

SAN JOSE/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

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**SPECIAL TPAC
AGENDA**

4:30 p.m.

September 23, 2010

Room T-1047

1. **ROLL CALL**
2. **MINUTES**
3. **UNFINISHED BUSINESS**
4. **CORRESPONDENCE**
5. **REPORTS**
6. **AGREEMENTS**
 - A. Action Item – TPAC Recommendation for Request for Proposal for a Power Purchase and Site Lease; Adoption

The following action items are scheduled to be considered by the San Jose City Council on October 5, 2010:

1. It is recommended that the City Council accept the report on the Request for Proposals for a Power Purchase and Site Lease Agreement for Fuel Cell System Power Production and adopt a resolution authorizing the Director of Finance to execute a Power Purchase Agreement, Site Lease and other necessary documents, with UTS Bio-Energy SJ-1, LLC (UTS) (Encinitas, CA) to purchase fuel cell energy at the Plant for a 20 year term.
7. **STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC**
8. **MISCELLANEOUS**
 - A. The next TPAC meeting will be Thursday, October 14, 2010, at 4:30 p.m. City Hall, Environmental Services, 10th Floor, Room 1047.

9. **OPEN FORUM**

10. **ADJOURNMENT**

NOTE: If you have any changes or questions, please contact Monica Perras, Environmental Services, 408-975-2515.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please call Monica Perras at (408) 975-2515 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

Availability of Public Records. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at San Jose City Hall, 200 East Santa Clara Street, 10th Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Scott Johnson
John Stufflebean

SUBJECT: SEE BELOW

DATE: 09-16-10

Approved

Date

9/17/10

COUNCIL DISTRICT: City-Wide

SUBJECT: REPORT ON REQUEST FOR PROPOSALS FOR A POWER PURCHASE AGREEMENT TO FINANCE, ENGINEER, INSTALL, COMMISSION, AND MAINTAIN A TURNKEY BIO-GAS FUEL CELL CO-GENERATION SYSTEM AT THE SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT (PLANT).

RECOMMENDATION

It is recommended that the City Council accept the report on the Request for Proposals for a Power Purchase and Site Lease Agreement for Fuel Cell System Power Production and adopt a resolution authorizing the Director of Finance to execute a Power Purchase Agreement, Site Lease and other necessary documents, with UTS Bio-Energy SJ-1, LLC (UTS) (Encinitas, CA) to purchase fuel cell energy at the Plant for a 20 year term.

OUTCOME

Execution of the Power Purchase Agreement (PPA) with UTS will result in a fuel cell system with the capacity of generating 1.4 megawatts (MW) of electrical power at the Plant providing clean, renewable and reliable power at a reasonable cost. The system will advance the Plant's energy self sufficiency goal and also advance the City's Green Vision renewable energy goal of receiving 100% of electrical power from clean renewable sources.

EXECUTIVE SUMMARY

The Plant relies on self generation of power to provide reliable supply of electricity to run its critical equipment. The generation systems are 30 to 53 years old and are in need of replacement. City staff has pursued an option of obtaining this equipment through a 20 year PPA using newer, renewable fuel cell technology that uses the Plant's digester gas. Under the

September 16, 2010

Subject: Report on RFP for a Power Purchase and Site Lease Agreement for a Fuel Cell System at the Plant
Page 2

PPA, UTS will design, build, own, operate and maintain a 1.4 MW fuel cell, and the Plant will purchase all power generated by the fuel cell at the agreed upon price. In addition, the Plant will construct the concrete pad the fuel cell will be installed on and the interconnection between the Plant and fuel cell (water, gas, electrical). The Plant's capital investment is estimated at \$2,000,000. City staff looked at other more traditional generation systems such as Internal Combustion (IC) engine generators and concluded that fuel cell has slightly higher cost but significant environmental benefits. This recommendation accomplishes several of the Plants and City's goals:

- Reliable power generation of aging engine generators
- Low up front capital investment
- Advances the goal of Plant energy self sufficiency by 2022
- Comparable but slightly higher power costs to other more traditional generation systems
- Additional energy source of hot water as a by-product of the system
- Regulatory compliance by elimination of air permit requirements for this system
- Environmental stewardship through lower green house gas emissions

The planned completion date of the project is January 20, 2012.

BACKGROUND

The electrical generation and distribution system is the lifeline of Plant operation, without which, the plant would not function. As with much of the infrastructure at the Plant, the engine generators are 30 - 53 years old and are at a high-risk of failure. Of the eight originally installed engine generators at the plant, representing an installed capacity of 13 mega-watts (MW), two generators equaling 2.5 MW have been retired due to age, and three of the remaining six generators with a combined capacity of 3.4 MW need replacement due to lack of reliability, high maintenance costs, and difficulty in obtaining spare parts.

The Plant uses an average of 7.6 MW of electricity for its daily operations, with peak loads reaching 11 MW on occasion. On average, 5.2 MW is produced on-site using engine generators fueled by a blend of natural gas purchased from PG&E, landfill gas purchased from Newby Island Landfill, and digester gas produced on-site as part of the waste water treatment process. The remaining 2.4 MW of electricity is purchased from PG&E. Although current Plant generation capacity is 10.5 MW, generation frequently falls short of demand due to the unavailability of generators down for maintenance and other operability factors. Even though the plant can purchase all of its electricity needs from PG&E, the ability to generate electricity in-house is critical for reliable plant operations in the event of a PG&E power failure caused by an earthquake, bird strike, or other blackout. Lack of reliable in-house electrical generation during PG&E power failures can have disastrous consequences with significant damage to critical equipment and facilities, and potential discharge of untreated sewage into the bay.

September 16, 2010

Subject: Report on RFP for a Power Purchase and Site Lease Agreement for a Fuel Cell System at the Plant

Page 3

The Plant needs to maintain a minimum of 8 MW of very reliable on-site generation to meet current critical power demands. This minimum power requirement is expected to increase over next 20 years as the Plant is modernized through implementation of the Plant Master Plan. The need to replace aging engine generators is critical.

Along with the need to replace aging generators, is the need for increased efficiency and environmental sustainability. Concerns over climate change and environmental responsibility have prompted the City of San Jose, and the State of California to establish policies and programs aimed at addressing these issues. In addition to the City's adopted Green Vision goals and Strategic Energy Plan, other key policies include:

- The City signing the Urban Environmental Accords (November 2005)
- The City signing the U.S. Conference of Mayor's Climate Protection Agreement with a goal of reducing greenhouse gas emission by 80% of 1990 levels (March 2007)
- The State of California, through the California Public Utility Commission (CPUC) started the Self Generation Incentive Program (SGIP) which offers substantial rebates towards the implementation of renewable self-generation technologies, such as Photovoltaic Cells (solar), fuel cells, and wind turbines.

Aging engine generators and the need to move toward increased efficiency and environmental sustainability led staff to evaluate options for replacement of the generators, which would meet the Plant's goals and at the same time take advantage of the rebate incentives offered by the CPUC. Staff has evaluated the cost benefits and applicability associated with these renewable technologies and identified fuel cell electrical generation as a cost effective technology that would yield the greatest resource and environmental benefit to the Plant.

Fuel cells convert natural gas or biogas to electricity electrochemically like a battery. But unlike a battery which eventually goes dead as the chemicals in the battery are depleted, the fuel cell is continuously fed new chemicals so it can produce electricity for up to 5 years before the cell needs to be rebuilt. Fuel cells require very clean fuel to prevent early failure so the biogas from the Plant must first be cleaned and conditioned through a gas cleaning system to remove most of the contaminants. The gas is then delivered to the fuel cell along with oxygen where the gas is converted to electricity, hot water and a residual gas stream of mainly carbon dioxide. The heat from the fuel cell is recovered and used in Plant operations.

Fuel cells have one of the highest financial incentives because they use renewable biogas as fuel. They are highly efficient, and have very low air emissions compared to more traditional generation systems like Internal Combustion (IC) engines or turbine generators. Fuel cells generate approximately 20% less greenhouse gases compared to internal combustion engines and near zero air pollutant emissions. As a result, fuel cells do not require an air permit to operate.

Based on the recent successes with the City's Solar PPA process, City staff looked at a PPA as a way to procure a fuel cell instead of funding and constructing one through the capital program. The PPA option uses a private entity to fund, own and operate the fuel cell. The private entity

can take advantage of the Investment Tax Credit (ITC) program funded by the American Recovery and Reinvestment Act (ARRA). The ITC program allows private companies who build own and operate fuel cells (as well as solar and wind power systems) to take a 30% tax credit or grant on their net capital expenditures. This is in addition to the rebate offered through the SGIP. Government agencies are ineligible for the tax credit because they do not pay taxes. The PPA allows the project developer to capture the SGIP incentive along with the ITC, making the project viable with significantly less upfront City funding.

In order to capture the SGIP rebate incentive, City Staff submitted an application for reservation of the rebate for the installation of up to a 2.8 MW fuel cell and received a conditional reservation letter dated July 20, 2010 from PG&E for a maximum rebate amount of \$7.4 million. For a 1.4 MW fuel cell, the rebate amount is \$5.4 million. The remaining two important milestones of the conditional reservation are:

- Execution of a contract of the Power Purchase Agreement by March 17, 2011
- Submit proof of installation and operation of fuel cell by January 20, 2012

ANALYSIS

On June 29, 2010, the City released a Power Purchase & Site Lease Agreement for Fuel Cell Power Production Request for Proposal (RFP) for the Plant on the City e-procurement system. Under the provisions of the RFP, the Fuel cell provider will fund the construction of the gas cleaning system, fuel cell, hot water transfer system, and electricity monitoring/distribution system as well as operate and maintain the fuel cell a for period of 20 years. The Plant will pay for the construction of the interconnections between the fuel cell and the existing plant utilities (water, gas, electric) including the concrete pad the fuel cell will be installed on. The City's capital investment is estimated at \$2,000,000.

Forty-nine companies viewed the RFP, sixteen companies downloaded the RFP, and the following two companies/teams submitted technical proposals by the July 28, 2010 deadline:

- Chevron Energy Solutions/UTC Bio Energy (San José, CA)
- UTS Bio-Energy (Encinitas, CA)

In accordance with the evaluation process set forth in the RFP, a three person evaluation team from within the Environmental Services Department evaluated the written proposals on August 16, 2010. Proposals were evaluated against the following criteria: Experience (30%), Technical Competency of Key Staff (30%), Overall System Efficiency (30%) and Local/Small Business Preference (10%). The final scores and rankings are summarized in the table below:

Team Name	Experience (30 pts)	Technical Competency of Key Staff (30 pts)	Overall System Efficiency (30 pts)	Local/ Small (10 pts)	Total (100 pts)	Rank
UTS Bio-Energy	25	25	30	0	80	1
UTC/Chevron	22	30	8	5*	65	2

*UTC/ Chevron qualified for the City's Local Business Enterprise preference as they have an office with at least one employee located in San Jose

The evaluation team determined that the proposal submitted by UTC/Chevron shows a lower combined heat and power output than the existing system in the plant and so did not meet the City's goal for conversion of biogas to electricity and hot water. The evaluation criteria established in the RFP required that, with the exception of the local and small business preference, Proposers must score at least 50% of the total available points for each category. Because the UTC/Chevron proposal did not meet this requirement in the Overall System Efficiency category, their proposal was dropped from further consideration.

UTS submitted their Best and Final Offer (BAFO) on August 31, 2010 with a price of 11.5 cents/kWh and an annual escalation of 3.25 percent. The quoted price of 11.5 cents/kWh did not include renewable energy credits which UTS valued at 0.5 cent/kWh. If the City allows UTS to keep the renewable energy credits (RECs), the power purchase price is 11 cents/kWh. City staff is recommending that UTS keep the RECs and accept the starting price of 11 cents/kWh.

This Agreement is subject to the City's Prevailing Wage Policy and the Office of Equality Assurance will ensure compliance.

Given the age and declining reliability of the Plant's older engine generators, additional or replacement capacity must be secured. Therefore, the primary motivation in this proposed PPA is to secure clean, on-site generation of electricity at the best price with the least capital investment, in order to have backup power in the event of a PG&E power failure or other loss of electricity. The starting price of 11 cents/kWh is consistent with the Plant's current PG&E annual average billing rate of 10.8 cents/kWh. The escalator of 3.25% per year is also within the range of expected PG&E rate increases (3-6%) over the term of the agreement.

To secure the additional generator capacity, City staff considered a traditional generation system like IC engines as well as the fuel cell. For the IC engine generator, staff would not recommend a PPA approach since the Plant has skilled employees familiar with IC engine operation and maintenance. For the fuel cell, staff is recommending a PPA in order to qualify for the ITC credit, reduce City risk to a new technology, and to secure a firm that has the skills and abilities to operate and maintain the system. The table below compares the cost of a similar size (1.4 MW) IC engine generator without a PPA, with the fuel cell PPA, and concluded that the fuel cell

PPA will cost slightly more per year (\$85K) even with the current high SGIP incentives and ITC tax credit. (see table below), However, the fuel cell comes with significant environmental advantages over the IC engine generator such as lower GHG emissions, no air permit requirements, greater regulatory certainty, improved efficiency, and a very reliable base load generator.

Cost Comparison Fuel Cell vs. IC Engine

	1.4MW Fuel Cell PPA	1.4MW IC Engine – non-PPA
Capital Cost	\$12,100,000	\$8,760,000
Rebate & Incentives	\$6,810,000	
Net Capital Cost	\$5,290,000	\$8,760,000
Capital Cost/Year (@5% interest rate)	\$424,483	\$702,925
O&M Cost (3% escalation rate)	\$943,002	\$578,695
Total Cost/Year	\$1,367,485	\$1,281,620

In terms of added benefits, with the acquisition of a new base load generator, the Plant will be able to reduce PG&E peak demand charges during the high-demand hours of the summer months by about \$108K/yr. In addition, to this the fuel cell will produce free hot water which has an economic value to the Plant. The Plant currently captures waste heat from its engine generators and uses it to heat digesters and thereby reduced the need to run natural gas fired boilers. With the addition of the fuel cell, the Plant will have this additional energy source (electricity and hot water) that will benefit current and future planned operations.

When all the costs and benefits are taken into consideration, the fuel cell will cost the plant more than purchasing the same amount of power from PG&E (around \$250K/yr) if PG&E rate increases average 3.25% over the life of the fuel cell. If actual PG&E rate increases are lower or higher than 3.25%, the relative cost of energy from the fuel cell may be greater or the project could result in a savings. However, although cost is important, the main purpose of procuring new onsite generation is not to beat PG&E prices, but to secure reliable power for emergencies at the reasonable cost. By committing to the initial capital investment of \$2,000,000 to build the interconnections, and entering into the full-service PPA, the Plant is able to acquire a new, but developed technology with minimal risk and be positioned in the long-term to develop an environmentally friendly and diverse generation portfolio.

Key Business Terms

Agreement Term: The Power Purchase Agreement will be for a term of 20 years that will begin upon completion of construction of the fuel cell facilities and generation of electrical power. The initial price per kilowatt hour will be eleven cents that will escalate as described below.

System Construction: The City will pay for the construction of the interconnections between the fuel cell and existing plant utilities including gas, water, and electric. The City will also construct the concrete pad that the fuel cell will be installed on per the design of the fuel cell manufacturer. These costs are estimated at \$2,000,000.

UTS will construct, at its expense, the fuel cell system including the gas cleaning system and power conditioning equipment. UTS will provide a performance and payment bond. The PPA requires UTS to pay the prescribed prevailing wage rates. The City is not obligated to make any payment until power becomes available from the completed system. At the end of the term, UTS must remove the Fuel Cell System from the site and return the Plant premises to its original state if the PPA is terminated at any point in time even if the project is terminated before completion. UTS is also obligated to indemnify the City against any claims arising out of its construction activities at the site. The estimated time to install and commission the system is approximately twelve months after notice to proceed.

System Ownership: UTS will own, operate and maintain the system throughout the term of the Agreement. As part of the Agreement, UTS is requesting that any entity holding a leasehold interest in the property where the system is installed acknowledge UTS's ownership interest and right to give security interests in the system to other providers of financing.

Payment Terms: Under the PPA, the City must pay for all the energy that the fuel cell system produces at the agreed upon price. If the system is down for maintenance and not producing electricity the City does not pay. The initial price for the first year of the PPA is set at \$0.11/kWh and UTS keeps the energy credits. The annual escalation will be 3.25% per year for the first 10 years of the PPA. At the start of the second 10 year period, the actual average core-CPI (consumer price index minus food and energy) for the first 10 year period will be compared to the 3.25% escalator. If the average core-CPI is higher than 3.25%, the escalation rate will be increased to match the average core-CPI with a maximum of escalation rate of 4% for the second 10 year period. The contract pricing contemplates full benefit from the SGIP grant of \$5.4M offered by PG&E and an ITC offered by the IRS, which is based on 30% of UTS's net capital costs invested in the project.

Fuel Cell Energy, the manufacturer of the fuel cell, is engaged with the CPUC to get recognized as a California supplier from PG&E. If this happens, an additional \$1M in SGIP rebate could be obtained. The PPA provides that if this occurs, the kilowatt hour charge will be adjusted to reflect a split of this additional revenue between UTS and the City.

The PPA also provides that UTS will adjust the rate down by 10% on the power generated from the fuel cell, for power produced in excess of 90% (10,585,000 kWh) of the system capacity.

Disruption: UTS will not be penalized for electrical power disruptions from the fuel cell if it is down for maintenance or other technical reason. If there are problems with the supply or quality of the digester gas from the Plant, the Plant will pay for the natural gas to keep the fuel cell running. UTS and the City will split the natural gas cost for the first 48 hours, in case of failure of the gas cleaning system after which time UTS will pay for all the natural gas until the gas cleaning system is back on line.

Ongoing Funding: Payment obligations for the first year of operation will be encumbered against the Plant's general utility charges appropriations and will be encumbered on an annual basis throughout the twenty year term of the PPA.

City's Buyout Rights: This PPA is being financed by UTS partially through the Federal ITC program. Because of restrictions on the use of these tax credits, the City may not exercise the right to purchase the system until the 91st day following the anniversary date of the 5th year of commercial operation. The buyout price is equal to the greater of the fair market value of the system as determined at that time or the buyout schedule as set forth in a schedule attached to the PPA. If the City exercises its buyout right, then the City would need to provide for the operation and maintenance of the System, including replacement fuel cells from the manufacturer.

Site Lease: The fuel cell needs to tie into the Plant's electrical distribution system, so it will be located on approximately 5,000 square feet of Plant property next to a main power substation. This property will be leased to and controlled by UTS as the fuel cell owner/operator for \$10 for the 20 year lease term.

Property Tax: The system will be owned and operated by a non-governmental entity and therefore, is subject to property taxes. These taxes have been factored in by UTS into their price of 11 cents/kWh.

Other terms and conditions: The PPA contains a mutual indemnification provision and standard insurance and construction bonding requirements.

Fuel Cell and PPA Advantages:

Minimizes Future Costs: The fuel cell PPA minimizes future energy costs as best possible by locking in a reasonable fixed escalator of 3.25% over the 20 year term. Future increases in energy prices (both gas and electric) are uncertain, but market indicators point to higher than average increases over the next 20 years in the range of 4 – 6% with higher increases in the early years, as PG&E renews its infrastructure and increases its renewable energy generation portfolio to include more solar, wind and other capital intensive technologies. In PG&E's recent rate increase request to the CPUC for years 2011-2013, PG&E asked for a 19.7%, 4.1%, and 4.9% rate increase respectively. It is unlikely that PG&E will get the requested increases, but they are

likely to receive something in the middle. According to the federal report published for the Solar America Initiative, the electricity price escalation is estimated at 4.25% per year over a 20 year period.

Environmental Benefits: The fuel cell will provide the Plant with 1.4 MW toward its goal of achieving energy self-sufficiency by the year 2022. Fuel cells are recognized as having one of the lowest environmental impacts compared to other traditional generation technologies such as IC engine or turbine generators. They have lower green house gas emissions (16 tons/day vs. 19 tons/day), virtually no regulated emissions (3 lb/d vs. 30 lb/d), and are highly efficient. The reduced GHG are equivalent to taking 192 medium sized cars off the road or planting 26,000 trees.

Emissions Compliance: Fuel Cell power production is exempt from Bay Area Air Quality Management District (BAAQMD) permitting. Therefore, there is no permit fee or emission testing requirements. The fuel cell provides insurance against changing emissions standards and regulatory uncertainty that frequently impacts engine driven generators.

Reliable Generator Capacity: The fuel cell will provide a stable base load of 1.4 MW of power to the Plant. Fuel cells are also less vulnerable to down time and outages compared to traditional engine generators. The fuel cell will also offset an equivalent 1.4 MW of power purchased from PG&E. This stable base load is expected to reduce monthly peak demand (highest 15 minute electrical demand from PG&E) charges by approximately \$108,000 per year.

At a minimum, the Plant needs to maintain a reliable emergency generation capacity of 8 MW. The current aging generators need to be modernized and replaced with newer, high efficiency generators. The fuel cell PPA begins that process by providing a reliable, high efficiency generation system that will remain available as long as the plant has any fuel gas (Digester gas or Natural Gas) available. This will help provide critical power for the plant to restart minimum required loads in the event of PG&E power failure.

Higher Efficiency Generation: The fuel cell being used in this project has an efficiency rating of 45% in terms of converting methane gas to electricity. The Plant's current engine generators have an efficiency of 33%. This 12% higher efficiency is one of the key contributors in achieving a 20% energy saving goal for the plant by year 2012.

Hot water: The fuel cell will produce approximately 0.6 MW equivalent of hot water to be recovered and reused in Plant operations at no additional cost to the City.

Reduced Risk: Using a PPA approach, the City only pays for the power produced thus reducing the City's risk of investing in a young and still growing power technology. The City's initial capital investment is limited to providing the mounting pad and interconnection facilities.

Reduced Workload on City: UTS will own, operate and maintain the fuel cell for the duration of the contract period unless the City chooses to exercise its buyout option. This reduces the City's

September 16, 2010

Subject: Report on RFP for a Power Purchase and Site Lease Agreement for a Fuel Cell System at the Plant

Page 10

obligation and responsibility for hiring employees or third party contractors with knowledge in fuel cell technology and from ensuring that the system runs reliably and efficiently. Under the PPA, UTS is required to ensure that the fuel cell is up and running 90% of the time or greater and with 90% or greater rated efficiency.

SGIP Rebate Timeline: The current completion date per the SGIP Conditional Acceptance letter is January 20, 2012. The SGIP recognizes a longer execution time for government entities and has a provision for an extension of the completion date by a maximum of 180 days. If Council approves moving forward with this project, City staff will submit a letter to PG&E to request extension for the completion date, if needed, in accordance with the program guidelines, two months before the said date as per PG&E requirement.

POLICY ALTERNATIVES

Alternative # 1: Purchase and install new engine-generator

Pros: City staff is very familiar with this technology.

Cons: This technology is less clean, less efficient, has greater regulatory uncertainty, and not lower cost.

Reason for not recommending: City staff has opted to use a cleaner, more efficient technology that has a similar cost. City staff also wants a technology that will maximize the amount of rebate that we can get from the SGIP, but still be cost-effective. City staff is more familiar with the engine generator technology, but tighter emission regulations and compliance are expected to increase the O&M costs in the long run. Learning to deal with a new technology will give City staff additional knowledge and experience.

Alternative # 2: Reject bid and drop project

Pros: Money already allocated for engine-generator replacement could be used for other reliability projects.

Cons: Need to purchase more electricity as self-generation capacity reduces with aging engine generators. City will also lose the opportunity for a \$5,400,000 rebate.

Reason for not recommending: Cost to purchase electricity is forecast to be significantly higher than that from self-generation and the City will lose the opportunity for a clean and efficient technology for electrical generation utilizing the rebate incentive. According to the federal report published for the Solar America Initiative, the electricity price escalation is estimated at 4.25% per year over a 20 year period.

PUBLIC OUTREACH/INTEREST



Criteria 1: Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**



Criteria 2: Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**



Criteria 3: Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This requirement meets criteria 1 above and will be posted on the City's website for the October 5, 2010 Council agenda.

COORDINATION

This project and memorandum have been coordinated with the Finance Department, Planning Building and Code Enforcement, Office of Equality Assurance, Risk Management, Budget Office, and the City Attorney's Office. The City coordinated with PG&E and submitted an application for rebate through the SGIP and the City has received a conditional reservation letter. This item is scheduled to be heard at the September 23, 2010 Treatment Plant Advisory Committee (TPAC) meeting.

FISCAL/POLICY ALIGNMENT

This project is consistent with the Council approved Budget Strategy, Economic Recovery section, in that it will help to stimulate construction spending in our local economy. This project is in line with the City's Resolution Endorsing the U.S. Mayors Climate Protection Agreement. The fuel cell is a more efficient electric generation technology and will produce less greenhouse gasses compared to other technologies at the same amount electric energy produced.

COST SUMMARY/IMPLICATIONS

As described in the Analysis section, entering into this contract will cause the Treatment Plant to incur both capital and operating costs in the future. The capital costs are currently estimated at \$2,000,000. The actual costs will be determined once the construction contract has been put out to bid. The Department will return to the City Council for approval of the construction contract.

HONORABLE MAYOR AND CITY COUNCIL

September 16, 2010

Subject: Report on RFP for a Power Purchase and Site Lease Agreement for a Fuel Cell System at the Plant

Page 12

at a later date. Funding for the construction costs is available in 2010-2011 in the San José/Santa Clara Treatment Plant Capital Fund (\$1.3 million in the Fuel Cell appropriation, and approximately \$700,000 in the Plant Electrical Reliability appropriation).

The proposed operating and maintenance costs of this project have been reviewed and will result in the need to purchase additional landfill or natural gas. The impact is estimated at \$250K/yr to the San Jose-Santa Clara Treatment Plant Operating Fund. This funding will be requested through the budget process once the capital project has been completed.

CEQA:

Exempt, File No. PP10-112

/s/

SCOTT P. JOHNSON

Director of Finance

/s/

JOHN STUFFLEBEAN

Director, Environmental Services

For questions please contact Dale Ihrke, Deputy Director, at (408) 945-5198 or Mark Giovannetti, Division Manager at (408) 535-7052.