



Agenda Report

February 6, 2017

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (January 24, 2017)

FROM: Pasadena Water and Power

SUBJECT: AUTHORIZE A CONTRACT WITH DNV GL ENERGY SERVICES USA, INC. FOR THE PROVISION OF RESIDENTIAL ENERGY AND WATER DIRECT INSTALLATION PROGRAM SERVICES

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the proposed action is exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines Section 15301 (Class 1: Existing Facilities); and
2. Authorize the City Manager to enter into a contract without competitive bidding pursuant to City Charter Section 1002(F) contracts for professional or unique services, with DNV GL Energy Services USA Inc. ("DNV GL") in an amount not to exceed \$5,500,000 over a maximum five-year term for the installation of energy and water-conservation devices and services in residential homes under the Water and Power Department Residential Direct Installation Program.

MUNICIPAL SERVICES COMMITTEE RECOMENDATION:

The Municipal Services Committee recommended that the City Council approve these recommendations at their January 24, 2017 meeting. The Committee further directed staff to closely monitor the program to ensure it meets program goals and report findings, progress and performance to the Committee at least annually.

EXECUTIVE SUMMARY:

Pasadena Water and Power ("PWP") currently offers a variety of rebate and informational programs to incentivize efficient use of water and energy, and to help PWP meet City Council approved efficiency targets. In addition, many customers qualify for a broad range of utility programs through both PWP and the Southern California Gas Company ("SoCal Gas") that provide no cost installation of efficient devices as well as whole house retrofit incentives. Numerous financing options, including Property Assessed Clean Energy ("PACE") loans through the Los Angeles County, are available to PWP customers. Combined, these programs reach several thousand PWP customers each year.

Despite the extensive range of existing efficiency program offerings as summarized in Attachment A, many residential customers do not participate either because they cannot afford the up-front expense of installing the equipment, do not have a trusted contractor, or simply because they do not know how to get started.

To address these barriers and help spread the benefit of PWP’s conservation programs to a broader base of residential customers, PWP is developing a new residential efficiency direct install program (“Program”) that will help customers save water, electricity, and natural gas at no cost to the customer. Through the Program, DNV GL will provide in-home customer energy and water efficiency assessments (audits), personalized summary reports with actionable recommendations, and will install energy and water saving products such as LED lamps, aerators, and provide other services, such as HVAC tune-ups and weatherization at no cost to the participating customer.

Under the new Program, PWP intends to serve approximately 1,500 customers on a first-come first-served basis. In order to distribute program participation and benefits across a wider base of residential customers, the value of work performed will be limited to \$4,000 per household. Furthermore, Program outreach and marketing efforts will be targeted to moderate-income customers and neighborhoods; elderly customers; and those with relatively high electricity and/or water usage for the size of their residence.

For qualifying low-income customers, PWP will continue to support and promote the existing “Under One Roof” program, which provides a wider range of services that potentially have much higher value (see Attachment B for a comparison of services).

The maximum \$5.5 million cost of the recommended contract is expected to be spent over three years; however, the proposed five-year term will accommodate a slower startup or lower annual participation rates. As shown in Table I, PWP’s net cost for this contract is expected to be approximately \$3.7 million. Funding will be provided through various revenue sources intended to support energy and water conservation programs, including PWP’s Public Benefits Charge (“PBC”) revenues for the cost of products and services that save electricity, the Water Conservation Fund budget for those that save water, and reimbursement from SoCal Gas for those that save natural gas. PWP anticipates fully funding the Program without adverse impacts on any existing water or electric conservation programs.

Table I: Funding Summary for Proposed Contract¹ (\$000)

Efficiency Type	Funding Source	Total Cost	Annual Cost	Annual Savings	Lifetime Savings	Lifetime Cost per Unit Saved
Energy	PBC Fund	\$3,100	\$1,033	2,100,000 kWh	14,700,000 kWh	\$0.21 / kWh
Water	Water Fund	\$600	\$200	105 AF	1,121 AF	\$535 / AF
Natural Gas	SoCal Gas	\$1,800	\$600			
Total		\$5,500	\$1,833			

¹ Excludes PWP direct expenditures for program marketing and implementation.

Upon completion, the Program is expected to yield approximately 2,100,000 kilowatt hours (“kWh”) per year in energy savings and 105 acre-feet (“AF”) per year of water savings.

BACKGROUND:

Program Overview

Direct install programs provide and install energy and water savings products and services to customers at no cost in order to reduce barriers to implementation. While PWP’s incentive programs have prompted customers to complete energy efficiency upgrades, many of the easy-to-install, low-cost, energy efficiency upgrades in homes, such as LED light bulbs and ENERGY STAR® appliances, have already been implemented thanks in part to the amount of time PWP incentive programs have been running and growing acceptance of these efficient technologies.

Further savings opportunities would become possible by implementing the new direct install program that will provide two main services at no cost to residential customers.

1. **Assessment/audit report:** A trained efficiency specialist will tour the home to identify efficiency opportunities, install simple low cost items such as LED lighting or adjust irrigation controllers, and recommend improvements. This assessment will be used as an opportunity to engage with customers to discuss opportunities to save energy and water based on their home’s unique characteristics and also to answer any related questions. Following this initial assessment, customers will receive a customized energy and water survey report in the mail with specific recommendations on efficiency improvements, including information on cost and supporting links to existing PWP and other agency rebates; and,
2. **Installation/services:** Based on findings in the assessment report, participating customers may choose to have an assortment of energy and water savings services and products installed. DNV GL will bring a team of subcontractors to provide plumbing, home performance and HVAC services. Table II lists a set of efficient products and services that PWP plans to offer through this Program. Home performance testing will be done in conjunction with certain products and services (e.g., air sealing) to ensure the upgrades are achieving the proper energy savings. Through PWP’s partnership with SoCalGas, the Program will offer Pasadena customers a “one stop shop” with a comprehensive set of products and services that can save them natural gas as well as electricity and water. The survey report will prioritize additional upgrades customers can pursue that are outside the scope of the direct install services offered (e.g., central AC replacement) and rebates available.

Table II: Home Improvement Program – Sample Products and Services

Energy Savings Products & Services	Water Saving Products & Services
<ul style="list-style-type: none"> ● Energy Use and Recommendations Report ● LED Lamps ● Thermostatic Shower Valves ● Attic Insulation ● Attic Plane Sealing ● Air Sealing, Door Weather stripping ● Central AC Tune Ups ● Whole House Fan 	<ul style="list-style-type: none"> ● Water Use and Recommendations Report ● Low Flow Showerheads ● Aerators ● Toilet Replacement ● Toilet Flapper replacement ● Adjustment to Irrigation Controller ● Rotating Sprinkler Nozzles

Program Cost

The recommended contract will have three cost-components:

1. Fixed costs including an initial \$99,580 fee for program design, set up and staff training; and, a fixed monthly administrative fee of \$10,000 a month commencing when the program launches (estimated to be in March 2017);
2. Per-unit costs for services performed, including equipment and installation services, field visits and inspections, and marketing plan development. The rates for equipment and services will be reviewed and updated no more than twice a year for potential adjustments due to changes in market conditions, using the Construction Cost Index and specific product cost changes due to shortages, commodity price escalation or a similar market change; and
3. Time and material based costs for additional technical consulting including advisement on historic properties.

In addition to the DNV GL contract fees, PWP anticipates incurring internal staff costs related to labor and administration, and marketing costs of about \$20,000 for the initial program setup; and ongoing costs of about \$24,000 per year.

As is typical of direct installation programs, the average cost per unit of energy and water saved under the new Program will be higher than that of PWP's current conservation programs and rebates. The estimated "lifetime" cost of electric energy savings under the recommended contract is \$0.21 per kWh and the estimated cost of water savings is \$535 per AF. For comparison, the average lifetime cost of PWP's residential energy-efficiency programs range from \$0.04 to \$0.16 per kWh and the cost of commercial energy-efficiency programs range from \$0.01 to \$0.03 per kWh. PWP's current water efficiency rebates average \$351 per AF saved.

Program Benefits

PWP estimates that participating households will save an average of approximately \$436 per year in utility bill costs, including \$249 per year for electric, \$131 per year for water, and \$56 per year for natural gas. This would imply an estimated seven to nine year simple payback (if the homeowner had incurred the costs) for a project that valued between \$3,000 and \$4,000.

In addition, the proposed Program will help capture deeper energy savings and stimulate the market for efficiency upgrades by implementing harder-to-reach energy upgrades and by helping customers identify and evaluate further opportunities to make their homes more efficient.

The value of the efficiency improvements goes beyond bill benefits for participants, and can translate into health, safety and comfort benefits for participants that program evaluations commonly find to be a substantial fraction of the overall benefit from such programs. Additional benefits include higher property values and supporting the City's sustainability objectives.

Finally, successful implementation of the Program is expected to enhance PWP's role as trusted efficiency advisor for Pasadena residents who are seeking guidance and assistance with improving the efficiency of the home.

Contractor Selection Process

In June 2016, the City issued a Request for Proposals ("RFP") for a residential direct install efficiency program. The RFP was posted on the City's website through Planetbids in accordance with the applicable provisions of the Pasadena Municipal Code. Six proposals were received, one from a local vendor. The proposals were scored based on the criteria shown in Table III.

Table III: RFP Scoring Criteria

Scoring Criteria	Max Points
Statement of Work	25
Staffing, Management and Qualifications	25
Project Cost/Budget	35
Overall Quality and Responsiveness	5
Local Pasadena Business preference	5
Small / Micro-Business Preference entitlement	5
Total Score	100

Based upon these criteria, DNV GL is recommended as the best option for providing a turnkey residential direct install program in accordance with City specifications. A summary of the scores is provided in Table IV with additional details provided in Attachment C. DNV GL's proposal ranked highest based on its comprehensive and detailed statement of work that covered the full set of services and measures sought by PWP, a program approach that emphasized strong customer service, and community outreach and engagement. Their proposal also included a plan to address the unique needs of older and historic properties. DNV GL has over 30 years of experience implementing residential direct install programs for utilities, included local Pasadena subcontractors in the proposed Pasadena Program, and their proposal was cost-competitive with other proposals received.

Table IV: RFP Respondents

Vendor/Respondent	Company Location	Evaluated Score (Out of 100)
DNV GL	Anaheim, CA	75.8
Synergy	Perris, CA	55.4
CLEARresult	Los Angeles, CA	52.8
FCI Mgmt	Long Beach, CA	43.5
Fess Energy	Pasadena, CA	42.4
AmGreen	Los Angeles, CA	38.0

The recommended contract fully complies with Prevailing Wage Law (Senate Bill 7) per Resolution 9406 adopted by the City Council on December 15, 2014.

The City has had prior contracts with DNV GL and affiliated companies totaling \$68,500 for unrelated services.

ENVIRONMENTAL ANALYSIS:

The project is categorically exempt from CEQA pursuant to State CEQA Guidelines Section 15301 (Class 1: Existing Facilities). The Class 1 categorical exemption covers the repair, maintenance, or minor alteration of existing public or private structures, involving negligible or no expansion of use. The proposed contract for the provision of residential energy and water direct installation program services would provide for energy and water saving improvements to existing residential structures. The Program would not expand the use of the residential properties, but rather it is intended to reduce energy and water consumption from existing structures.

FISCAL IMPACT:

The cost of this contract will be up to \$5,500,000 over a three-year period, anticipated to begin in early 2017. The anticipated expenditures in the current year are included in the approved Fiscal Year 2017 Operating Budget. Funding for the planned expenditures in Fiscal Years 2018, 2019 and 2020 will be addressed in future budgeted appropriations within the Public Benefits Fund account number 41609140-821510 and the Water Conservation Fund account number 41407820-821500.

Table V summarizes the contract expenditures and anticipated reimbursements from the SoCalGas, by fiscal year. Actual expenditures may vary from year to year and extend beyond FY 2020 based on the actual pace of program activity.

Table V: Projected DNV GL Contract Cash Flow (\$000)

Funding Source	Account	FY2017 ¹	FY2018	FY2019	FY2020	Total
SoCalGas	41600010-702300	60	600	600	540	1,800
PBC Fund Net	41609140-821510	210	1,000	1,000	890	3,100
Water Fund	41407820-821500	20	200	200	180	600
DNV GL Contract Total		290	1,800	1,800	1,610	5,500
Net Cost to PWP		230	1,200	1,200	1,070	3,700

¹ Assumes a May 2017 program launch.

Table VI summarizes additional support services required for PWP to administer the Program.

Table VI: Projected Program Support (\$000)

Budget Category	Account	FY2017	FY2018	FY2019	FY2020	Total
Employee Salary	41609140-800510	40	20	20	20	100
Verification Service	41609140-811410	4	4	4	4	16
Total for Program Support		44	24	24	24	116

The total cumulative energy savings and water savings achieved through the completion of the Program would reduce annual electrical revenues by approximately \$374,000 per year and water revenues by approximately \$197,000 per year.

Respectfully submitted,



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Attachments

- Attachment A – Summary of Residential Efficiency Programs
- Attachment B – Comparison of Residential Direct Install Program Services
- Attachment C – RFP Scoring Matrix Summary