

## Comments of Pacific Gas and Electric Company on the Regional Integration California Greenhouse Gas Compliance and EIM Greenhouse Gas Enhancement Straw Proposal

Submitted by	Company	Date Submitted
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## Introduction

Pacific Gas and Electric Company (PG&E) recognizes that the California Independent System Operator (CAISO) faces numerous challenges to developing and implementing an enhanced mechanism to account for greenhouse gases in the Energy Imbalance Market (EIM) and potentially in a multi-state balancing authority area. PG&E supports the approach outlined in the CAISO Straw Proposal, and looks forward to engaging in the upcoming effort to further develop, refine, and implement a two pass market optimization that meets California Air Resources Board (CARB) requirements and maintains a robust EIM. As work is underway to create the long-term market optimization enhancement, PG&E encourages the CAISO to continue to work with CARB and stakeholders to articulate clear definitions, expectations, and principles around GHG accounting and particularly the secondary dispatch emissions issue. The time required to create and test the two pass solution provides a valuable opportunity to gather data, identify issues, and better understand the role of GHG accounting enhancements in achieving California's broader climate vision.

## **Comments**

<u>PG&E</u> supports the focus on a two pass market optimization, and urges ongoing stakeholder participation.

PG&E agrees with the CAISO and other stakeholders that a two-pass market optimization (likely a variation of the Issue Paper's "Option 2"1), is the most likely of the available options to produce an outcome that appropriately, accurately, and efficiently addresses secondary dispatch emissions. A two pass optimization approach is complex, however, and extensive study of its behavior is crucial. PG&E urges the CAISO to draw on the expertise and perspectives

<sup>&</sup>lt;sup>1</sup> http://www.caiso.com/Documents/StrawProposal-RegionalIntegration-EIMGreenhouseGasCompliance.pdf



of stakeholders throughout the pre-implementation development and testing phases. By investing resources in the creation of a two-pass market optimization, the CAISO has an opportunity to facilitate deliberate, thorough solution development, and minimize risk of unintended negative consequences after implementation. PG&E encourages the CAISO to take full advantage of this opportunity by leading a transparent and robust stakeholder process, even after releasing a draft final proposal in January.

Two pass optimization should result in dispatch that is economically efficient and minimizes emissions, as well as compliant with GHG regulations.

Looking ahead, PG&E hopes that the CAISO and CARB will continue to articulate principles and objectives that will guide technical decisions. Market efficiency, grid reliability, and harmonization with other CAISO enhancements, such as those that will increase renewables integration, must not be compromised when a solution is implemented. The design should not over constrain the ability of EIM to dispatch resources to provide energy for import into California as long as the resulting emissions are properly tracked and incorporated in market prices. Given the complexity of a two pass optimization, PG&E recognizes that the CAISO will likely have to balance precision and feasibility. PG&E understands, for example, that simplifications to the optimization calculations, particularly in the first pass of the two pass model, may be necessary to make the solution practical. Such simplifications may be acceptable, but must first be examined carefully to ensure that they do not jeopardize EIM benefits or introduce risks to grid operations, market functionality, or other environmental achievements.

The time required to develop the two pass optimization provides a valuable opportunity to study the problem and inform a strong solution.

As the two pass solution is under development, the CAISO, CARB, and stakeholders have the opportunity to gather additional data and understand better the scope and characteristics of the secondary dispatch emissions problem, as well as the impact of the current EIM on the atmosphere. Identifying and accounting for emissions associated with serving California load is one of several important components of the state's overarching emissions targets and climate goals. PG&E encourages the CAISO and CARB to use time prior to implementing the new optimization to refine the problem definition, and carefully consider how GHG accounting



mechanisms may enhance or detract from other efforts and tools to achieve California's climate-related objectives. Additional data and analysis on EIM atmospheric impacts will also inform the dialogue, and PG&E appreciates that the CAISO has committed to ongoing dissemination of data and analysis.