



## DESALINATION TASK FORCE MEMORANDUM

**TO:** DESALINATION TASK FORCE  
**FROM:** PROGRAM MANAGERS  
**SUBJECT:** ENERGY STUDY FOLLOW UP DISCUSSION  
**DATE:** MAY 16, 2012

**RECOMMENDATION:** That the scwd<sup>2</sup> Desalination Task Force receive information on the role and utility of the Energy Study and provide guidance on how and/or when to implement any of the 11 energy efficient and greenhouse gas (GHG) reduction projects that were endorsed by the Energy Technical Working Group (ETWG).

**BACKGROUND:** At its April 2012 meeting, the Task Force discussed five outstanding work items.

1. Amendment of the MOA
2. Development of a recommendation for ongoing governance
3. Direction on projects and programs associated with the Energy Study
4. Review of the Intertie Analysis
5. Review of the Preliminary Design Report for the SWRO Treatment Facility

With regards to the Energy Study, the Task Force recommended that the GHG reduction projects only be implemented following approval of the water supply project (Project). The following discussion is intended to add clarification to this recommendation as staff wants to ensure that the near- and long-term role of the Energy Study is clearly understood, as well as the implications of implementing or not implementing projects prior to Project approval.

**DISCUSSION:** The Energy Study will serve multiple purposes for the Project as described here.

*Inform the Environmental Impact Report (EIR) on the technical aspects of the energy and GHG impact of the Project.*

The Energy Study informs the EIR on all technical aspects of the energy requirements and direct and indirect GHG emissions of the Project and identifies a group of feasible GHG reduction projects that have the ability to meet the net carbon neutral objective of the Project as outlined in the EIR.

*Inform and guide agency policy makers in evaluating and selecting future GHG reduction projects and programs.*

The overarching goal of the ETWG work was to build and endorse a sustainable and reliable method for evaluating and assessing GHG reduction projects and programs. This ETWG method

was used to assemble and further endorse an initial selection of feasible projects to demonstrate both agencies' realistic ability to meet the net carbon neutral objective. This work is carefully documented in the Energy Study to support the EIR analysis as well as to give policy-makers a road map for selecting suitable GHG reduction projects and programs should the proposed desalination project be approved.

*Serve as part of a permit application to those resource agencies requiring an energy and GHG reduction plan.*

The Energy Study meets the understood requirements of the various resource agencies having jurisdiction on this topic: the California Coastal Commission and California State Lands Commission.

### **Items for Discussion and Clarification At the Task Force Meeting**

1. The EIR will identify a subset of projects from the ETWG that could feasibly achieve a net carbon neutral objective. It will also recognize that all the projects endorsed by the ETWG are feasible and could be considered by the agencies in the future to achieve the net carbon neutral objective.
2. The Energy Study can provide guidance for the District and City in selecting projects. I.e., in the future, should the Project be approved, each agency would confirm that the listed projects remain favorable, and/or additional projects should be identified and/or pursued.
3. What are the advantages and disadvantages for the agencies if they implement some projects now? For example: Roof top solar at District downtown offices; Microhydro unit at Graham Hill; Advanced conservation within either or both agencies. Some items to consider include credit sharing with the other agency or involved party, and ability to bank credits.
4. What are the issues with additionality for any of these projects?

Joe Monaco, the **scwd**<sup>2</sup> Permitting Advisor from Dudek, will be attending the meeting to assist with the discussion and answer questions on permitting considerations.

**FISCAL IMPACT:** There is no fiscal impact associated with this item.

**ATTACHMENTS:** 11 ETWG–endorsed projects

<b>11 Endorsed Projects and Programs</b>		
<b>Project Title</b>	<b>Annual GHG Reduction Potential</b>	<b>Lifecycle GHG Reduction Cost (\$/MT)</b>
<b>Water and Energy Efficiency Projects</b>		
High efficiency washing machine rebates (accelerated program)	453	600
Commercial and Residential Solar Incentive Program	246	-0
Implement advanced mixing technologies at SCWWTP	266	-45
Implement additional energy savings at SCWWTP	329	-215
Improve pump & motor efficiency (accelerated program)	29	980
<b>Renewable Energy Projects</b>		
Program to convert food waste to energy at SCWWTP	810	276
Invest in renewable energy projects instead of purchasing power from PG&E	Variable (as required)	Variable (as required)
Install local solar projects	750	580
Install micro-hydropower turbine at Graham Hill WTP	76	-212
<b>GHG Reduction Projects</b>		
Use Recovered CO2 from local sources for desal process	70	475
Purchase certified GHG Offsets	Variable (as required)	15-50