



(This is a Request for Information only - Complete Pages 1 and 2 for each initiative)

Title of Proposed Initiative: Amendment to S5.1 - Analyses of Emissions and Offsets Markets

Investment Areas (Check one or more) – *For definitions, see First Triennial Investment Plan, page 12:*

- Applied Research and Development
- Technology Demonstration and Deployment
- Market Facilitation

Electricity System Value Chain (Check only one): See CPUC Decision 12-05-037, Ordering Paragraph 12.a. http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF.

- Grid operations/market design
- Generation
- Transmission
- Distribution
- Demand-side management

California Energy Commission

DOCKETED

12-EPIC-01

TN 72604

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Issues and Barriers:

The S5.1 Strategic Objective to “Conduct Air Quality Research to Address Environmental and Public Health Effects of Conventional and Renewable Energy and to Facilitate Renewable Energy Deployment” identifies the need for new research on the integration of environmental regulation and energy development. In particular, S5.1 seeks research that “will inform improved emissions estimates for generation technologies and fuels and improved mitigation strategies.” One element that is crucial to meeting California’s Renewable Portfolio Standard (RPS) and greenhouse gas reduction goals under AB32 is an analysis of emissions markets and alternative emissions reduction policies. S5.1 in the first EPIC investment plan does not clearly include an economic analysis of the emissions markets, including offsets, and their ability to achieve California’s goals. We request that S5.1’s scope be broadened to clearly encompass an economic and policy analysis of emissions markets and alternative environmental policies.

Initiative Description and Purpose:

How will this technology or strategy help address the issue/issues? Describe knowledge to be advanced to overcome critical barriers. Include the recommended funding level (minimum and maximum) for each project under this initiative.

California has adopted some of the most progressive environmental policies with the goals of developing clean energy and addressing climate change. California is the leader in these areas, however, there is a lack of understanding how various emissions policies interact with the electricity generation investment incentives and whether the policies actually achieve their emissions goals. The purpose is to improve emissions estimates for generation technologies and fuels and improve mitigation strategies.

Rigorous economic and policy evaluations of current and proposed energy and environmental regulations will provide needed data to guide policy makers in crafting the optimal policies. Often policies can have unintended consequences, both positive and negative, and it is only through rigorous evaluations that we can determine whether the policy has achieved its goals.

Stakeholders:

Identify the stakeholders who support the initiative. The Energy Institute at Haas and its affiliated researchers.

Background and the State-of-the-Art:

**Justification:**

Describe how this technology or strategy will provide California IOU electric ratepayer benefits and provide any estimates of quantified annual savings/benefits in California, including:

- Name of sector and estimated size and energy use.
- Quantifiable performance improvements for the proposed technology/strategy.
- Maximum market potential, if successful.
- Number of direct jobs created in California.
- Why this research is appropriate for public funding.

Ratepayer Benefits (Check one or more):

- Promote greater reliability
- Potential energy and cost savings
- Increased safety
- Societal benefits
- Environmental benefits - specify
- GHG emissions mitigation/adaptation in the electricity sector at the lowest possible cost
- Low emission vehicles/transportation
- Waste reduction
- Economic development

Describe specific benefits (qualitative and quantitative) of the proposed initiative

Public Utilities Code Sections 740.1 and 8360:

Please describe how this technology or strategy addresses the principles articulated in California Public Utilities Code Sections 740.1 and 8360. The California Public Utilities Code is available online at www.leginfo.ca.gov/cgi-bin/calawquery?codesection=puc.