COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) ON PREFERRED RESOURCES THAT SHOULD BE PILOTED AND TESTED AS PART OF THE LIVING PILOT, FOR THE NOVEMBER 6, 2013 SYMPOSIUM: "DEFINING THE LIVING PILOT"

OCTOBER 21, 2013

NRDC appreciates this opportunity to propose the types of Preferred Resources that should be tested as part of Southern California Edison's Living Pilot. NRDC is a non-profit membership organization with a longstanding interest in minimizing the societal costs of reliable energy services required by a healthy California economy. NRDC strongly supports a Living Pilot that demonstrates the use of Preferred Resources to meet reliability needs, with the goal of replacing the San Onofre Generating Station (SONGS) with Preferred Resources to the extent possible. In all of its efforts associated with the Living Pilot, Southern California Edison (SCE) and the California Public Utilities Commission (CPUC) should:

- Use results to improve the accuracy of California's current methodologies that estimate the ability of Preferred Resources to delay or obviate the need for transmission and distribution projects in targeted areas.
- Compare strategies with other utilities that are presently using Preferred Resources to meet reliability needs, like Consolidated Edison¹ and Efficiency Vermont,² or those that have in the past, like Pacific Gas & Electric.³
- Engage the targeted communities in the effort to replace SONGs with local, clean energy, working with the Governor's office, state agencies, local governments, businesses, and community organizations.
- Leverage smart meter data and behavioral science to find attractive opportunities to deploy Preferred Resources and engage customers.
- Favor proposals that deploy Preferred Resources in an integrated manner for a specific customer proposals that pair energy efficiency with solar, for example in order to make best use of customer contacts.
- As soon as possible, provide the market with information on the locations and attributes (timing, duration, quantity, and contractual requirements) of the Preferred Resources that will be deployed in the Living Pilot.

Energy efficiency should be the first priority resource in the Living Pilot, consistent with the loading order. It is important that efforts under the Living Pilot be coordinated with and incremental to (i.e., *deeper* and/or *broader* than) existing efforts, to ensure customers are not confused and to avoid double counting. Under the Living Pilot, SCE should:

• Conduct a Request for Offers for energy efficiency service providers to permanently reduce demand at specific hours of the day in specific locations, with non-performance mitigated contractually

¹ http://www.fortnightly.com/fortnightly/2011/08/planning-efficiency

² As described in Neme, C., and Sedano, S., U.S. Experience with Energy Efficiency as a Transmission and Distribution System Resource, Regulatory Assistance Project, February 2012, available at: www.raponline.org/document/download/id/4765.

www.raponline.org/document/download/ld/

³ The Delta Project in the early 1990s

- Modify existing utility programs and existing third-party contracts to enhance uptake or better target demand reductions to specific hours
- In analyzing the cost-effectiveness of energy efficiency investments, use an avoided cost "adder" to reflect the generation, transmission, and distribution investments that will be avoided in the targeted areas.

Demand Response resources should be procured using a Request for Offers for demand reductions of specific duration, frequency, size, and location. SCE should raise the penetration of voluntary time of use rates in the Johanna-Santiago vicinity, especially amongst electric vehicle customers, using marketing and outreach best practices from SMUD's Smart Pricing Pilot.⁴ Time of use rates may need to be modified to align with local area reliability needs. SCE should also modify existing utility programs and existing third-party contracts to enhance uptake and align programs with the resource attributes necessary for reliance on demand response as a reliability resource (duration, frequency, size of demand reduction). The Living Pilot should also test the use of **Smart Charging** to modify the load shape of electric vehicles. The CPUC and SCE should ensure that dirty back-up generators are not used as demand response resources.

SCE should of course seek **Clean Distributed Generation** and substation-level **Energy Storage** resources in the Living Pilot. SCE should test **Smart Charging** as an energy storage resource and a means to integrate variable renewable generation. **Smart Inverters** should also be tested, including retrofits of a percentage of existing inverters and requiring smart inverters on all large solar installations in the target area.

NRDC appreciates the opportunity to propose resources for testing in the Living Pilot, and looks forward to further engagement.

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⁴ George, S., Interim Load Impact Results from SMUD's Smart Pricing Options Pilot, National Town Meeting on Demand Response and Smart Grid, May 2013, available at: http://www.demandresponsetownmeeting.com/wp-content/uploads/2012/03/1A-0830-GEORGE.pdf.