IID comments on the ISO 2015-2016 Transmission Planning Process Stakeholder meeting 9/21-22/2015

We appreciate CAISO Staff efforts during the two days Stakeholders meetings:

Background:

In April 2015 IID provided the ISO with IID's 10 year proposed transmission upgrade plan. IID proposed upgrades were contingent upon ISO's reversal of its zero increase MIC allocation for the IID Balancing Authority Area (BAA) because ISO's MIC allocation severely constrains renewable energy development in the IID BAA.

Section I: IID proposed suspension of transmission upgrades on the "S" line:

The ISO's action last year in decreasing additional deliverability from the IID BA from 938 MW to zero has negatively impacted the market for new renewable development in the IID BAA. This reduction in IID MIC coming after IID had already commenced construction of the ISO approved Path 42 upgrades (at a cost of over \$30 million) was shocking. The decrease of the IID MIC will not allow IID to recover its costs for those upgrades. The ISO's actions in virtually shutting down renewable energy development in one of the most impoverished areas of the State is not only a gross disservice to the IID and the people of the Imperial Valley (already suffering a 27% unemployment rate), it constitutes a dereliction of ISO's duty to California. By suffocating renewable energy development in the IID BAA, the ISO is depriving California of vast amounts of geothermal and solar power located within the State, under the governance of people thirsting to produce and export that power. ISO's actions, already indefensible, became even more intolerable in light of California's decision to boost renewables to 50%. Where better to obtain that power than the IID BAA?

IID went forward with costly upgrades to Path 42 in reliance on ISO assurances only to face betrayal when ISO slashed the IID MIC from 1400 MW to 462 MW, a 938 MW reduction. Accordingly, IID insists upon written assurances from CAISO that any upgrades to the "S" line will *increase*, and not decrease, IID's MIC at the IV substation intertie. Pending receipt of such assurances and specification of the amount of MIC increase, IID is left with little option but to suspend such "S" line upgrades in order to avoid further stranded investments.

Section II - Interaction between IID "S" and ISO SWPL 500kv line:

In light of the suspension of the IID transmission upgrade on several lines including the "S" line, IID has made the assumptions described below in regard to its system. We ask the ISO to utilize these new IID assumptions regarding IID facilities in all its 2015 -2016 Transmission Planning studies, including deliverability and calculation of IID MIC.

Assume:

- a. that IID has entered into three long term point to point Transmission Service Agreements (TSA) and has sold a total of 190 MWs of transmission capacity on the IID – ISO SDGE intertie, or the "S" Line in the direction of El Centro to Imperial Valley 230kv sub. The 190 MW TSA was in effect starting 2015 and will continue to 2035. The users of the new TSA are paying IID for transmission capacity in accordance with the IID Tariff.
- b. that the ISO limits the SWPL line in all its Transmission Planning studies in accordance with ISO Procedure #7820. Under that procedure, SWPL Flow = 796 MW.¹

As stated above, the flow of the SWPL line is highly dependent on the transmission availability of the IID "S" line. For instance, if the IID "S" line is fully subscribed from El Centro to the Imperial Valley Sub, then the SWPL flow would be nearly zero.

Recently, IID has received two requests, totaling 150 MW, to acquire long term point to point Transmission Service Agreements from El Centro to the Imperial Valley 230kv. If IID grants an additional 150 MW, this will result in a total of 340 MW ²of exports from IID to ISO SDGE intertie through the "S" line. The result would significantly impact the SWPL flow, and in fact, limit the SWPL flow to 241 MW.

The impact of the loss of the SWPL line, as we all witnessed during the September 8, 2011 outage remains a critical contingency to both BAAs. Although the SWPL line is not in the IID BAA, the loss of the SWPL line represents the single worst contingency for IID BAA. Therefore, IID wishes to work with the CAISO to ensure reliability to both BAA's. As stated in ISO Procedure # 7820, 27% of the SWPL line flow depends on IID's "S" line available capacity. IID finds itself in an unenviable position where the users of SWPL do not compensate IID for the use of its transmission capacity on the "S" line, while other users of the "S" line are paying for transmission capacity on the same "S" line.

IID have re-submitted twelve bases cases to CAISO that include the suspension of IID upgrades. The summary of the assumptions and major flows on the summer peak 2017 case are as follow:

¹ For years the IID has voiced a concern that the ISO has relied on IID Transmission Capacity,

specifically on the "S" line, to flow energy on the SWPL with zero compensation. This action concurrently resulted in blocking IID's connected renewable generation from utilizing IID's own lines to export to the ISO. For instance, the ability for the ISO to flow 796 MW can only be achieved by relying on 215 MW on IID "S" line capacity. IID requests that ISO advise its Scheduling Coordinator that 27% of the SWPL flow would require obtaining IID transmission capacity reservation and payment to IID.

² IID 230KV "S" Line links IID BAA to SGDE and the CAISO BAA. The normal rating of the line is 370 MW and its emergency rating is 405 MW.

The Tables below summarizes the three cases:

Case #1. IID April 2015 submission to CAISO

Case #2. Summary of CAISO summer reliability case for 2016

Case #3 Summary of Revised IID Summer Peak case for 2017

	Case #1 (IID 4/15 submission to ISO)			Case #2 (ISO Reliability case)			Case #3 (Revised IID case)		
Area	Gen (MW)	Load (MW)	Int (MW)	Gen (MW)	Load (MW)	Int (MW)	Gen (MW)	Load (MW)	Int (MW)
IID	1,450	1,092	313	1,458	1,092	313	1,653	1,092	503
ARIZONA	25,750	19,309	5,930	26,678	19,309	6,861	22,345	19,309	2,562
SDG&E	3,466	5,175	-1,879	3,973	4,952	-1,146	4,355	5,175	-948
SCE	15,744	22,833	-7,524	13,500	24,471	-11,546	17,886	22,833	-5,273
PG&E	22,904	22,918	-734	24,349	22,918	750	22,884	22,918	-730
CAISO	42,114	50,925	-10,137	41,822	52,341	-11,942	45,125	50,925	-6,951

	Case 1 (IID 4/15 submission to ISO)	Case 2 (ISO Reliability case)	Case 3 (Revised IID case)
Key Line flows	MW	MW	MW
Path 42	216	327	343
"S" line	64	-17	138
Export to ISO	280	310	481
N. Gila - IV	1648	1402	826
PV - CR	1122	1678	548

We understand that it may be late for the CAISO to modify IID assumptions to reflect the suspension of the IID upgrades. We appreciate CAISO taking into account the circumstances under which IID have suspended these upgrades. These circumstances are layout in Section I. The CAISO changes in IID BAA MIC are the primary reason for IID suspension of its proposed upgrades and thus IID changes should be incorporated in CAISO 2015-2016 planning cycle.

Furthermore, We have re-submitted the twelve revised base cases to CAISO, which will reflect the suspension of IID's "S" line and other upgrades, the increased exports on the "S" line, and enforcing ISO operating procedures on the SWPL line.