

California Energy Markets / By Energy Newsdata

Firm Previews Strategies, Costs of GHG Emissions Reductions

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Work is under way to measure California's greenhouse-gas emissions, the costs to cut them and the impact on ratepayers. But uncertainties such as how renewables integrate with the grid make it difficult to quantify results, a consultant reported recently.

In June, the California Public Utilities Commission contracted with Energy and Environmental Economics Inc., a San Francisco-based consulting firm, to model GHG emissions-reduction strategies and costs. Last week during a CPUC workshop to go over the company's progress, E3 reviewed its approach to measuring the electricity and natural gas sectors' compliance with AB 32. The 2006 law requires the California Air Resources Board to set GHG emissions limits across the state to match 1990 levels by 2020.

The project will focus on how different scenarios impact utility rates and costs. Calculations will analyze emissions, capacity costs, energy costs, GHG costs, rate impacts and retail rates based on different energy resources and fuel prices. Decisions not yet made on retiring and repowering plants will also be factored.

Results from the study will detail emissions totals from the electricity and natural gas sectors, a cost comparison to the current status, the cost of emissions reductions per ton of carbon dioxide and the rate of impact per kWh.

E3 will use [Plexos 4.0](#), a computer modeling program that can provide large amounts of detailed information, and a GHG calculator that E3 is developing and will place on its website. Stakeholders and the public can more easily access information from that style and download spreadsheets of various scenarios to check specific outcomes, said project manager and E3 partner Snuller Price.

"There's a lot of stakeholders, there's a lot of questions," Price said, noting the different scenarios that will produce different outcomes. "We don't want to just go into a back room and come out with an answer for California."

The firm is not the only one chasing the GHG-measurement rabbit. Dozens

of papers on the subject were presented during the Sacramento Climate Change Conference two weeks ago (see /CEM/ No. 942 [14]).

E3 is now compiling data from public sources and until the end of November, it will focus on sector-wide issues, develop data and methods and test an analysis tool. A second stage of the project will run from December through August and will focus on LSE and cross-sector trading issues and refine concerns formed by specific working groups. A summary of methods and data is due Oct. 24 and a public release of the model is due Nov. 2 on E3's website. A Nov. 14 workshop at the CPUC will walk through it.