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## Re: Docket No. 13-IEP-1L: Comments on Joint Workshop on Electricity Infrastructure Issues Resulting from SONGS Retirement

To Whom It May Concern:

Southern California Edison Company (SCE) appreciates having the opportunity to comment on the Joint Workshop to consider the consequence of the closure of Once Through Cooling (OTC) generating facilities including the recently announced San Onofre Nuclear Generating Station Unit Nos. 2 and 3 (SONGS) retirement. During the workshop, SCE provided the results of its new studies of the effects on Southern California of both the SONGS closure and the impending closure of OTC generating facilities. SCE studies show that there will need to be a combination of new transmission, Preferred Resource (Energy Efficiency (EE), Demand Response (DR), and renewables), and conventional gas-fired generation (GFG) facilities to assure customer needs are met through reliable operation of the electric grid in Southern California. Of course, efforts to assure reliable service must also be consistent with reasonable costs to all users.

The various state agencies participating in the Workshop will all participate in the extensive effort necessary to procure, develop, build, and commence operation of needed new facilities. Electric system reliability is critical to a healthy California economy. SCE is eager to meet the challenge of assuring our customers reliable service that also meets the State's policy preference for Preferred Resources when they can form a portfolio to provide needed reliability and flexible operation. The rest of these comments focus on two components that are needed to assure electric system reliability discussed at the Workshop: (1) SCE's Preferred Resources Living Pilot Program (Living Pilot); and the (2) Mesa Loop-In Transmission Project.

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## **Preferred Resources Living Pilot Program**

One of the major challenges to the use of Preferred Resources<sup>1</sup> to meet on-going reliability needs has been a level of uncertainty whether these resources would be available where and when needed. SCE intends to pursue a Living Pilot targeted in the high impact area, which includes south Orange County, to procure up to 400MW of competitively priced Preferred Resources to meet reliability needs in collaboration with the California Public Utilities Commission (CPUC), California Energy Commission (Energy Commission), California Independent System Operator (CAISO), and stakeholders. The Living Pilot will provide "real time, real world" experience to reduce uncertainty associated with the application and value of Preferred Resources, and encourage greater participation and use of such technologies. The Living Pilot will include (1) performance attributes to support reliability needs; (2) metrics, measurement, and evaluation protocols to report the efficacy of a portfolio of various Preferred Resources; and (3) methods for applying lessons learned for improvements. This design will ensure that the Living Pilot provides tangible results that can inform reliability analysis and resulting system-wide procurement and investment decisions for years to come.

SCE has considerable experience developing and managing EE and DR programs, with over 5,490 GigaWatt hours (GWh) and 1,017 Megawatts (MW) in energy savings during the 2010 – 2012 program cycle, and over 1,300 MW in DR programs under contract as of April 2013. SCE plans to leverage this experience in connection with its Pilot to identify and pursue competitively priced Preferred Resources, and to capture synergies, such as DR-capable EE (e.g., Heating Ventilation and Air Conditioning (HVAC) with DR capability) and DR-enabled DG (e.g., solar photovoltaic (PV) with smart inverters/ storage). The Living Pilot will be designed to help inform electric system operators, transmission planners, and procurement entities, regarding the use of Preferred Resources, to provide greater certainty about the ability and availability of these resources to perform where and when needed to meet local reliability, with the objective of an integrated planning of resources in the vicinity of selected substations most affected by the recent retirement of SONGS.

In order to acquire the most information quickly, the Living Pilot will start with existing DR from SCE's current programs and contracts. These DR resources will not count toward Track 1 LCR Preferred Resource procurement. As the Living Pilot will require additional resources, SCE plans to leverage the procurement opportunity in the Decision which authorized SCE to procure up to 400 MW of Preferred Resources, to be available by 2021. SCE will also consider additional procurement authorization for Preferred Resources as part of the LTPP Track 4 proceeding.

<sup>&</sup>lt;sup>1</sup> SCE uses the term Preferred Resources in the context of the State's Preferred Resource Loading Order, as described in the Energy Action Plan II. Energy Storage is a potential enabling technology for intermittent renewable resources, but is not a Preferred Resource because it stores power regardless of how that power is produced. That said, SCE may also procure and study Energy Storage as part of its Preferred Resource Living Pilot Program.

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SCE expects to acquire a portfolio of Preferred Resources that will provide sufficient assurance of "dependable" load reduction or generation when needed for local reliability. SCE's Living Pilot will be a "living" program allowing measurement, assessment, critique, and continual improvements to the program. The improvements will be used to create a better understanding of the resource attributes and value to increase procurement of Preferred Resources.

## **Mesa Loop-In Information**

In response to a question from Commissioner Florio, SCE offers the following additional information regarding the scope of the Mesa Loop-in project. The Mesa Loop-in project involves expanding SCE's existing 230/66/16 kilovolt (kV) substation to include 500 kV service, in order to bring higher voltage electric service into its load center. The project also involved the looping into Mesa Substation, two existing 230 kV lines which pass directly by Mesa Substation, as well as some additional line and termination work at SCE's Vincent and Mire Loma substations.

In providing a new 500 kV substation to serve western Los Angeles Basin (LA Basin), the Mesa Loop-in Project will provide increased margin to the electric system. It will also provide for a significant reduction in the amount of generation that would otherwise be required in the western LA Basin and provide relief to the west of Serrano Substation corridor. The project scope for Mesa Loop-in has limited impact to the public since the vast majority of work is at an existing SCE substation and within SCE owned land.

Based on preliminary engineering assessments, the new Mesa 500/230/66/16 kV Substation will require approximately 70 acres of land. The existing Mesa 230 kV Substation fence line encloses approximately 23 acres. There is a separately fenced area to the southwest adjacent to Mesa Substation used by SCE as an equipment yard which enclose approximately 19 acres. Another SCE-owned 27 acres is available located southeast of Mesa Substation. The current work scope outside the new Mesa Substation is entirely within SCE right of way. SCE's preliminary transmission planning for this project includes removal of four towers/poles and seven spans (conductors between towers/poles), and addition of one tower and five spans. However, this plan is subject to further refinement based more advanced engineering and on input from stakeholders.

## **Engagement with Local Communities**

SCE supports CPUC Commissioner Florio's direction to engage local communities early on in the process of developing a balanced portfolio of transmission, preferred resources, and conventional GFG to meet reliability needs, and will be actively engaging local communities in southern California. California Energy Commission Page 4 July 29, 2013

If you have any questions or need additional information about our presentations at the workshop or the information provided here, please contact me at (916) 441-2369.

Very truly yours,

/s/ Manuel Alvarez

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