

Comments On The 2016-2017 Transmission Planning Process

Special Study On Early Resource Retirement Risks

#### June 13, 2016 Stakeholder Call

Diamond Generating Corporation ("Diamond") provides these comments regarding the CAISO's June 13<sup>th</sup> stakeholder call concerning the 2016-2017 Transmission Planning Process ("2016-2017 TPP"). The CAISO discussed its planned approach for this summer's "Special Study" that will evaluate the potential impacts on transmission reliability and congestion if certain local capacity resources retire early (i.e., before the standard 40-year economic life assumption for gas-fired generation).

As discussed below, Diamond is concerned that the Special Study scope is too limited and will not accurately portray the premature retirement risks that firm capacity resources face today, nor the associated impacts on the transmission should those resource retire early. To address these limitations, the Special Study should look at both local and system capacity resources to better understand the cumulative effect of resource retirements within a relatively short time horizon. The CAISO should also revise the Special Study screens to reflect how limited long-term financial commitments and the pricing of capacity in CAISO's short-term markets impact the availability of capacity resources. As discussed below, the CAISO should not focus on resources' respective capacity factors or whether the resource provides ancillary services in a single hour during the year, but instead focus on whether a resource has a long-term financial commitment that assures availability over the TPP planning horizon. California is beginning to refine its procurement policies pursuant to the SB 350 Integrated Resource Planning ("IRP") requirement, which will integrate procurement with the CAISO's TPP, Resource Adequacy ("RA") procurement obligations and other market aspects which compensate resources for services provided to the grid. In the context of these changes, there is a need for a broader evaluation of local and system reliability and congestion impacts that are likely to occur with the early retirement of gas-fired generation. This is necessary so that the CAISO's efforts in this year's TPP will be informative beyond the immediate transmission planning process cycle.

#### **DISCUSSION**

### I. Conventional Generators Face Early Retirement Risks in the Absence of Longer-term Contracts and Fully Compensatory Short Term Market Prices.

Diamond and a number of other merchant generators have explained that in the absence of longer-term financial commitments, the current CAISO market structures do not support the operation of conventional, firm-capacity resources (i.e., simple cycle and combined cycle projects).<sup>1</sup> In this proceeding and others (e.g., the Joint Reliability Plan and previous LTPP proceedings) the CAISO and CPUC have taken steps to proactively evaluate these risks. Unfortunately, both the CAISO and the CPUC have adopted very generalized assumptions that a resource will remain available to CAISO irrespective of market conditions as long as the resource's age is less than an assumed 40-year useful economic life. The early retirement risk study in the 2016-2017 TPP is a critical step towards fully understanding the system risks associated with the ongoing use of unrealistic assumptions about asset availability for system and local reliability needs. Diamond appreciates the CAISO's efforts to date, and recommends three specific actions to assure a robust evaluation of the premature retirement risk issue.

## A. The 2016-2017 TPP Special Study Should Evaluate Both System and Local Resources.

Under the current proposal, the 2016-2017 Special Study would only evaluate a subset of the firm capacity resources available to the CAISO.<sup>2</sup> The study would include a screen to only consider resources "required" to meet a local capacity requirement. By not considering both local and system resources, the CAISO cannot properly evaluate how combinations of resources are needed to maintain system reliability. In addition, the CAISO cannot properly evaluate the risk that multiple resources, all facing similar economic conditions, that may be forced into early retirement within a short timeframe of one another. The CAISO should assume that all merchant conventional generation is at risk of premature retirement absent a financial commitment or sufficiently compensatory market structures. By utilizing a more realistic assumption, the CAISO will be able to better evaluate the cumulative impact of resource retirement on transmission planning.

<sup>&</sup>lt;sup>1</sup> See for example, Diamond Generating Corporation comments in R.13-12-010 (Feb. 22, 2016), available at: <u>http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M161/K886/161886457.PDF</u>

<sup>&</sup>lt;sup>2</sup> See June 13, 2016 Special Study Presentation, available at: <u>https://www.caiso.com/Documents/AgendaandPresentation-2016-2017TransmissionPlanningProccess-SpecialStudies.pdf</u>

## **B.** The Screens Should Be Revised to More Accurately Account for Actual Market Conditions.

The Special Study proposes to use a capacity factor based screen to identify resources that are at risk of early retirement. The screen would limit the study to resources that have capacity factors below "typical historical values." This capacity factor based screen will not provide meaningful results because a resource with a relatively high capacity factor may still face retirement risks in the absence of a longer-term financial commitment over the balance of the study period.

The Special Study would also exclude resources that provide <u>any</u> ancillary services ("AS") <u>in any hour</u> in the CAISO's 2016-2017 production cost simulation based on the 50% RPS portfolios. This screen should be removed because it does not reflect market realities. In the absence of a longer-term financial commitment a resource could still provide some AS, but nevertheless be uneconomic (and therefore at risk for premature retirement) given the limitations of the CAISO short-term market structures. In addition, there is no requirement to achieve a 50% RPS within the 2016-2017 TPP ten-year planning horizon. SB 350 requires the utilities to meet a 50% RPS by 2030.

The CAISO should remove the capacity factor and ancillary services based screens and instead use the presence of a longer-term financial commitment as the most important screen. If a resource rolls off of a contract for firm capacity within the TPP planning horizon, that resource is at risk of premature retirement and should be included in the Special Study.

# C. The CAISO Should Use the TPP Special Study as a Jumping Off Point for Further Study of the Early Retirement Risk.

The adoption of SB 350 and the CPUC's plans for changes to the long-term procurement processes pose important questions as to how system reliability will be ensured over the longer planning horizon. The simple 40-year retirement assumption is flawed, and it risks understated potential reliability risks where procurement rules and short-term market conditions do not provide a path for resource re-contracting. The existing fleet of conventional, firm capacity resources will remain critical to maintain system reliability as the State pursues expanded RPS and GHG targets and seeks to design a flexible system that is responsive to dynamic market conditions. More must be done to address the full scope of the reliability risks that arise as conventional, firm capacity resources come off of their long-term contracts. The CAISO and the CPUC should revisit the simplified, 40-year retirement assumption and use this Special Study on early retirement risks to provide meaningful data rather than relying on the overly-simplistic 40-year retirement assumption.

Diamond appreciates the CAISO's efforts to tackle these challenging issues and looks forward to working with the CAISO to create a more robust early retirement risk study. We believe the 2016-2017 TPP is an important point in this effort, and encourage the CAISO to design the Special Study to include a broader review of resources availability and associated reliability impacts. If you have any questions or would like to discuss these comments, please do not hesitate to contact me at the information below.

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Paul Shepard Diamond Generating Corp. Email: <u>p.shepard@dgc-us.com</u>