

## DOCKETED

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## **Correction to TN 206558 submitted on 11 November 2015 RE DCPD CO2 Avoidance**

This is a correction to the 15-IEPR-01 docket. My docket entry, TN 206558, submitted on 11 November 2015 and titled, "Gene Nelson, Ph.D. Comments: CGNP's Recommendation for 3 Points to Emphasize in The Final Version of the 2015 IEPR" contains an error in my interpretation of the 2013 PG&E publication, "Economic Benefits of Diablo Canyon Power Plant." (DCPD) For my bullet point 2 of the 11 November 2015 docket entry, I am updating my explanation of the error I found on page 48 of 72 of this PG&E publication.

My conclusion that PG&E understates the annual carbon avoidance of DCPD remains. The factor of 1 million error that I note below should be immediately corrected by PG&E.

SEE:

[http://www.pge.com/includes/docs/pdfs/shared/edusafety/systemworks/dcpp/PGE\\_Economic\\_Impact\\_Report\\_Final.pdf](http://www.pge.com/includes/docs/pdfs/shared/edusafety/systemworks/dcpp/PGE_Economic_Impact_Report_Final.pdf)  
Archived 01 11 16 by Gene A. Nelson, Ph.D.

There are 11 instances of "Metric Tons" in this publication. The key error appears in a sentence on page 48 of 72. The sentence with the error reads, "The use of nuclear generated electricity helped avoid the emissions of 613 metric tons of carbon dioxide in 2011 (See Figure 20)," The word "million" is missing before "metric" in this sentence.

This publication understates statistics showing DCPD's contribution to carbon avoidance. This contribution may be readily calculated by taking the ratio of DCPD's annual electricity generation (typically 18 TWh/year) relative to the total annual nuclear generated electricity in the United States, shown as 790.2 TWh in 2011 on page 52 of 72 of the 2013 PG&E publication. The ratio is .02278. This ratio multiplied by 613 MMT yields 13.96 MMT CO<sub>2</sub> avoided by DCPD in 2011.

On page 49 of 72: "According to testimony by PG&E (Note 10,) DCPD avoids the emission of seven to eight million tons per year of greenhouse gases (GHG) that would otherwise be produced by conventional generation sources such as fossil fuel plants."

Note 10: Pacific Gas & Electric Company 2014 General Rate Case Prepared Testimony Exhibit (PG&E-6) Energy Supply, November 15, 2012.

I believe that the understatement may have at its root the statistic for carbon emissions from natural gas-powered electricity generation in California, which are lower than that for coal. However, according to the California Energy Commission statistics for power importation show that in 2014, California imported 18,342 Billion Watt-hours of coal-fired electricity. (18.342 TWh.) This was a significant amount of power to import, estimated as less than 7% of total generation, down from 10% in 2011. See: "Actual and expected energy from Coal for California - Overview" dated 15 October 2015 at page 3 of 8

[http://www.energy.ca.gov/renewables/tracking\\_progress/documents/current\\_expected\\_energy\\_from\\_coal.pdf](http://www.energy.ca.gov/renewables/tracking_progress/documents/current_expected_energy_from_coal.pdf)

This correction is relevant, as my recent CEC docket entries include the Environmental Defense Fund (EDF) projection that the Aliso Canyon Storage Field natural gas leak from well SS-25 will be equivalent to about 7 MMT CO<sub>2</sub>, about 1/2 of DCPD's annual CO<sub>2</sub> avoidance.