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VIA E-MAIL

Mr. Eric Greene California Public Utilities Commission Energy Division 505 Van Ness Avenue San Francisco, CA 94102-3214

RE: <u>PG&E</u> Response to <u>IPRP</u> Report No.6 <u>Site shear wave velocity at Diablo Canyon: summary of available data and comments on analysis by PG&E for Diablo Canyon Power Plant seismic hazard <u>studies</u></u>

Dear Mr. Greene:

I am writing to provide Pacific Gas and Electric Company's (PG&E) limited technical feedback on the Independent Peer Review Panel (IPRP) Report No.6 entitled "Site shear wave velocity at Diablo Canyon: summary of available data and comments on analysis by PG&E for Diablo Canyon Power Plant seismic hazard studies" (Report).

PG&E understands the scientific findings and will conduct the further studies noted on Page 21 of the Report. PG&E would like to clarify the scope of Studies 2 and 3 as follows:

Study 2: PG&E will analyze broad band ground motion data from the region to evaluate the method previously used by PG&E to remove path effects from the two earthquakes used for site amplification. Additionally, the ground motions from small earthquakes recorded at the Diablo Canyon Power Plant (e.g., the Deer Canyon earthquake) will also be used to evaluate the site effects. In particular, earthquakes from the south and west would provide different path effects and lead to reduced uncertainty in the resulting average site amplification terms.

Study 3: PG&E will evaluate site amplification using analytical approaches, such as those used by the Nuclear Regulatory Commission (NRC) in its independent evaluation, in which seismic waves are propagated through a velocity model. This approach is commonly used at facilities that do not have site-specific recordings from earthquakes. The results from this modeling-based approach will be compared to the site-specific approach data for evaluating the average value and uncertainty in the amplification factors.

Also, PG&E offers two comments on the following statements in IPRP Report No. 6. At Page 2, paragraph 3, the Report indicates: "The NEHRP scaling approach is simple, conservative, and often used only for an approximate estimation ...?" PG&E notes that while the NEHRP scaling is simple, it is not a conservative approach. It is just simplified and may underestimate or overestimate the site-specific site factors. Additionally, at Page 3, paragraph 1, the Report notes "... the PGE method

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resulted in lower ground motion hazard estimates." It should be clarified that the PG&E method resulted in lower ground motions at high frequencies (> 3 Hz) and higher ground motion at moderate and low frequencies (< 3 Hz).

Should you have any questions about these comments, please don't hesitate to call me.

Sincerely,

/s/

Valerie J. Winn