

2013 Council Study Issue

DPW 10-09 Reliable Electrical Power Options**Lead Department** Public Works**History** **1 year ago** Deferred **2 years ago** Deferred**1. What are the key elements of the issue? What precipitated it?**

This study issue was proposed by Vice Mayor Moylan and supported by Councilmember Hamilton at the December 8, 2009 study session on the City's Economic Development Program. A major factor in locating businesses within Sunnyvale or relocating out of Sunnyvale is the availability of reliable electrical power, or lack thereof. Businesses have raised concerns about frequent power outages and general reliability of the PG&E utility, affecting their operations. PG&E has indicated that the poor condition and or inadequacy of the local distribution system is a cause of power failures.

This study issue would consider options to provide a better, more reliable power system in the City of Sunnyvale. Some options to explore are: whether the City may provide its own power system; whether the City can purchase and wheel power through existing distribution systems, what role the City can play in getting the local power distribution system improved; and, other options that will further or satisfy the goals of providing reliable, cost-effective power.

This study issue was ranked for study in 2010, 2011 and 2012, however, it was not funded in any of the fiscal year budgets. As requested by Council, staff worked with the Moffett Park Business and Transportation Association to see if they would fund this study. While there was great interest in the study they also did not identify any funding. Therefore, this study issue is being brought back for Council consideration as part of the 2013 study issues process.

In 2012, Council combined Part B of Study Issue ESD 12-04 which would evaluate the feasibility of a large solar system with this study issue. Council felt the two issues were related and could be accomplished more efficiently under one study. Given recent progress on the Reliable Electric Power options study issue, a separate study issue has now been created for evaluating solar power so Council can consider and rank it separately. See DPW 13-11 *Community Solar Array System*.

2. How does this relate to the General Plan or existing City Policy?

X. ROBUST ECONOMY: To retain, attract and support strong and innovative businesses, which provide quality jobs for the city's workforce, tax revenue to support public services, and a positive reputation for Sunnyvale as a center of creativity and productivity.

Sunnyvale sits in the very center of the Silicon Valley, world renowned for its innovative and entrepreneurial spirit. The businesses which have grown up in the community bring wealth to its residents and cutting edge products to the world market. But the competition for such businesses, among the cities of the region and among similar regions throughout the world, is intense. To maintain its position of predominance, Sunnyvale must continue to provide opportunities for strong and innovative businesses, both large and small, including start-up companies and headquarters of large successful companies, to locate in the city; and it must strengthen its reputation as a business friendly community.

3. Origin of issue**Council Member(s)** Vice Mayor Moylan, Councilmember Hamilton**Board or Commission** Sustainability Commission

4. Staff effort required to conduct study Major**Briefly explain the level of staff effort required**

Staff would write scopes of work and conduct a Request for Proposals to hire a legal consultant, versed in CPUC, and Energy Law, as well as an electrical power system engineering consultant to consider feasibility, costs, and recommendations on opportunities that would serve the City and business community. Staff would also provide information, oversight, and review, concluding with a report, presentation, and study session.

5. Multiple Year Project? Yes **Planned Completion Year** 2014**6. Expected participation involved in the study issue process?**

Does Council need to approve a work plan? No
Does this issue require review by a Board/Commission? Yes
If so, which? Sustainability Commission
Is a Council Study Session anticipated? No

7. Briefly explain if a budget modification will be required to study this issue

Amount of budget modification required 165000

Explanation

This study is estimated to take approximately 260 to 300 hours of staff time to administer consultant contract(s). A power systems consultant would be hired to research information and evaluate options. Legal expertise, familiar with Public Utilities Commission and other power related regulations would be hired to coordinate regulatory and environmental compliance. The consultant hours are estimated at 1040 hours or about \$165,000.

8. Briefly explain potential costs of implementing study results, note estimated capital and operating costs, as well as estimated revenue/savings, include dollar amounts

Are there costs of implementation? Yes

Explanation

Costs to improve the power distribution system or to establish the City as a power supplier are unknown at this time. Entering the market as a new power utility would have considerable start-up costs and may subject the City and consumers to substantial financial risk.

9. Staff Recommendation

Staff Recommendation Drop

If 'Support', 'Drop' or 'Defer', explain

The City Council initiated a process several years ago which caused PG&E to focus its efforts on improving the power grid in the Moffett Park area. Further efforts by the City and the Moffett Park Business Group (MPBG) kept the pressure on PG&E to make investments in the power system.

On September 18, 2012, a Council study session was held to provide updated information on power reliability in the Moffett Park area. Representatives from PG&E and the MPBG attended. PG&E provided data on the number and duration of power outages in the Moffett Park area that showed significant improvement over the past several years. PG&E also discussed improvements that have been made to the power system over the past several years as well as planned future improvements. The MPBG has developed a good working relationship with PG&E. They have expressed appreciation for improvements that have been made and urged PG&E to continue

investing in measures to improve reliability.

As directed by Council in 2001, staff looked into the issue of a long-term energy solution as part of research efforts on Energy Strategies for Sunnyvale (RTC 01-288 dated August 7, 2001.) Staff found that a power plant, or "peaker plant" (smaller capacity plant) was not feasible in Sunnyvale.

Staff is still participating in the Joint Venture Silicon Valley's initiative for a Moffett Park Smart Grid. This study and potential project would leverage federal Department of Energy funds through the Lawrence Berkeley Laboratory. The "Moffett Park Smart Grid" would involve new power distribution, power consumption, power generation, and power storage with data to anticipate and respond to variable power demands in a more efficient manner. The goal would be to create a grant-funded demonstration project in the area north of Highway 101 between Mountain View to the City of Santa Clara. This effort helps alleviate the need for Sunnyvale to do its own power reliability study.

Reviewed by



Department Director

10-22-12

Date

Approved by



City Manager

10-22-12

Date