CONFIDENTIAL

April 22, 2010

To: Susannah Churchill (CPUC – Energy Division)
From: Joe Lawlor (PG&E)

Hi Susannah – below are the latest responses to your questions regarding the DTE Stockton contract.

Questions

1) Joe noted that PG&E was not necessarily planning to submit an amended PPA to CPUC if there was a price change due to increased costs from GHG law change. This seems problematic to me; Sean Simon says he has not heard of the same for other PG&E contracts. I can't find anything in the PPA that says PG&E will or won't come back to CPUC if price goes above max allowable price. I may recommend that we note in the resolution that any price increase above the max allowable price come back here for re-approval. Please let me know your thoughts.

As noted in our April 13th response to question 2, this term is very similar to the compliance cost caps that sometimes exist in other contracts for items like change in law where if costs exceed a certain level, PG&E will pick up any costs in excess of the cap. In addition, PG&E has agreed in other contracts to simply take all future GHG compliance costs associated with GHG emissions without an opportunity to walk away based on the size of the costs – examples of this would be all the pending contracts submitted in the LTRFO including the Commission approved Mariposa contract. The Russell City contract is another example of a Commission approved contract where PG&E assumed the GHG costs. However, Sean Simon is correct that to our knowledge there is no precedence for increased capital costs (not emission costs) if GHG rules require some type of capital improvement.

Considering only compliance costs (not capital), this change in law for DTE Stockton is limited only to GHG change in law and instead of PG&E agreeing to pay all GHG compliance costs in excess of a cap, PG&E has the opportunity to negotiate cost sharing beyond the threshold or to walk away; these are both beneficial outcomes for ratepayers compared to other precedents. PG&E believes the Commission should approve compliance costs increases without establishing further conditions.

PG&E can understand why the Commission would be concerned with potentially blanket approval of capital costs improvements pursuant to this GHG term at the outset of the contract, even though PG&E would have the right to refuse such improvements. For the case of capital improvements it therefore may be appropriate to consider a threshold beyond which the Commission would require PG&E to seek approval of additional costs. One way to calculate the threshold is to consider the price level of the contract that the Commission would have been comfortable approving -- if they would have been comfortable with the contract at prices $1-2/MWh more, then on an NPV basis a reasonable threshold between those amounts is $5 million. The result of establishing such a threshold is if the GHG reopener resulted in potential capital costs increase that would be borne by ratepayers exceeding $5M, and PG&E felt that the contract would still be in the ratepayer's interests (considering market conditions at the time) at the higher level, then PG&E would be required to seek Commission approval of the increased costs. The risk of such a term of course is that if the contract is indeed in the ratepayer's interest considering market conditions at the time, the time required for re-approval would give DTE the option to terminate and seek another buyer.

When negotiating this item PG&E proposed seeking CPUC approval of costs increases; the seller refused. Their objection seemed based on the simple commercial reality that they can't have their plant sit idle for an extended period of time while CPUC approval is sought – so the parties settled on a 60 day negotiating period. If such a negotiation ever does occur and PG&E believes the cost increase warrants additional CPUC review, then PG&E can propose that as part of that negotiation and also a method of how the costs should be handled for the period that CPUC approval is pending; however, as stated previously, DTE would not likely agree and would terminate the contract.

PG&E believes the contract term and re-opener are crafted in the ratepayer's interest and should be approved without the addition of further conditions for the case of future emissions. However, there is no precedence for potential future capital additions and in all likelihood PG&E would have made Commission approval a part of the negotiation at the time this type of cost was considered, if significant. Therefore, PG&E would not be opposed if the resolution added the capital dollar threshold of $5M. If the CPUC adds a threshold, requiring CPUC re-approval, then PG&E would ask that that threshold not be provided in the public documents and that the threshold be a net threshold, similar to how the term is written in the PPA that applies to the net additional capital costs that would be borne by ratepayers (netting costs against any potential allowances or benefits).

2) Has PG&E done any analysis assessing the possible range of GHG costs for biomass projects? If so, please send any work papers to support your conclusions.

PG&E's internal experts reviewed the developer's assumptions that this type of resource should not be assessed GHG costs and came to the same conclusion. Since PG&E does not anticipate any GHG costs will result on these resources, the negotiated contract terms that would allow PG&E to review any potential GHG compliance cost, creating exposure workpapers or scenarios, was not deemed necessary.

3) What assumptions are made to arrive at the rule that 1 MWh is produced from burning 1 bone dry ton?

A $1/BDT price change in fuel being roughly equal to a $1/MWh change in cost of electricity output from a biomass plant is a general rule of thumb. The basic underlying assumptions are:
1. A typical biomass plant's heat rate is approximately: **16,000 Btu/net kW**
2. Typical heat content of biomass is approximately: **8,000 Btu/lb (dry)** (or, 16,000 Btu/dry ton)

Therefore, the resulting ratio is approximately 1:1. Variability is relatively small year over a year but can be high from month to month. For contract and settlements simplicity, we decided to use this annual average simplifying assumption to avoid the administrative burden that would be inherent in a more complex settlement calculation that would likely show monthly variability due to weather but have little effect over several years.

PG&E confirmed the rule of thumb as appropriate with a forester that has expertise with biomass facilities. Further, DTE, as evidence to support the reasonableness of the "rule of thumb" provided Woodland's historic MWh to BDT conversion – which is:

2008: 166,351 MWh to 161,332 BDT = 1.03 MWh/BDT

2009: 159,504 Mwh to 162,874 BDT = 0.98 MWh/BDT