TENERA Environmental

December 6, 2013

Dr. Maria de la Paz Carpio-Obeso
State Water Resources Control Board
1001 I Street 15Th Floor
Sacramento, CA 95814

Subject: Response to Comments by Pisces Conservation Ltd. On the 2013 Bechtel Phase 2 Final Technologies Assessment Related to Screening Efficiency Study Conducted by Tenera Environmental

Dear Dr. de la Paz Carpio-Obeso:

As you requested in your email on December 2, 2013 I reviewed the comments provided by Drs. Henderson and Seaby of Pisces Conservation Ltd. (Pisces) on behalf of Friends of the Earth on the September 2013 Final Technologies Assessment for the Alternative Cooling Technologies or Modifications to the Existing Once-Through Cooling System for Diablo Canyon Power Plant prepared by Bechtel Corp. I only reviewed the sections of the report relevant to the report Tenera prepared on the potential efficiency of wedge wire or fine-mesh screens at reducing entrainment. The report reviewed by Pisces was the version dated July 31, 2013, but the results in the tables in that version are identical to the revised report dated October 29, 2013.

The comments by Pisces largely focus on the estimates of screen efficiency used by Bechtel in their report. The comments by Pisces correctly point out that the estimates used by Bechtel on screen efficiency (Table 1 in the Pisces comments) were not specific to DCPP, and that they should have used the site-specific estimates provided in Table 6 (Table 9 in the July 31, 2013 Tenera report).

I agree with the general conclusions by Pisces that wedge wire screens will provide low levels of entrainment reduction unless small slot openings of 0.75 or 1 mm are used. I also agree that any reductions in entrainment provided by fine-mesh screens would result in high levels of impingement with very low levels of survival for the larvae that previously were entrained. The poor performance of the screens and low levels of survival are due to the small size of the larvae that comprise the majority of larval fish entrainment at DCPP. These small fish have not developed scales or musculature that would allow them to either avoid entrainment or survive impingement.

I also wanted to comment on the Pisces comments at the bottom of page 10 of their report on the approach used to calculate the percentage reductions in mortality. This is explained in more detail in the October 29, 2013 version of the report and is not based on the assumption that "..some of the larvae killed by entrainment would die anyway and so

can be discounted." The approach does not involve discounting since it treats each size class equally.

Please contact me if there are any questions on my comments on the Pisces report.

Sincerely,

John Steinbeck
Principal Scientist

cc: Mr. Bryan Cunningham, PG&E