California Wind Energy Association

February 16, 2007

Donald Brooks
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: 2006 Resource Adequacy Report

Dear Mr. Brooks:

The California Wind Energy Association ("CalWEA") is writing to express our serious concern with one aspect of the February 2, 2007, "2006 Resource Adequacy Report," prepared by CPUC staff.

Unfortunately, because a misleading evaluation method was chosen, the report perpetuates the myth that wind generators do not contribute to system reliability. As discussed below, CalWEA believes that the Commission-adopted method for calculating the Net Qualifying Capacity for wind projects is appropriate, self-correcting and should be maintained by the Commission.

In the report (at pp. 33-36), staff analyzed the production from wind and solar units during one hour on each of five days during the California heat storm this past year, concluding that wind performed at only 24-88% of expected levels. The report acknowledges that "looking at only five peak days is a very rough evaluation tool," but the report nonetheless implies, wrongly, that the Commission's capacity valuation methodology for wind resources may need to be revisited based on the analysis.

The analysis conducted was inappropriate and unfair for several reasons:

1. The "methodology" used in this evaluation was not subjected to any public or analytic process. The report did not evaluate wind based on the Commission's adopted methodology for counting wind resources for resource adequacy purposes, which is based on wind production during summer on-peak hours.

2. The five-hour methodology is not instructive or supportable for many reasons:

    a. a high probability of loss of load occurred during many more days and hours in 2006 – including many hours during the heat storm in addition to the five sampled -- during which wind performed well;

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b. the inappropriateness of calculating capacity value using any narrow data set can be demonstrated by looking at wind production during different particular hours during the heat storm. For instance, had CPUC staff looked at the 5-6 p.m. hour instead of the 3-4 p.m. hour on the same days, performance would have been 72 percent higher.[1]

c. the highest-loss-of-load probability hours do not always occur on the hottest days, they change from year to year, and they are only known in retrospect; and

d. no generator (or for that matter seller) has an interest in limiting capacity credit to a small number of high-risk hours that are determined in retrospect.

3. No other generation resource was evaluated during this very narrow one-hour window on just five days.[2] Had one of the large nuclear units happened to have experienced a forced outage during these peak hours (as occurred, for example, with Diablo Canyon during a Stage Three power emergency in January 2001 and with one of the San Onofre units for most of the 2000 – 2001 energy crisis period), no one would conclude that the NQC for nuclear generators warrants revisiting.[3]

The fact that wind did not meet its NQC during five particular hours during the hottest five days California has experienced in the last 50 years says very little about wind's overall contribution to system reliability. Use of the five-hour methodology contradicts, without any basis, the Commission's adopted methodology for determining capacity credit, which recognizes the appropriateness of a larger data set based on peak hours during the summer months. We believe that methodology remains sound. Moreover, the adopted methodology is self-correcting: to the extent that wind production was low during on-peak hours last summer, the capacity valuation for wind will be lower in future years.

Staff should revise the report by evaluating wind performance based on the Commission's adopted methodology and eliminating the arbitrary evaluation. If wind production was not near the expected level, future valuations will be affected accordingly, as noted above. If staff wishes to propose another methodology, the proposal should be evaluated with due public process.

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[1] Using CAISO one-minute data for all wind generators, production was 259 MW during the 3-4 p.m. hour as compared to 446 MW during the 5-6 hour – 72 percent higher -- during the five days evaluated in the CPUC report. On July 21, wind generation doubled between the 3-4 p.m. hour and the 5-6 p.m. hour; on July 22, it tripled between these hours.

[2] However, that wind performed at nearly half its expected value on average during these five high-risk hours might surprise some, given the incorrect notion that "the wind does not blow when it is hot."

[3] Imports were evaluated during the five-hour window, and the results were favorable. However, as with the nuclear example, had a line happened to have been out of service during that window, it would not be reasonable to conclude that imports do not deserve their NQC rating. In addition, the report's evaluation of imports did not rely only on the five-hour sample; it also presents the performance of imports throughout the entire summer of 2006 (see Figure 13).

We appreciate your attention to our concerns.

Sincerely,

Nancy Rader
Executive Director

cc: President Michael R. Peevey
Commissioner Dian M. Grueneich
Commissioner John Bohn
Commissioner Rachelle Chong