. How could developers leverage the many incentive opportunities that are available from the Federal government through the Inflation Reduction Act and the Bipartisan Infrastructure Law to assist with the financing of LLT resource development?<sup>8</sup> How could developers and contractors access the Department of Energy or other agency grants for resource and infrastructure development that are available for projects that improve reliability and

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<sup>7</sup> Codified as Pub. Util. Code Section 454.52(h)(2).

<sup>8</sup> More details are available at the following link:  
<https://www.ballardspahr.com/insights/alerts-and-articles/2022/09/inflation-reduction-act-tax-changes-part-2-energy-credits-and-incentives>.

grid flexibility?<sup>9</sup> How might centralized procurement help leverage federal funds for each resource type?

### 3. Need Determination

The Commission is required to make an initial determination about whether and how much need there is for the use of DWR as the CPE by September 1, 2024. To serve as an initial basis for the need determination, this ruling starts with the resources included in the existing PSP portfolio adopted in D.24-02-047.

Table 1 below shows the amounts of the potential new resource types to be considered for centralized procurement in the adopted PSP portfolio, in the individual LSE plans submitted on November 1, 2022, and also the approximate amounts of new resources of these types already under contract to LSEs as of the August 1, 2023 semi-annual procurement data filings required to be submitted to the Commission by all LSEs.

**Table 1. Amounts of Eligible Resources Included in PSP Portfolio, LSE Plans, and LSE Procurement Data Filings (MW capacity by 2035)**

Resource Type	PSP Portfolio	LSE 11/1/22 Plans	Under Contract or Expected Online by 6/1/24	Additional Forecasted through 6/1/28
OSW	4,500	4,500	0	0
OOS Wind	6,300	3,400	318	28
Geothermal	2,000	1,600	26	258
Generic LDES	500	500	0	0
8-hour Batteries	2,800	2,800	0	361

<sup>9</sup> See, for example: <https://www.energy.gov/gdo/grid-resilience-and-innovation-partnerships-grip-program>.

<b>Resource Type</b>	<b>PSP Portfolio</b>	<b>LSE 11/1/22 Plans</b>	<b>Under Contract or Expected Online by 6/1/24</b>	<b>Additional Forecasted through 6/1/28</b>
Pumped Hydro Storage	500	500	0	0
Total	16,600	13,300	344	647

AB 1373 requires “a review of the integrated resource plans submitted by load-serving entities in compliance with the requirements of this section and Section 454.53 and the progress towards meeting the portfolio of resources identified pursuant to subdivision (a) of Section 454.51.” The information in Table 1 can be used to inform this review. All LSE plans can be found on the Commission website.<sup>10</sup> A procurement progress report has also recently been posted.<sup>11</sup>

Table 1 above indicates several things. First, LSEs included a significant amount of LLT resources by 2035 in their November 1, 2022 individual IRP filings. Second, the Commission’s modeling analysis to supplement those IRPs in some cases indicated that even more of these resources were optimal by 2035. Third, the contracted and forecasted online columns show that some LLT resources are being procured pursuant to existing IRP procurement

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<sup>10</sup> See information available at the following links: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/2022-irp-cycle-events-and-materials> and <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>.

<sup>11</sup> The progress report is available at: <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/publicirpcompliancecercerport080123.pdf>.

requirements, but that progress on procurement is somewhat slow.<sup>12</sup> Comparing the columns in Table 1 shows that the LSEs and the IRP process in general are planning for a large amount of LLT resources, yet only a small amount has been procured thus far. Considering California's goals and the long development and procurement timelines associated with these resources, exploring centralized procurement of LLTs seems prudent.

For this purpose, Commission staff conducted supplemental analysis for OSW resources for several reasons, including its unique nature, scale, and uncertainty around some of its associated assumptions, as well as the fact that of all the eligible resource types, OSW was the only resource not identified as cost-effective in the least-cost modeling analysis conducted for the most recently adopted PSP portfolio in D.24-02-047. Considering the uncertainty of cost estimates for this unique resource type and the fact that costs would be borne by ratepayers, Commission staff found it prudent to further evaluate the significant potential benefits and potential costs under various future scenarios.

The additional analysis examines the net benefits of different amounts of OSW under a number of future scenarios. For this analysis, net benefits are intended to represent the cost-effectiveness of OSW. Net benefits are the difference between the benefits of OSW (from avoided investment and operating costs of other resources displaced by OSW) and the costs of OSW (the resource and transmission costs of OSW). The analysis calculates a net benefit data point for each benefit scenario (representing different assumptions around policy and/or other non-OSW resources in the RESOLVE model) and cost scenario

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<sup>12</sup> This is also reflected in D.24-02-047, which extended the LLT procurement deadlines further, to June 1, 2028.

(representing different assumptions around OSW resource and transmission costs).

As distinct from the PSP analysis scenario, which focused on optimizing resources towards a single portfolio, the new RESOLVE model OSW analysis presented here takes a different approach. Specifically, instead of allowing the RESOLVE model to select OSW as a candidate resources, this analysis forces OSW into the portfolio across many future scenarios, performing a risk-based analysis of OSW cost-effectiveness across a range of potential futures. This is appropriate to study the benefit of resource diversity in various scenarios, where some will show high value and others will show lower value. These values are then compared to the OSW wind costs to assess OSW cost-effectiveness.

Commission staff extended the analysis conducted to inform the PSP recommendation, to take a closer look at the potential range of reasonable procurement volumes. Using the best available information on technology and cost for OSW, and building upon the analysis recently completed for the PSP, some additional quantitative analysis is presented below for consideration of potential OSW procurement volumes.

When the PSP analysis was conducted,<sup>13</sup> no OSW resources were selected in a least-cost portfolio because OSW cost estimates had risen since the previous round of analysis. The adopted PSP portfolio, however, included 4.5 GW of OSW because of its inclusion in LSE plans. In light of this inclusion, a more detailed quantitative analysis exploring the range of costs and benefits for OSW across various penetration levels was developed. The full detailed analysis and results for all resource types considered, with an emphasis on OSW, are available on the

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<sup>13</sup> See D.24-02-047 and the analysis that led up to it, including the October 5, 2023 Administrative Law Judge (ALJ) ruling.



Commission's web site at the following link:

<https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/ab-1373-centralized-procurement-of-specified-long-lead-time-resources>.

This cost-benefit study is supplemental to the work already used in preparing the most recent PSP portfolio, using the same RESOLVE capacity expansion model that was used in the PSP development as a tool for analysis. To conduct the study, the team fed the RESOLVE model seven different scenarios for OSW procurement trajectories, on top of the usual resource and policy scenarios analyzed for the PSP portfolio just adopted in D.24-02-047. The purpose was to create a robust set of ratepayer cost and benefit scenarios with which to analyze the costs and benefits of the OSW procurement scenarios. A similar approach was also applied to other potential resources that could be procured.

The OSW scenarios analyzed were the following:

By 2035:

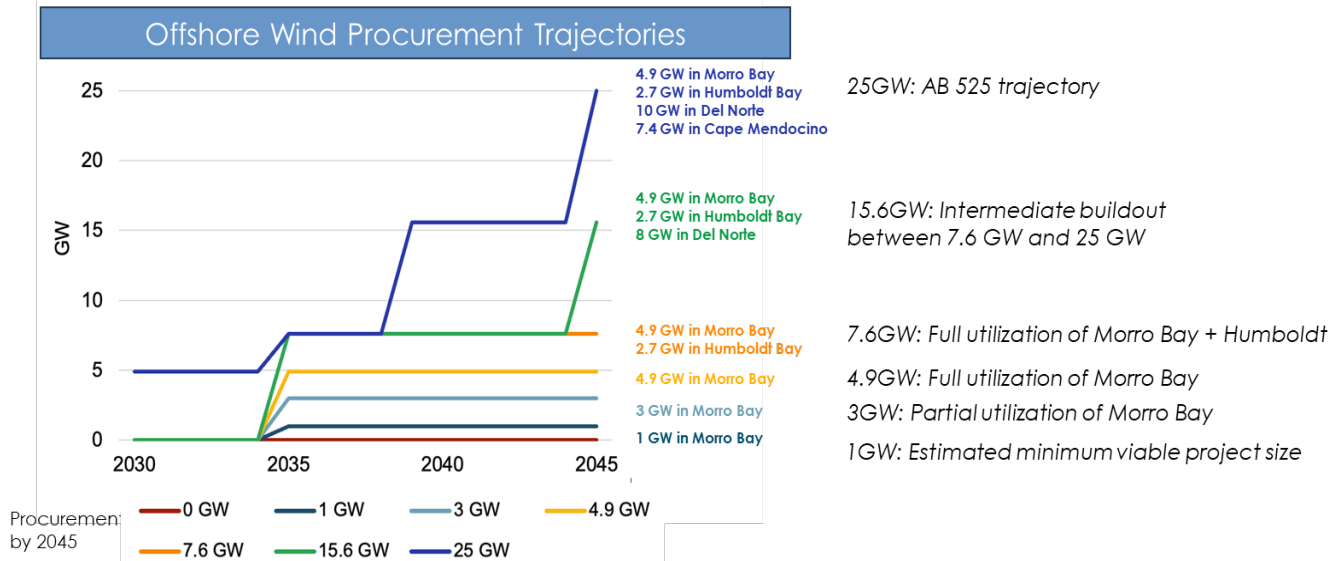
- 0 GW;
- 1 GW (estimated minimum viable project size);
- 3 GW (partial utilization of Morro Bay);
- 4.9 GW (full utilization of Morro Bay);
- 7.6 GW (full utilization of Morro Bay and Humboldt);

By 2045:

- 15.6 GW (intermediate buildout between 7.6 GW and 25 GW); and
- 25 GW (AB 525 trajectory).

Figure 2 below shows the trajectories graphically.

**Figure 2. OSW Procurement Trajectories Analyzed**

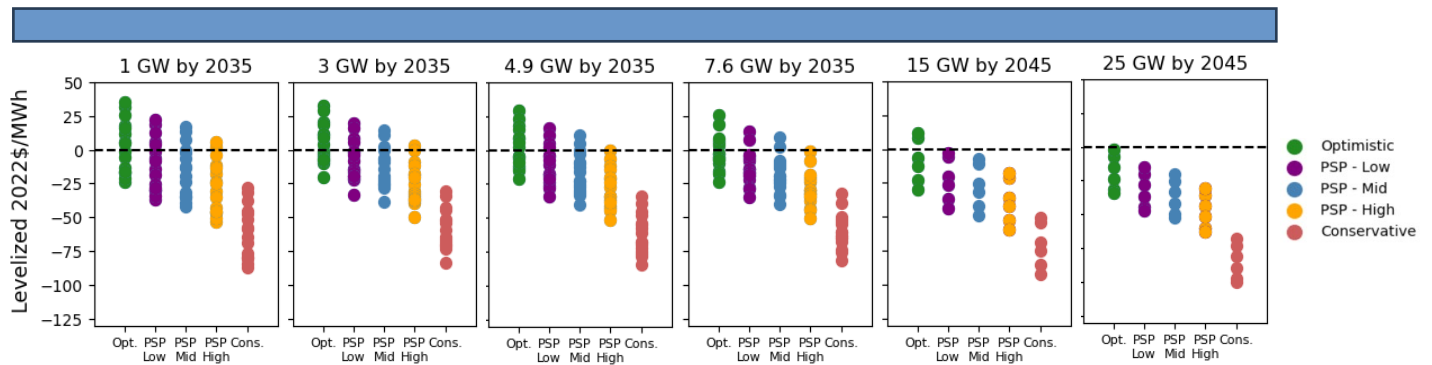


To analyze the relative costs and benefits of the OSW scenarios, investment and operating costs in RESOLVE were compared with and without OSW in the various procurement amounts. In addition, a number of individual variables were tested to see the impact on the net benefits of OSW, such as modifying the costs of the competing resources, other non-OSW resource availability, effective load carrying capability estimates, and natural gas retirements.

The costs of OSW were also varied across five different cost scenarios, to reflect the uncertainty in projected floating OSW capital and operating costs. Transmission costs are included by geographic location, with the assumed OSW resource amounts and estimated costs, to give a total OSW cost. Staff and consultants also looked at the relative costs of the various potential locations of OSW development, including on the North Coast and Central Coast. In general, they found that the levelized costs were similar across locations, because the higher costs of transmission on the North Coast were offset by the higher output from the wind resource itself.

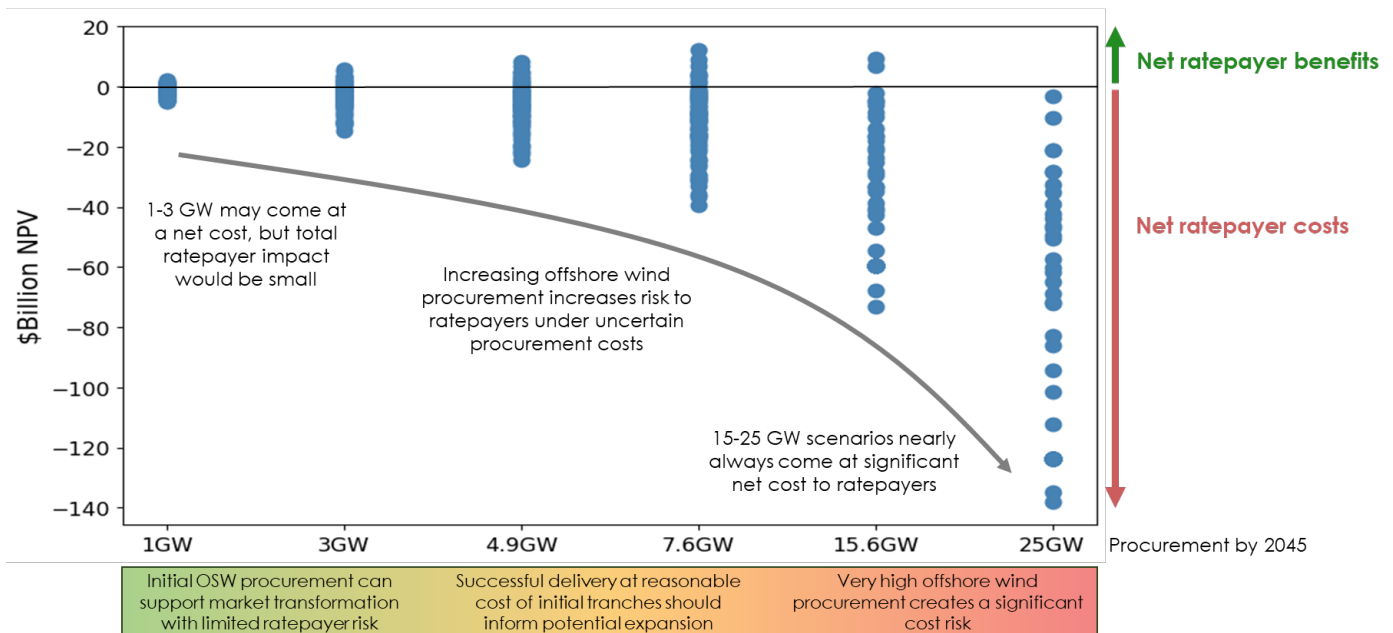
Once all of the scenarios and drivers were analyzed, the results were as follows. Overall the key drivers of additional value for OSW (all of which factor into the estimated net present value (NPV) calculation) are related to reduced availability or higher costs of competing resources, higher natural gas plant retirements, and lower GHG emissions needed by 2045. Figure 3 shows a summary of the analysis for all scenarios. Each dot represents net benefits for each combination of a benefit scenario (representing avoided California Independent System Operator (CAISO) operating and investment costs) and a cost scenario (representing OSW costs, including transmission).

**Figure 3. Range of OSW Net Benefits or Costs Across All Scenarios Analyzed**



Across all scenarios studied, the 1 GW to 7.6 GW OSW scenarios were those that minimized total ratepayer cost and risk. Notably, RESOLVE selects 0 GW of OSW as optimal from a ratepayer perspective, using the assumptions from the PSP portfolio development, because of the higher cost assumptions associated with OSW. Figure 4 below shows the consolidated costs and benefits across all scenarios. Parties should note that nearly all emerging and new resource types show negative NPV results prior to commercial deployment, so the important considerations for OSW relate to the net costs and benefits of one scenario relative to another.

**Figure 4. Summary of Net Benefits and Costs of OSW Across All Scenarios Analyzed**



As Figure 4 shows, using best available current information and the same underlying data as Figure 3, OSW may be cost-effective under multiple scenarios between 1 GW and 15.6 GW. Each dot represents a potential range of net costs and benefits at various levels of overall OSW development. The conclusion visible in Figure 3 and Figure 4 is that net benefits of OSW are highly sensitive to assumptions about OSW costs.

Commission staff have noted that other technologies that began as emerging technologies, such as solar thermal, solar photovoltaics, and lithium-ion batteries, have achieved significant cost declines over time, due to key learnings, as well as favorable government policies, including funding for research and development, demonstration projects, and incentives for early adoption. The same may prove true for floating OSW. Further, the conclusion from the figures above that more OSW leads to lower net ratepayer benefits is also dependent on assumptions that increasing transmission costs will

accompany more OSW buildout, and that higher levels of OSW will have a saturation effect, potentially reducing the total value provided to the grid.

As already discussed, OSW is also a developing technology for which any cost assumptions have considerable uncertainty, though confidence in projections should continue to improve as the technology matures and developers gain project experience.

It should also be noted that the Commission transmitted to CAISO for its 2024-2025 Transmission Planning Process (TPP) a base case scenario that included 4.5 GW of OSW and the CAISO is analyzing the transmission needs. This scenario was also consistent with the scenarios previously presented to the CAISO for its 2023-2024 TPP. Based on the 2023-2024 TPP results, the CAISO's Draft Transmission Plan has proposed authorization of transmission access to North Coast OSW at a cost in the range of \$2.9 billion to \$4.2 billion.

As discussed in Section 2 of this ruling, the Commission has the responsibility to balance a wide range of available information on ratepayer costs, risks, and timing constraints before making a need determination. The Commission will likely want to revisit and revise need determinations at various points in the future to ensure prudent ratepayer commitments. Therefore, the Commission may not want to ask DWR to procure all potential cost-effective resources at one time. Instead, the Commission may want to consider layering in procurement into the portfolio and revisiting the need determination at various points based on the best available information at several future junctures. In addition, if early procurement is successful, costs should decline over time.

### **3.1. Questions for Parties**

6. Comment on the cost-benefit analysis conducted, including the analysis presented in the slide deck posted on the Commission's web site. Does the analysis serve as a

- reasonable basis for a need determination? Specify how and why.
7. Are the quantities of resources contained in the PSP portfolio adopted in D.24-02-047 a reasonable basis for considering utilization of the centralized procurement mechanism? Provide your rationale.
  8. What need determination for centralized procurement should the Commission make before the September 1, 2024 AB 1373 deadline and why? Specify which resource types, in what amount, and by when.
  9. What other elements of future Commission need determinations (such as the scope of analysis, cost assumptions, ways to manage uncertainty) would provide the best foundation for a centralized procurement solicitation?

#### **4. Relationship to Load-Serving Entity Procurement**

As described earlier, many LSEs indicated, in their individual IRPs filed in November 2022, a desire to procure several types of the LLT resources included in the PSP portfolio and eligible to be procured in a centralized manner under AB 1373.

OSW was included in LSE plans in quantities of up to 4.5 GW by 2035, even though the OSW resource was not necessarily the lowest cost resource to procure by 2035. This may have been partly based on prior lower-cost assumptions for OSW from the previous PSP portfolio and Commission direction to utilize cost information, or it may reflect a genuine desire on the part of LSEs to help develop the OSW resource.

Either way, the Commission has seen no evidence that any LSE under the Commission's IRP purview currently has any OSW under contract. Therefore, any centralized procurement of OSW by DWR would not be co-mingled with substantial pre-existing LSE procurement this year if the Commission makes a

need determination by September 1, 2024. It is also possible that events will transpire to change whether OSW is under contract with LSEs before or after DWR may enter into contracts with OSW developers.

OSW, because it is a new and as-yet uncontracted resource for California, represents a unique opportunity for early development in a centralized manner. An initial tranche of OSW could be procured by DWR in a centralized manner at a large scale as a public good and with the purpose of investment in GHG reductions for California as a whole, specifically to attain the goals set forth in Section 454.53. It could be argued that it is in the best interests of ratepayers to share the cost, timing, and technology risks of development of OSW across the broadest possible group of ratepayers.

If DWR were to procure OSW in a centralized manner, it could make sense not to count the procurement toward any existing requirements for individual LSEs and instead to consider it separately. This would mean that OSW procurement by DWR would not count toward the procurement requirements of D.21-06-035 or D.23-02-040, or the revised LLT requirements of D.24-02-047. All existing procurement orders are intended to bring online capacity in advance of the likely timeframe for OSW to come online anyway.

In addition, it could follow that any OSW procurement by DWR could be kept separate from any LSE-specific requirements that may be included in the Reliable and Clean Power Procurement Program (RCPPP), which is intended, once adopted, to replace the order-by-order procurement process used in IRP to date.<sup>14</sup> The RCPMP is intended to cover both reliability- and GHG-driven

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<sup>14</sup> For more detail on the RCPMP considerations, see the September 8, 2022 ALJ ruling available at the following link:

<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=496688637>.

procurement requirements. Regardless of the ultimate form of the RCPPP, once adopted, the current expectation in this ruling is that any RCPPP requirements would be separate and apart from, but complementary to, DWR's centralized procurement.

LSE plans also included existing contracts and planned contracts for geothermal and OOS wind resources. Procurement of these other types of resources, and including LDES, could introduce additional challenges. For instance, the Commission has already ordered each LSE to procure a specified amount of LDES and clean firm resources.<sup>15</sup> While some LSEs have requested, and the Commission has granted, extensions of the deadlines for those ordered resources, overall many LSEs already have resources that meet their share of one or both of these requirements under contract and may be in the process of contracting for more such resources. Consequently, DWR procurement of geothermal or LDES resources would introduce considerable complexity into the need determination and allocation of procurement responsibility to LSEs, unless any DWR procurement of clean, firm, and/or LDES resources were excluded from the previously ordered requirements (which arguably could defeat the purpose of using DWR procurement to address challenges that the LSEs are experiencing in their own procurement of LLT resources).

Further, asking DWR to procure any of these resources or OOS wind could also exacerbate the challenges LSEs are experiencing procuring these LLT resources by introducing another competitor into the market. Including pumped hydro storage projects that meet the statutory requirements would appear to be mixed in this regard, since, on the one hand, pumped hydro storage is a resource

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<sup>15</sup> See D.21-06-035, as modified in D.23-02-040 and D.24-02-047.



that can be used to meet the LDES requirement, while on the other hand it does not appear that any new pumped hydro storage is under contract with LSEs to meet IRP procurement orders as of yet.

Should the Commission adopt a need determination for DWR centralized procurement in response to this ruling, DWR's procurement would need to be coordinated with many existing and future procurement requirements, including those driven by IRP orders, renewables portfolio standard (RPS) compliance, local resource adequacy procurement via an IOU CPE, emergency reliability procurement, Diablo Canyon orders, and likely future individual LSE procurement obligation resulting from the RCPPP and/or future IRP procurement orders.

There is also the question of whether individual LSEs would be allowed to opt out of any centralized procurement in favor of procuring the resources individually and/or if they demonstrate excess procurement of LLT resources already required to be procured. As discussed further in Section 5 of this ruling, AB 1373 speaks to the opportunity for LSEs to voluntarily opt in to additional centralized procurement by DWR, which strongly implies that opting out of centralized procurement is not authorized. There are also provisions requiring cost recovery from all LSEs. This ruling proposes that LSEs not be allowed to opt out of centralized procurement by DWR, such that all LSE customers would pay for the centralized procurement.

In addition, at various points in the planning horizon, the Commission and/or LSEs may need to make assumptions about when any allocation of benefits from centralized procurement to individual LSEs will occur. For example, in the past when the Commission authorized the centralized procurement and used the Cost Allocation Mechanism (CAM) for a new natural

gas plant, the resource adequacy credits were shared to all benefitting customers. However, LSEs only receive the resource adequacy credits in the year-ahead CAM credit allocation process. For situations where there is uncertainty about whether and when a new resource will come online, the LSEs have had to plan for their resource adequacy obligations without full knowledge of exactly when the CAM credits will arrive. In many instances, this has led to an overcapacity of overall resource adequacy system capacity available to LSEs, and often low prices, if the new resources materialized, leaving some LSEs with long positions for resource adequacy. Currently, all Commission LSEs have recently been allocated system resource adequacy credit for Diablo Canyon, with the first credits being allocated for November and December 2024. It is easily imagined that these credits could leave some LSEs in long positions. Likewise, many years from now, if the DWR-procured resources come online with a capacity benefit that can be allocated to all LSEs, it may not be known until close to real time (or within a few months) if or how the system resource adequacy credits will be allocated to all LSEs.

This ruling acknowledges that LSEs are already procuring or plan to procure alongside any centralized procurement in the future. Due to the time constraints to make the Commission's initial determination by September 1, 2024, this ruling does not discuss the alternatives for central procurement alongside LSE procurement in any further detail.

This ruling also recommends that the Commission revisit the need determination for centralized procurement by DWR at least once during each IRP cycle, when considering the PSP. In future IRP cycles, all eligible LLT resources can continue to be considered as options to satisfy the centralized procurement need determination.

This ruling also notes that AB 1373 provides the option for publicly-owned utilities (POUs) to voluntarily opt in to DWR centralized procurement.<sup>16</sup> Such an election by a POU would need to be negotiated directly between the POU and DWR, because this Commission does not have direct regulatory authority over the allocation of costs or benefits of procurement to POUs. However, this ruling proposes that any capacity volume procured on behalf of a POU be above and beyond any procurement authorized by this Commission for LSEs under its IRP purview. AB 1373 also provided the option for Commission LSEs to request that DWR procure additional quantities of resources for the benefit of that LSE's customers, beyond any amounts the Commission orders to be procured centrally. This is discussed in more detail in Section 6 below.

#### **4.1. Questions for Parties**

10. Is the rationale described above for DWR centralized procurement to be used for new uncontracted resource types, such as OSW, as a public good for GHG reduction purposes reasonable? Why or why not?
11. If DWR centrally procures undeveloped resources as a public good, how should that procurement relate to the individual LSE procurement (existing resources under contract and/or future procurement)?
12. How should any DWR centralized procurement relate to the eventual RCPPP design, given that the Commission has not yet adopted an RCPPP design and yet must make an initial need determination by September 1, 2024?
13. This ruling proposes that LSEs not be allowed to opt out of DWR centralized procurement requested by the Commission. If you disagree with that proposal, explain why with citations and discussion of relevant provisions of AB 1373.

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<sup>16</sup> See Water Code (Wat. Code) § 80820, § 80822, and § 80826.

14. Should a need determination for DWR centralized procurement be made by the Commission during every IRP cycle during the consideration of the PSP or at some other time? Explain the rationale for your preferred approach.
15. A logical point for POU's to engage with DWR on opting into centralized procurement would be after the Commission makes a need determination, but prior to DWR initiating procurement activities. Comment on whether this is appropriate and include any necessary and relevant implementation concerns or details.
16. If DWR procures resources on behalf of POU's, it is possible that related costs currently socialized through existing processes, such as transmission costs flowing into the transmission access charge (TAC), may be incurred. What other costs of benefits might be implicated, and what is the best means for addressing them?
17. The centralized procurement mechanism could provide an alternative pathway towards procurement of diverse resources that are currently infeasible for individual LSEs or small consortiums of LSEs to develop. What process should the Commission develop to encourage parties, especially developers, to provide candid feedback about timing and pricing considerations necessary to develop LLT resources through this mechanism, while also providing the most value to ratepayers?

## **5. Allocation of Costs and Benefits**

Whether DWR procures a new, as-yet-uncontracted resource such as OSW, or other resources that are already being procured by LSEs, has implications for how the costs and benefits of the procurement should be allocated.

In the case of OSW, the costs and benefits could be allocated in the same manner as recently approved for the extension of Diablo Canyon via centralized

procurement by PG&E<sup>17</sup> or by using CAM at the individual IOU level. The advantage of the Diablo Canyon cost allocation approach is that it would spread the costs uniformly across all LSEs, rather than differentiating the costs by IOU territory.

Namely, the costs of the OSW centrally procured by DWR could be first allocated to each IOU service area based on the IOU TAC area's share of a 12-month coincident peak load, minus non-benefitting POU load in that TAC area, and based on the share that occurred in the most recent full year that ended before the costs are allocated. Once the split between each utility TAC area was identified, then each IOU would need to create a new subaccount in its New System Generation Balancing Account to track the costs associated with paying for the eligible generation and/or recoverable expenses. The primary expenses allowable would be the power purchase agreement costs, plus procurement administration costs of DWR prior to the flow of electrons.

While the OSW would likely be procured to meet GHG emissions reduction targets to comply with Section 454.53 and not purely for reliability purposes, the value of more diverse resources would still contribute toward system reliability overall. The IOUs could use public load data to determine each electrical corporation's annual share of the 12-month coincident peak demand (minus POU load in each TAC area).

Next, the process for allocating the eligible costs to the LSEs within each IOU's territory could mirror the CAM. The CAM was established by the Commission in D.06-07-029, and amended in subsequent decisions, where the Commission designated each IOU to procure new generation capacity in its own

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<sup>17</sup> See D.23-12-036, §§ 6-7.

territory, with the costs and benefits allocated to all customers in the territory (including both bundled and unbundled customers). When establishing the CAM, the Commission determined that “all RA [resource adequacy] counting benefits and net costs are spread to the LSEs whose customers are allocated costs based on [their] share of 12-month coincident peak, adjusted on a monthly basis to facilitate load migration. The contract costs paid and RA benefits received by [departed load] and bundled customers should be based on a share basis equal to the credit share received.”<sup>18</sup>

Because LSEs are familiar with the CAM and it is a proven mechanism for allocating costs among the LSEs in a large electrical corporation’s territory, it could be reasonable to use a process that mirrors the CAM process to allocate the costs of DWR-procured OSW within each IOU’s territory.

The Commission could then allocate the benefits of the DWR procurement in the same manner as the costs, basically mirroring the CAM allocation of resource adequacy and GHG emissions reduction benefits. The actual benefits may vary depending on the product procured by DWR (a capacity-only product may not have any GHG reduction benefits to be allocated to LSEs; likewise an energy-only product may not have resource adequacy value). The GHG reduction benefits could be used to achieve the GHG reductions necessary to achieve an LSE’s share of emission for IRP purposes. In addition, the GHG emissions reduction benefits could be used in each LSE’s Power Source Disclosure Program that is overseen by the CEC. However, most likely the GHG emissions reduction benefits would not become attributes that can be resold. If there are GHG emission reduction benefits that result in an individual LSE being

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<sup>18</sup> D.06-07-029 at 31.

long on GHG reduction benefits, they would be able to rebalance their portfolios, if applicable.

AB 1373 also provides the option for individual LSEs to obtain incremental resources from DWR on a voluntary basis, “subject to the approval of the Commission and a specific determination by the Commission that sufficient capacity is available to accommodate the request to obtain amounts beyond those allocated to the load-serving entity.”<sup>19</sup> DWR, in consultation with the Commission, may also establish a schedule for LSEs to provide advance notice of their intent to obtain incremental resources through DWR. The LSE would also be required to impose a nonbypassable charge on its ratepayers sufficient to fund its allocated share of the costs of incremental procurement for the duration of the contract. This would be over and above any costs that are allocated by the Commission to the LSE’s customers for the collective centralized procurement requested by the Commission.

DWR may also need to be wary of procuring on behalf of individual LSEs that may be subject to load migration, bankruptcy, or closure. In instances of centralized procurement done on behalf of a collective group of LSEs, there are frequently mandatory step-in requirements in contracts, such that if a single LSE fails, the remaining procurement would be paid for by a remaining LSEs. In the case of excess procurement on behalf of one LSE, there is additional risk that will need to be considered. For example, DWR may only want to provide additional LSE purchasing options (beyond the centralized need determination by the Commission) in volumes whether DWR itself would be comfortable assuming

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<sup>19</sup> See Wat. Code § 80822.5.

step-in rights for its own load in the event that an LSE ceased to act as a contractual counterparty.

### **5.1. Questions for Parties**

18. For centralized procurement of resources not yet in LSE portfolios such as OSW, is it appropriate for the costs of any DWR contract to be allocated to all LSEs based on the TAC area's share of a 12-month coincident peak load? If not, provide rationale and explanation for another cost allocation methodology.
19. For centralized procurement of resources that already exist in at least some LSE portfolios, what is the appropriate method for allocating costs and benefits?
20. How would DWR's solicitation and contracting process need to change for circumstances where POU's and/or individual LSEs seek additional volumes of procurement beyond the amount of need determination authorized by the Commission? How would those additional costs and benefits be allocated fairly to benefitting LSEs and/or POU's?
21. How should the allocation of benefits beyond energy and capacity (such as, but not limited to: RPS value, renewable energy credits, IRP compliance, or GHG-reduction value) be allocated to LSEs?
22. How should the AB 1373 requirements for nonbypassable surcharges be implemented?
23. Some LLT eligible resources may require substantial infrastructure development, the costs of which are incremental to costs related to the deployment of the resource itself (for example, OSW requires port and transmission development; geothermal requires transmission development and construction in challenging environments). How do these contingent, necessary costs influence the overall financial impact of resource development for different eligible resources?



24. How do costs not directly related to the specific energy projects factor into the affordability question for ratepayers for deployment of LLT resources through centralized procurement? How could centralized procurement help address or mitigate these additional costs?

## **6. Procurement Process and Timeline**

AB 1373 added several sections to the Water Code to govern DWR centralized procurement activities. Water Code Section 80820 contains many of the key provisions and, among other things, provides that “the commission, in consultation with the department [DWR], shall develop and adopt procedures and requirements that govern competitive procurement by, obligations on, and recovery of costs incurred by the department pursuant to this division.”

The key provisions of Wat. Code Section 80821 state the following:

- (a) (1) When conducting a solicitation pursuant to Section 80820, the department shall confer with the Commission and other parties, including local publicly owned electric utilities that are voluntarily participating pursuant to Section 80822 and load-serving entities, for eligible energy resource procurement activities of an identified scope and duration. The department shall recover costs related to conducting the requested solicitations and all supporting work. Cost recovery may be effectuated, if determined to be just and reasonable by the commission before the procurement, through a nonbypassable charge approval process for load-serving entities and pursuant to Section 80822 for local publicly owned electric utilities.
- (2) At the request of the department, the commission may require an electrical corporation to act as the agent of the department or to assist the department in conducting the solicitation, bid evaluation, or contract negotiation for new eligible energy resource

procurement. The electrical corporation shall be reimbursed by the department for its reasonable costs, as determined by the commission.

- (b) If the department's costs associated with the procurement of eligible energy resources pursuant to this division, including the costs related to bonds issued pursuant to Chapter 5 (commencing with Section 80840), costs related to contracting for eligible energy resources, and other costs to implement and administer this division, will be recovered through a commission proceeding, the commission shall review the procurement undertaken pursuant to this division, and if approved, issue an order governing the recovery of the department's costs before the consummation of the contract only if both of the following conditions are satisfied:
  - (1) The recovery of the department's costs, including those costs associated with the procurement process, the resulting transactions, and the associated costs, has been found to be just and reasonable and to be in the public interest.
  - (2) The recovery of the department's costs, including, if authorized, costs associated with the issuance of bonds and the material terms of those bonds, including, without limitation, interest rates, rating, amortization, and maturity, through charges on customers does not unreasonably increase costs to customers on a net present value basis. ...
- (e) Any agreement between the department and the commission pursuant to this section that is solely for the purpose of imposing a nonbypassable charge to recover the department's revenue requirement related to bond issuance debt service shall include a provision stating that the commission's just and reasonable determination with respect to the revenue requirement is in effect for the duration of the bond term.

In compliance with the above provisions of the Water Code, this ruling proposes the following key aspects of the procurement process to be undertaken by DWR:

- All procurement should be conducted via a competitive solicitation process;
- All proposed contracts should be submitted by DWR to the Commission for approval via an application, leading to a Commission decision on the contracts and their cost recovery;<sup>20</sup> and
- All contract volumes and pricing data can be submitted by DWR as confidential for a period of three years after approval (or rejection) by the Commission in a decision.

Wat. Code Section 80820 also requires that the Commission and DWR establish a “procurement group” to advise DWR on any procurement undertaken. This ruling suggests that this group be convened by and advisory to DWR and consist of non-market-participants, as well as agency staff. This ruling

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<sup>20</sup> Wat. Code Section 80821(b) provides, in part:

If the department’s costs associated with the procurement of eligible energy resources pursuant to this division, including the costs related to bonds issued pursuant to Chapter 5 (commenting with Section 80840), costs related to contracting for eligible energy resources, and other costs to implement and administer this division, will be recovered through a commission proceeding, the commission shall review the procurement undertaken pursuant to this division and, if approved, issue an order governing the recovery of the department’s costs before the consummation of the contract only if both of the following conditions are satisfied:

- (1) The recovery of the department’s costs, including those costs associated with the procurement process, the resulting transactions, and the associated costs, has been found to be just and reasonable and to be in the public interest.
- (2) The recovery of the department’s costs, including, if authorized, costs associated with the issuance of bonds and the material terms of those bonds, including, without limitation, interest rates, rating, amortization, and maturity, through charges on customers does not unreasonably increase costs to customers on a net present value basis.

also proposes that DWR be encouraged to retain an expert consultant to advise on the procurement; such a consultant could be an independent reviewer and/or support for DWR staff procurement determinations. This would be similar to an independent evaluator that is typically hired by IOUs for electricity procurement. The expert consultant would be tasked with providing an independent report and advice to both DWR and the Commission on the solicitation process and results.

Wat. Code Section 80820 also includes some detailed requirements governing the conduct of the solicitations by DWR, including the following:

- (b) In evaluating the bids received through a solicitation, the department shall consider all of the following:
  - (1) For eligible energy resources dependent on the development of a project, that project's viability, including, but not limited to, developer experience, developer financial strength and creditworthiness sufficient to eliminate financing contingencies, and the status of required permits and licenses, including a commitment to submit a consistency certification pursuant to the federal Coastal Zone Management Act of 1972 (16 U.S.C. § 1451, *et seq.*) to the California Coastal Commission for offshore wind energy development projects, to the extent required.
  - (2) The ability to meet in-service dates offered during the solicitation and the ability to meet those in-service dates without escalation in cost.
  - (3) The useful life of the project.
  - (4) The capability to supply energy, capacity, and ancillary services at locations, times of day, and for durations that meet the state's energy resource needs, as determined by the department and the commission.

- (5) The bidder's economic and local community impact, workforce development needs and opportunities, environmental impact mitigation plan, and equipment acquisition and supply chain investment plan.
- (6) A plan to contribute to large-scale, regional, or statewide baseline and ongoing monitoring of coastal waters and wildlife, if applicable.
- (7) Any other criteria determined by the commission or the department.

Wat. Code Section 80820 also contains numerous detailed provisions containing direction to DWR that are related to labor requirements, including whether the energy resource project is a "public work," prevailing wage requirements, project labor requirements,<sup>21</sup> and the use of a "skilled and trained workforce."<sup>22</sup>

Assuming the Commission makes a non-zero need determination in 2024, this ruling proposes the schedule set forward in Table 2 below. DWR will need to design a solicitation process, evaluate the types of products to be solicited, and solicit stakeholder input on draft contract documents, well in advance of initiating a binding solicitation. A solicitation would be conducted, with contracts brought to the Commission for approval.

This ruling proposes to provide DWR flexibility to buy less than the maximum need determination (including zero) in any single solicitation, in order to allow maximum ratepayer benefit. If prices are reasonable, DWR would have the flexibility to buy up to the full need determination amount. If prices are high, DWR would have the flexibility to buy less than the full amount, including zero.

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<sup>21</sup> See Section 2500 of the Public Contract Code.

<sup>22</sup> See Section 2601 of the Public Contract Code.

While the portfolio diversity benefits of LLT resources potentially have significant value, and the initial investment by DWR as the CPE could lead to lower-cost procurement of such resources in the future, the Commission is also mindful of the substantial rate pressure electricity customers are currently experiencing. Consequently, the centralized procurement approach outlined in this ruling is not intended as a commitment to procure LLT resources at any cost. If the premium required to develop the initial tranche of resources exceeds the portfolio diversity and initial investment values of taking an initial step, the Commission could elect to suspend or postpone the procurement by DWR.

After the initial need determination made by the Commission before September 1, 2024, each time the Commission considers and adopts a PSP portfolio, it can evaluate whether there is a need for raising the limit on the amount of need authorization allowable via centralized procurement by DWR of any of the resources in the selected portfolio. If so, a request could be made to DWR on a regular basis at the time of the PSP adoption, similar to the way the PSP decision also recommends portfolios to the CAISO for TPP analysis. If necessary, a need determination could also be made outside of the regular process for PSP consideration.

There is expected to be a common interest agreement and/or memorandum of understanding (MOU), with associated non-disclosure agreement (NDA) terms, between the Commission and DWR for purposes of implementation of AB 1373. During the MOU and NDA development process, more specific processes and procedures may be negotiated.

The Commission/DWR process development discussions are likely to include elements that should govern the solicitation criteria. Many elements are

likely to be considered, including, but not necessarily limited to, cost caps that govern the maximum bids in the solicitation process.

Generally, this ruling suggests the timing for the first tranche of centralized procurement by DWR could proceed as described in Table 2 below. The timing ranges are intended to indicate a possible range of time within which the activity would occur.

**Table 2. Proposed Schedule for Possible First Tranche of Centralized Procurement by DWR**

ITEM	TIMING RANGE
Commission decision making on initial need determination	No later than September 1, 2024
Commission request to DWR to exercise its central procurement function to procure needed resources, if determined necessary	March 1, 2025
DWR and Commission staff outreach to POU's and voluntarily participating LSEs; subsequent formation of procurement review group	Late 2024 - 2025
DWR development of solicitation plans and materials, in consultation with Commission staff and procurement review group	2025 - 2027
DWR pre-bid activities with bidders	2026 - 2027
Solicitation open for project proposals	2026 - 2028
Bid evaluation	2027 - 2028
DWR submits proposed contracts for Commission consideration	2027 - 2028
Commission decision addressing approved contracts and associated cost recovery	2028 - 2029 for deliveries by 2035

This ruling proposes that the use of this AB 1373 process would be conducted through a track of this proceeding or its successor(s) devoted to consideration of centralized procurement by DWR, with a separate application

once the recommended contracts are submitted to the Commission for approval. As stated earlier, this activity related to centralized LLT procurement would be separate from consideration and adoption of the RCPPP in this proceeding, and also separate from ongoing “planning track” activities associated with evaluation of LSEs’ individual IRPs and adoption of a PSP, although the resource procurement will be factored into and considered prior to ordering any additional future procurement by LSEs.

### **6.1. Questions for Parties**

25. Is the proposed timeline and activities description appropriate for DWR’s initial solicitation activities? If not, what should be the expected timeline and why? What other activities and/or interim milestones should be considered or required?
26. Is there an optimal contract structure for DWR to consider when contracting with resources through the centralized mechanism? Should the Commission review contract structures or other pre-bid activities in advance of their completion?
27. Comment on how the “procurement group” for DWR required by AB 1373 should be implemented.
28. Is an application the appropriate mechanism for Commission consideration of individual contracts proposed by DWR after the conduct of its solicitation? Explain.
29. Include any other process recommendations for the Commission to request or require for DWR’s conduct of centralized procurement.
30. Specifically for developers of LLT resources: What would be the optimal timing and minimum threshold amount of a DWR centralized procurement solicitation from your perspective? Explain your rationale. In addition, delineate the categories of costs associated with your projects and when such costs should be firm enough to allow binding



bids in a solicitation (for example, due to supply chain issues, components may only be available by a certain date to inform bid development; transmission availability is expected by a certain date; *etc.*). Be as specific as possible to assist the Commission in designing a reasonable process and timeframe. If desired, information in response to this question may be requested to be submitted under seal, if supported by relevant justification.

31. Assuming that the Commission will give direction to DWR on the expected online date for centrally-procured LLT resources, how might such a directive be framed? For example, should the Commission specify commercial operation by a certain date, by a certain year, or within a range of years?

**IT IS RULED that:**

1. Interested parties may file and serve comments in response to this ruling, the questions in Sections 2.1, 3.1, 4.1, 5.1, and 6.1 of this ruling, and the associated analysis posted on the California Public Utilities Commission's web site, by no later than May 24, 2024. Parties shall respond to the ruling questions in the order in which they appear in the ruling, with any additional comments to follow.

2. Interested parties may file and serve reply comments in response to this ruling by no later than June 5, 2024.

3. If any party wishes to propose a need determination for specific resources to be procured by the Department of Water Resources in the first procurement tranche, to be determined by the California Public Utilities Commission by September 1, 2024, the party's proposal(s) may be included in its comments to this ruling. The proposal(s) shall include a description of the eligible resource, need determination, relationship to load-serving entity procurement, allocation of costs and benefits, and procurement process and timeline, effectively

addressing all of the sections of this ruling for the specific centralized resource procurement recommended.

Dated April 26, 2024, at San Francisco, California.

          /s/ JULIE A. FITCH            
Julie A. Fitch  
Administrative Law Judge