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RE: Pacific Gas and Electric Comments on SB 1383 Pilot Financial Mechanism

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide feedback on the proposed financial mechanisms presented at the Air Resources Board's (ARB) Low Carbon Fuel Standard (LCFS) Workshop on June 26, 2017.

PG&E strongly supports California's clean energy goals and is committed to working with California's state agencies and other stakeholders to ensure the successful implementation of the dairy biomethane pilot projects (SB 1383 Dairy Pilots) required by SB 1383. The financial mechanism will be a critical component in the success of the SB 1383 Dairy Pilots. PG&E offers its comments and suggestions in the sections below.

I. The Financial Mechanism is Crucial for Project Viability and Must be Aligned with the CPUC Proceeding

PG&E appreciates ARB's work in developing a potential financial mechanism (and offers specific feedback in Section II). However, PG&E is concerned that, as it stands, funding for the mechanism has not been identified[1], and it does not have a clear administrator or implementation timeline, beyond release of a final report in January, 2018[2]. PG&E explains why this is critical below, and recommends that these issues be addressed in additional workshops.

Renewable natural gas derived from biogenic sources, such as dairy waste, have the potential to both reduce direct methane emissions from these sources and decarbonize other sectors, such as transportation or power production. Currently, a viable dairy digester market does not exist and, thus, the potential of this resource remains unclear. Recognizing this

[1] See slides 27, 28 and 29, here: https://www.arb.ca.gov/ fuels/lcfs/lcfs_meetings/062617presentation.pdf.
[2] See slide 32, here: https://www.arb.ca.gov/ fuels/lcfs/lcfs_meetings/062617presentation.pdf.

uncertainty, the Legislature passed SB 1383, which requires two separate and interrelated processes to enable at least five dairy pilot projects to be constructed.

First, the California Public Utilities Commission (CPUC) must open a proceeding to develop the dairy pilot project program, addressing such questions as project selection and evaluation, and the role of utility infrastructure support. Accordingly, the CPUC opened R.17-06-015 and is soliciting feedback on a CPUC staff proposal. However, even with enhanced utility support for infrastructure, which takes a major cost item off a developer's balance sheet, developers will still need to finance the remaining costs of the digester and associated infrastructure.

Since the revenue from the Low Carbon Fuel Standard (LCFS) program would be a major income source for the pilot projects, SB 1383 requires ARB to develop a mechanism to reduce the economic uncertainty associated with the value of environmental credits. Without this financial mechanism, developers may not be able to obtain financing and will face greater uncertainty on the costs they will have to bear. Better cost estimates will help the CPUC apply their selection criteria methodology to pick the projects that will not only be the most successful, but will also drive emissions reductions and help stakeholders gain real-world understanding of the potential of such projects.

It is therefore necessary for the development of the financial mechanism through ARB's process to sync with the timing of the solicitation process being developed through the CPUC's Order Instituting Rulemaking (OIR). A fully funded and fully functioning financial mechanism needs to be in place in time for dairy pilot developers to take advantage of it while going through the solicitation process that will be determined by the CPUC and will likely begin in 2018. The financial mechanism will be most useful if developers can utilize it to secure adequate financing for their projects, which will be a consideration in the ultimate selection of the projects that will be chosen for the pilots.

II. Contracts for Difference and Put Options are Both Potentially Viable Approaches if Funded

PG&E supports continued exploration of both Contracts for Difference (CfD) and Put Options to achieve the desired stability in the applicable environmental markets. However several potential barriers to both of these options exist and should be evaluated to ensure whichever mechanism is ultimately adopted will function as desired. In addition to urging ARB and CPUC to align the timing of their tasks from SB 1383, PG&E also offers the following comments on the options put forth by ARB in the workshop:

- **Funding:** As noted in the workshop, both options presented by ARB (CfD and Put Options) will need enough funding to cover the costs of a worst-case scenario (i.e. if environmental credit market - LCFS and possibly the Renewable Federal Standard (RFS) - prices drop to zero). In order to properly discuss the feasibility of either approach, possible funding sources should be identified in future workshops and ARB's final report.

- **Additional Market Research Needed**: It is not clear if there is sufficient market depth to support either a CfD Program or a Put Options Program at present. PG&E recommends ARB conduct additional analysis, as well as exploration of other types of financial mechanisms, including surveys of potential market participants to identify barriers to a smooth transition to implementation once adequate funding is identified and the program timelines between the CPUC and ARB are aligned.
- **Regulatory Issues:** Since this is a financial mechanism, it could be considered a swap under the Dodd-Frank Act. It would be helpful to obtain an exemption from the Commodities Futures Trading Commission (CFTC) for the Dairy Financial Mechanism. For example, the California Independent System Operator (CAISO) obtained an exemption for inter-scheduling coordinator transactions (ISTs) from the CFTC to clarify that the IST was not a swap under Dodd-Frank. It is possible that the ARB (or possibly the Contract Administrator) may need to obtain a similar exemption. PG&E recommends the ARB look into the potential applicability of Dodd-Frank to the dairy pilot financial mechanism for discussion in future workshops.
- **Other Items:** PG&E notes that is also important to anticipate the liquidity aspects of the options, i.e. how easy will it be to enter into and unwind these contracts within a reasonable bid and ask spread?

Thank you for the opportunity to provide feedback on ARB's proposed options for financial mechanisms. PG&E looks forward to participating with all stakeholders in continued discussions as this important mechanism is developed further.

Sincerely,

/s/

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