

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

Order Instituting Rulemaking to Develop an Electricity
Integrated Resource Planning Framework and to
Coordinate and Refine Long-Term Procurement
Planning Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

**COMMENTS OF THE INDEPENDENT ENERGY
PRODUCERS ASSOCIATION ON THE ADMINISTRATIVE
LAW JUDGE'S RULING SEEKING COMMENT ON
PROPOSED PREFERRED SYSTEM PORTFOLIO AND
TRANSMISSION PLANNING PROCESS
RECOMMENDATIONS**

INDEPENDENT ENERGY PRODUCERS
ASSOCIATION
Steven Kelly, Policy Director
PO Box 1287
Sloughhouse, CA 95683
Telephone: (916) 448-9499
Facsimile: (916) 448-0182
Email: steven@iepa.com

Dated: January 31, 2019

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

Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

**COMMENTS OF THE INDEPENDENT ENERGY
PRODUCERS ASSOCIATION ON THE ADMINISTRATIVE
LAW JUDGE’S RULING SEEKING COMMENT ON
PROPOSED PREFERRED SYSTEM PORTFOLIO AND
TRANSMISSION PLANNING PROCESS
RECOMMENDATIONS**

In response to the Ruling of the Administrative Law Judge seeking comment on the Proposed Preferred System Portfolio and Transmission Planning Process Recommendations (dated January 11, 2019), the Independent Energy Producers Association (IEP) is pleased to provide these comments. First, IEP provides some general observations regarding the results of the modeling presented by Energy Division (ED) staff on January 11, 2019. Next, we respond to the specific questions posed by the Ruling.

I. General Observations

IEP appreciates the fact that the 2017-2018 Integrated Resource Planning (IRP) process is an initial “run” at integrated resource planning in a complex environment. Long-range, 10-year forward planning is made more complex by the expansion of load-serving entities (LSEs) subject to the prescriptions of SB 350. We recognize that forecasting is inherently imprecise, and the Commission’s IRP planning and modeling activities will be perfected over time as more information and understanding of a complex energy system are gained.

Yet, it is important that the Commission act timely now to begin the process of procuring the infrastructure and resources that are forecast to be needed to meet grid reliability (i.e. system, local, and/or flexible needs); meet 2030 statutory obligations (e.g. 60% of retail sales from eligible renewable resources); and meet 2030 policy goals (e.g. greenhouse gas (GHG) emissions reduction). Postponing procurement in needed infrastructure risks fostering a “boom and bust” climate in investment, undermines project development, and risks higher costs.

In this context, a number of important observations may be gleaned from the modeling performed to date as presented at the January 11, 2019 IRP Workshop.

A. Risk of Insufficient Capacity Procurement

ED staff concludes that over-purchasing of existing capacity is not anticipated to be a problem because uncontracted capacity, especially uncontracted capacity from thermal resources, is forecast to be available to serve load.¹ Indeed, the biggest problem faced by the Commission is not the over-procurement of existing capacity but, rather, the under-procurement of capacity (existing and/or new) needed to replace retired/retiring capacity and integrate new, incremental renewables.

Importantly, the presentations of the outcome of IRP modeling at the January 11, 2019 Workshop reveal the following important trends that risk undermining the procurement of existing and/or new capacity needed to ensure grid reliability:

- **Increasing reliance on short-term market purchases between 2018 and 2030.** The volume of short-term purchases by LSEs is expected to increase by over 250% between 2020 and 2030, i.e. from approximately 20 TWhs to approximately 50 TWhs.² The investor-owned utilities (IOUs) and the Electric Service Providers (ESPs), typically

¹ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 32.

² *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 24.

assumed to serve 40-60% of the aggregate California Independent System Operator (CAISO) load over the next 5 – 10 years, are responsible for the bulk of the short-term purchases.³

- **Decreasing availability of Net Qualifying Capacity (NQC).** The total NQC from existing resources available to the CAISO is expected to decline by 8% by 2030, i.e. from a total of 49,504 MW in 2019 to 45,710 MWs in 2030.⁴ Equally important, total planned purchases by LSEs of NQC from existing resources is forecast to decline by approximately 38% between 2019 and 2030, i.e. planned purchases of existing NQC declined from 31,838 MWs in 2019 to 19,768 MWs in 2030.⁵

Short-term procurement in system, local, and/or flexible capacity is unlikely to incent new infrastructure forecast to be needed in a timely manner. In addition, if the planned procurement/investment by Community Choice Aggregators (CCAs) in *new* NQC fails to materialize as forecast, the existing capacity that has served to maintain grid reliability may no longer be available as planned.

B. Planned Resource Additions Are Not Well Matched to Renewable Integration Needs

CCAs are associated with nearly all the planned new capacity additions. CCAs plan to develop new solar (approximately 6,500 MWs), new wind (approximately 3,000 MWs), and new battery-storage (approximately 1,000 MWs).⁶ As a result, planned new capacity additions total approximately 11,000 MWs by 2030.

Overall, LSEs in aggregate plan to “balance” (i.e. integrate) the 11,000 MWs of planned new, incremental new renewable resources with 1,000 MWs of battery-storage resources

³ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 23.

⁴ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 28.

⁵ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 29.

⁶ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 34-35

(assumed to have a 4-hour duration). Very little of the planned new, incremental renewable energy derives from baseload renewable generation (e.g. biomass, geothermal). Nor is this new, incremental renewable energy expected to be balanced with new thermal resources. It remains unclear whether the planned 11:1 ratio between new intermittent resources and new battery-storage will be enough to maintain grid reliability, particularly in an era when existing capacity (primarily thermal) is at risk of retirement.

Aggregate LSE plans do not include enough resources on an energy or capacity basis to conduct a reliability analysis within the IRP.⁷ Moreover, thermal resources in the Reference System Plan baseline often are not reflected in aggregate LSE IRP plans after 2023. These findings heightens the concern, given the planned increase in new solar and wind resources due to the RPS, the electric grid may not be sufficiently “balanced” to support overall system reliability.

As action items, the Commission should direct LSEs to *begin* the procurement of needed resources in 2020/2021 rather than waiting until subsequent IRP proceedings to direct initial procurement. In addition, the Commission should take the necessary steps in the 2017-2018 IRP (or, alternatively, through the resource adequacy (RA) Track 2 proceeding) to ensure the availability of needed RA capacity by adopting a multi-year RA framework of enough duration and annual obligation to maintain the near- and mid-term reliability of the grid in the system, local, and flexible capacity domains. Overall, timely, steady procurement of NQC (as well as RPS energy) will enable LSEs to meet the reliability, RPS, and GHG goals at least-cost and with regards to best fit. On the other hand, delay in procurement fosters a boom-bust cycle in infrastructure investment and risks higher costs.

⁷ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 47.

II. Answers to Specific Questions Posed in the Ruling

The Ruling presented a series of questions for parties' comment. At this time, IEP responds to a select set of these questions in the order in which they were presented in the Ruling.

6. Comment on the implications of the increased reliance on imports represented by the hybrid conforming portfolio. While California has a long history of relying on imports to serve load (i.e. energy), the implications of increasing the state's reliance on imports for either energy or capacity "going-forward" are twofold. First, as the modeling suggests, relying on unspecified imports tends to increase GHG emissions associated with serving in-state load. Moreover, as policymakers in states bordering California increasingly make their own commitments to clean resources in the future, one might anticipate that the power from relatively clean PNW hydro and/or wind resources will be "counted" as serving load in those regions in order to lower their emissions profile unless otherwise specified (i.e. "claimed") by load-serving entities. As a result, "unspecified imports" serving California load increasingly may derive from relatively higher emitting resources that are unclaimed by other parties. The Commission should act now to minimize the risk of double-counting "clean" resources serving load in the West and minimize the risk of resource shuffling that otherwise may prevail.

Second, relying on imports on a long-term basis for an increasing amount of capacity and energy risks becoming dependent on the vagaries of the Pacific Northwest (PNW) hydro-based system. Just as California undergoes periodic drought, so too can the PNW. Indeed, one might expect that economic growth in the PNW, fish management, and "clean energy" mandates may

create a limit on the amount of capacity and energy that can and will be made available to serve California's needs. Moreover, the retirement of coal facilities that historically have served load in the PNW may result in the re-direction of hydro resources to serve local, regional load rather than being available for export to California.

7. Comment on the hydroelectric feasibility analysis conducted by staff. Should the Commission require additional or different approaches to reliance on hydroelectric resources. What are your specific recommendations? As IEP understands the staff's hydroelectric feasibility analysis, the staff relied on historical *annual* data to determine if in aggregate the LSEs' assumptions about PNW imports were feasible. Essentially, the staff assessed the extent to which the LSEs' forecast of annual hydro-imports on an energy basis reasonably fell within historical annual averages of energy imports from the PNW.

IEP is concerned that the focus on annual averages may mask the feasibility of importing PNW hydro on a seasonal and/or hourly basis when needed to serve California. We recommend that the staff clarify its hydroelectric feasibility analysis on this point and, as necessary, expand its hydroelectric feasibility analysis to investigate whether the energy imports associated with PNW hydro are feasible in the seasons and hours when needed in California.

8. Comment on any actions the Commission should take to mitigate drought risk, especially for in-state hydroelectric resources. Given the recent bankruptcy filing submitted by the Pacific Gas & Electric, the Commission should investigate what might happen to the in-state hydro-electric power supply if a regulated utility's hydro assets are divested and no longer available to produce electricity. Similarly, given that many existing hydro licenses are subject to pending renewal, the Commission should investigate what might happen if the permits for existing hydroelectric facilities are not renewed in a timely manner.

18. What are the potential implications if the CAISO analyzes the hybrid conforming portfolio and takes transmission investments to the CAISO Governing Board, if the resource procurement by LSEs between now and 2030 turns out to be significantly different than the hybrid conforming model suggests. If this is a concern, suggest potential remedies or other analysis or actions that could be taken. Undoubtedly, resource procurement by the LSEs between now and 2030 will be different than that which the hybrid conforming model suggests. The fact that the future is inherently unknowable does not mean that critical transmission infrastructure modeled to be needed today should not get built. Indeed, the bigger concern is that the CAISO fails to build critical infrastructure now in anticipation of future needs.

19. Comment on any other aspect of the Commission’s recommendations to the CAISO for TPP purposes. Recognizing that the Commission faces a deadline to transfer planning scenarios to the CAISO to enable timely completion of the TPP, the Commission must ensure that the CAISO has a set of scenarios to study that represent a broad range of policy outcomes. For example, among the scenarios transferred to the CAISO, one scenario should address the situation in which most Preferred Resources fail to materialize at the scope/scale anticipated in state law and Commission policy, i.e. a “worst-case” scenario. A worst-case scenario is needed to ensure a robust forecast of future outcomes, because most of the outcomes predicated on significant growth of preferred resources are in turn predicated on consumers choosing to invest in and adopt these resources for their own convenience.

24. What further policy or procurement actions should the Commission take as a result of the analysis presented in this ruling? Explain your recommendation in detail. IEP has recommended in various proceedings (e.g. RA, RPS, IRP) that the Commission not delay

procurement known to be needed until the last second. Experience has shown that the development of new resources in California is difficult, litigious, and expensive. If the Commission delays procurement decisions, costs likely will increase as the Commission and/or LSEs rely on expedited procurement and more costly resources that can become operational in a relatively short time-frame.

The RESOLVE modeling indicates a need for 11,000 MWs of incremental new renewable resources. The CCAs indicate that they plan to develop 11,000 MWs of incremental new resources. What is missing is any assurance that this will happen in a timely and cost-effective manner. IEP recommends that the Commission assume leadership in this matter by directing its jurisdictional LSEs to procure in 2020/2021 at least 2,000-3,000 MWs of new, incremental renewables as a “down payment” on the 2030 RPS and GHG goals. Successive IRPs and/or RPS procurements can focus on the remaining 7,000-8,000 MWs of new renewables that will be needed to come online between 2026-2030 to ensure compliance with statutory obligations while maintaining overall system reliability.

25. Is an increase in the RPS compliance requirement, beyond 60 percent RPS in 2030, warranted? Why or why not? The evidence suggests that the Hybrid Conforming Portfolio fails to achieve the 60% by 2030 RPS obligation in statute.⁸ Moreover, if LSEs’ procurement practices match the Conforming Hybrid Plan, the modeling indicates that LSEs will fall short of the RPS 2030 statutory obligation by as much as 15%.⁹

⁸ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 85.

⁹ *Proposed Preferred System Portfolio for IRP 2017-18*, Staff Presentation, slide 85. “Delivered Effective RPS” as a percentage of retail sales, including the use of banked REC’s, represents only 51.5% of retail sales in 2030 assuming the Hybrid Conforming model, i.e. nearly 15 percent below the RPS obligations.

Accordingly, the Commission should consider directing the procurement of new, incremental renewables as noted above in response to Question #24. At a minimum, the Commission should exercise its authority to increase the minimum procurement quantity (MPQ) imposed on all LSEs.¹⁰ Increasing the RPS MPQ will have the effect of drawing-down the banked RECs which currently are an impediment to the procurement of new, incremental renewables to meet RPS and GHG goals. Banked RECs simply reflect the environmental benefits that have already accrued in prior years to consumers. Reducing the amount of banked RECs will foster the procurement of new, incremental eligible renewables needed to meet GHG emission-reduction goals going forward.

26. Acknowledging that near- and mid-term reliability issues have been addressed in comments in response to a separate ruling in this proceeding, should the Commission order any resource procurement in the context of the IRP proceeding at this time.? How much? Explain your rationale. Yes. As indicated above in response to Question #24, the Commission should direct its jurisdictional LSEs to procure in 2020/2021 at least 2,000-3,000 MWs of new, incremental renewables as a “down payment” on the 2030 RPS and GHG goals. All beneficiaries should share in the costs and benefits of the procurement. To the extent that this procurement compels new capacity additions to support the integration of new renewables, this should be procured as well. Moreover, as discussed in response to Question #25, the Commission should assert leadership now and increase the MPQ imposed on all LSEs to draw-down excessive “banks” of RECs held by LSEs.

¹⁰ PU Code Section 399.15(a): “In order to fulfil unmet long-term resource needs, the commission shall establish a renewables portfolio standard *requiring all retail sellers to procure a minimum quantity* of electricity products from eligible renewable energy resources ...” [emphasis added].

The Commission also should focus its attention on the RA proceeding to ensure that the resources needed to provide reliability during a period of increasing expansion of renewables, including intermittent renewables, will be procured on a multi-year forward basis in a timely manner.

Respectfully submitted January 31, 2019 at San Francisco, California.

A handwritten signature in black ink that reads "Steven Kelly". The signature is fluid and cursive, with a large, sweeping flourish at the end of the name.

INDEPENDENT ENERGY PRODUCERS ASSOCIATION
Steven Kelly, Policy Director
PO Box 1287
Sloughhouse, CA 95683
Telephone: (916) 448-9499
Facsimile: (916) 448-0182
Email: steven@iepa.com