

ATTACHMENT A

I **ERRP Policy Questions**

1. Explain how ERRP addresses the following policy issues:

- Greenhouse Gas reduction
- 33% by 2020
- Executive Order S-06-06 (2006)
- AB 1969/SB 451
- Other

2. Explain how ERRP addresses the Renewables Portfolio Standard Gap within the 2020 timeframe with regard to the following four market constraints:

- Supply
- Demand
- Price
- Time

For these four factors discuss any relevant market trends or drivers such as:

- a. Escalating equipment prices
- b. "Low hanging fruit" has already been picked

Discuss renewable energy technology issues that impact the identified constraints

3. Describe the technologies within the ERRP portfolio with regard to:

- a. New technologies
- b. Enabling technologies

In this discussion address at least two other technologies which are not the currently proposed projects for ERRP. One of the technologies in the ERRP portfolio for each applicant should address bioenergy. Justify each technology with regard to the following issues:

▪ Technology Gap Analysis

Explain how each technology provides a solution to problems discussed in your RPS Gap Analysis

- Usage Gap
 - Market potential of technology
 - Existing usage of technology
- How each project will close the gap between market usage and market potential

▪ Benefits vs. Risk

- High risk vs. high return and vice versa
- Long term vs. short term benefits

▪ Commercialization path

- Long term vs. Short term
 - Identify and discuss each project phase over the next 6 years.
 - Identify the projected end date.

- Project milestones to evaluate progress
- Discuss and quantify the geographic applications:
 - IOU Service territory
 - Statewide
 - Regional
 - Other
- SWOT analysis
 - Strengths
 - Weaknesses
 - Opportunities
 - Threats
- Partnership Opportunities
 - NREL project assistance
 - IOU collaboration
 - Other

4. With regard to technology funding provide a budget for:

- Years 1-2. Provide a detailed budget for any funds requested for this time period.
- Years 3-4. You may designate a percent of the budget or a dollar amount by each technology or technology class.
- Years 5-6. You may designate a percent of the budget or a dollar amount by each technology or technology class.

Also provide a detailed analysis of other sources of funding outside of ERRP. Explain why the proposed projects are unable to obtain funding from those sources. Provide a detailed discussion of the following, if applicable:

- Matching Funds
- Partnerships

5. Discuss how ERRP projects have and will be identified for potential inclusion in ERRP.

- Discuss project identification:
 - Competitive solicitations
 - Bilateral negotiations
 - Other
- Discuss how each project identification mechanism will produce ratepayer benefits such as:
 - Highest value projects
 - IOU ownership that lowers overall energy costs
 - Knowledge of best technologies/reduction in contract failure rate
 - Patents
 - Other

6. Explain how each utility expects to apply peer review to the proposed projects, including communicating the outcome of the peer review and opinions of any technical experts to the Commission.

II Project Questions

1. Wastewater Facility Biomethane Demonstration Project

- a. How long is the permitting and approval process? What specific permits are needed, and what are the barriers to obtaining permits for this technology?
- b. What are the challenges specific to the capture of wastewater biomethane?
- c. What are the gas line interconnection hurdles, including any related to the distance of the facility from the gas transmission system? What are the relevant issues of the gas interconnection process?
- d. There might be overlap with current CEC pilot projects on biomethane. Can SDG&E identify these projects, and explain how they are complementary rather than duplicative?
- e. What is the potential resource in the SDG&E service territory? In California? Please quantify.
- f. How does wastewater technology differ from dairy or landfill gas technology? How could this funding improve dairy and landfill gas technologies?
- g. How does this relate to current or pending legislation that implements P.U. Code 399.20 such as AB 1969² or SB 451³?
- h. What experts have or will be consulted? What coordination will there be with the Government of Sweden?
- i. The application states that the project will address gas quality concerns and further the development of quality control standards for waste water based renewable biomethane. Is there an intended final product?
- j. Does this project address co-digestion?

2. Wave Connect Projects

- a. What, if any, community or other opposition have the WaveConnect projects received? How will PG&E address these concerns?
- b. How will joint jurisdiction over coastal waters affect the viability of commercializing WaveConnect? Please discuss the relevant issues relating to Federal Energy Regulatory Commission jurisdiction versus Minerals Management Service jurisdiction.

² D.07-07-027 implements AB 1969 and adopts similar terms and conditions for other resources.

³ SB 451, if signed, would cover all resources and increase statewide capacity from 250 MW to 1000 MW.

- c. How does PG&E intend to distribute overall permitting costs among WEC device manufacturers? Will they be collecting money from them? If so, how will that money be used?
- d. What will happen if FERC rejects PG&E's request for a preliminary permit for WaveConnect?
- e. Please provide more detail on possible PIER funding for WaveConnect Stage 1.
- f. Please go into detail about what rights are given as a result of obtaining a FERC development license, i.e. for what term will the license be valid?
- g. Please provide a more detailed analysis of project terms and economics.
- h. Please provide an updated status of the FERC preliminary permits.
- i. These permits are an asset, are they transferable? Will PG&E gain marketable knowledge from this process?
- j. Please provide an expected budget for Stage 2 and Stage 3.
- k. Please provide information on the involvement of other entities applying for FERC licenses or interested in commercializing wave technology (such as GE, Finavera, Voith Siemens, Oregon State University). Where are they receiving funding, and is there a duplication of effort?
- l. What happens to ERRP funds if ERRP is discontinued after the first 2 years, given that Stage 1 funding is for more than 2 years?
- m. What experts have or will be consulted?
- n. Please provide a line item budget for this project.

3. UC Merced California Solar Testing Center

- a. Why isn't funding for the UC Merced Solar Center adequate, meaning why is additional funding needed from PG&E?
- b. Is the rest of the funding for the UC Merced Solar Testing Center secure? What delays are possible if funding is not secure?
- c. To what extent can the other IOUs benefit?
- d. Please provide more analysis on the addressable market size.
- e. How much will the funding from solar testing come from collected fees? How large is PG&E's contribution to this part of the center?
- f. How does PG&E plan to use their credit toward solar testing services? Will PG&E focus only on utility scale technologies?
- g. How does the UC Merced Solar Testing Center get more renewable energy online?
- h. Please provide a line item budget for this project.

(END OF ATTACHMENT A)