Attachment 1 – Data Request regarding SDG&E's GHG Procurement Plan

Question 4:

The following question (a) was posed in a Track II data request, R.10-05-006-SDGE-004. DRA is restating the question in this Track I/Track III discovery request, as it relates to SDG&E's GHG Procurement Plan and the response may be needed for the record in this Track.

a. Please provide SDG&E's forecasted GHG requirements from 2012-2020 under CARB's expected GHG compliance program (i.e. cap-and-trade program). Provide a breakdown of the forecasted GHG requirements by resource and contract type. Indicate whether the forecasted GHG emissions are physical GHG emissions that SDG&E is responsible for under CARB's cap-and-trade regulation, or whether the forecasted GHG emissions result in a financial exposure only.

b. Does the information provided in response to the request in subpart (a) above regarding SDG&E's forecasted GHG requirements incorporate the new information in the ARB's July 2011 Discussion Draft (pages A-79 through A-82) regarding replacement electricity that substitutes for electricity from a variable renewable resource?

   b.i Please provide a list of all contracts that SDG&E has in which replacement electricity is being used to substitute for electricity from a variable renewable resource.

   b.ii Does SDG&E have any contracts for replacement electricity in which the emissions factor of that replacement electricity is greater than the ARB default emission factor? Please list all such contracts and the emissions factor of that replacement electricity.

   b.iii Please provide a discussion of how the updated Section 95852 of ARB's July 2011 Discussion Draft impacts SDG&E's forecasted GHG requirements under ARB's cap-and-trade program.

SDG&E Response to Q4:

a. The GHG forecast in Track I/Track III is only for the total combined service area of all three utilities and thus a forecast for SDG&E bundled customers does not exist in Track I. The forecast provided in SDG&E Track II plan was based on the mandated assumptions provided in the scoping memo. As SDG&E has pointed out, many of those assumptions are out-of-date and do not reflect SDG&E's current bundled customer portfolio.

The table below sets forth the type of data requested, but from the publicly available 2009 IEPR load forecast with some assumptions regarding (1) direct access and community choice aggregation (15% of total service area load), (2) SDG&E will be responsible for physical acquisition of allowances some contracted-for energy so that the breakdown of physical GHG emissions that SDG&E is responsible for under CARB's cap-and-trade regulation versus financial exposure only (SDG&E will have physical responsibility for 95% of non-QF gas-fired generation, (3) GHG reductions of out-of-state renewable (all out-of-state renewables will reduce GHG emissions), and (4) emissions factor for gas generation (0.4 MT for SDG&E controlled generation and 0.436 for QF power and purchased power). The 2009 IEPR forecast formed the basis of SDG&E's compliance obligation in ARB's determination of free allowances allocated to utilities on behalf of their customers.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Service Area Demand after EE, aMW, not GWh	2,544	2,589	2,623	2,658	2,689	2,722	2,755	2,789	2,824	24,19
DA and CCA assumed15 % of servicearea load	382	388	393	399	403	408	413	418	424	3,62
	2,162	2,201	2,230	2,259	2,286	2,314	2,341	2,371	2,401	20,56
Bundled Load including losses, GWh	18,941	19,278	19,532	19,791	20,023	20,268	20,510	20,769	21,029	180,14
Supply aMW, not GWh										
Hydroelectricity> 30MW (Line 14b of S-2)	5	5	5	4	4	4	4	4	4	3
State-Defined Eligible Renewable Energy, omitting QFs (S-2 lines 26a, 26c, 26d)	473	506	538	583	626	659	745	806	869	5,80
QFs: Renewable	2	2	2	2	2	1	1	1	1	1
Generation aMW, not GWh	480	512	545	588	632	665	750	811	874	5,85
Nuclear Plant : San Onofre										
Generation aMW, not GWh	425	427	427	424	425	424	424	424	425	3,82
Coal										
Coal Plant Name: Boardman										
Generation aMW, not MWh	69	69	0	0	0	0	0	0	0	13
Emissions thousands of metric tons	588	588	0	0	0	0	0	0	0	1,17
Gas										
QFs: Non-Renewable	180	180	180	180	180	180	180	180	180	1,61
	688	688	687	687	688	686	686	686	686	6,18
Residual Generation at Default Emission Rate	1,389	1,401	1,472	1,466	1,452	1,454	1,401	1,375	1,346	12,75
Less DA/CCA	382	388	393	399	403	408	413	418	424	3,62
	1,008	1,012	1,078	1,067	1,049	1,046	988	956	922	9,12
	3,531	3,547	3,778	3,739	3,675	3,664	3,463	3,351	3,230	31,97
Emissions: Thousands of tonnes										
from Coal	588	588	0	0	0	0	0	0	0	1,17
from owned and contractually obligated gas*	3,339	3,354	3,572	3,535	3,474	3,464	3,274	3,168	3,054	30,23
from gas with financial obligation, no physical	881	881	893	890	889	885	875	869	862	7,92
Total emissions - thousands of tonnes	4,808	4,823	4,465	4,426	4,363	4,350	4,149	4,037	3,916	39,33

* - assumes some gas generationis tagged with zero GHG attribute and so differs from tables in Appendix to Ryan Miller Testimony assumes 95% is owned or contractually obligated

b. No, SDG&E does not have a forecast for 2012-2020 that is consistent with the Discussion Draft. The table included in Appendix A to SDG&E-2, however, is consistent with the Discussion Draft.

b.i Glacier I, approved 10/2/08; Glacier II, approved 8/20/09; and Rim Rock, approved 7/14/11 are variable renewable resources that have replacement electricity. However, the replacement power does not meet the ARB Discussion Draft requirements as being from the same Balancing Authority and so the variable renewable resources do not count as a zero GHG resources.

b.ii No, SDG&E does not have any replacement power for purposes of the Renewable Portfolio Standard that qualifies as replacement power as defined in the Discussion Draft.

b.iii As stated above, the ARB Discussion Draft does not impact the forecasted GHG requirements shown in Appendix A to SDG&E-2 since Glacier and Rim Rock do not have replacement power from the same Balancing Authority and thus the variable renewable resources do not qualify as zero GHG emission resources.