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**AGENDA
MUNICIPAL SERVICES COMMITTEE
June 25, 2013**

MEMBERS

Margaret McAustin, Chair, District 2
Bill Bogaard, Mayor
Terry Tornek, District 7

STAFF

Phyllis Currie, General Manager
Sandra Robles, Recording Secretary

MISSION STATEMENT

The City of Pasadena is dedicated to delivering exemplary municipal services, responsive to our entire community and consistent with our history, culture and unique character.

Public meeting begins at 4:00 p.m.

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REGULAR MEETING OF THE
MUNICIPAL SERVICES COMMITTEE
Tuesday, June 25, 2013, 4:00 P.M.
100 North Garfield Avenue, Pasadena, Council Chambers

AGENDA

1. **CALL TO ORDER/ROLL CALL**
2. **PUBLIC COMMENTS ON MATTERS NOT ON THE AGENDA**
3. **APPROVAL OF MINUTES** - March 26, 2013, April 9, 2013 and May 14, 2013 – Regular Meetings*
4. **INFORMATION ITEMS**
 - A. RPS Procurement and Enforcement Plans (SBX1-2)*
 - B. Recycled Water – Tunnel Water Update*

5. **ADJOURNMENT**


* Attachment

NEXT REGULAR MEETING
July 9, 2013


Margaret McAustin, Chair
Municipal Service Committee

POSTING STATEMENT:

I HEREBY CERTIFY that this Agenda, in its entirety, was posted on the Council Chamber Bulletin Board S249, the bulletin board in the rotunda area at City Hall, 100 North Garfield Avenue, the City Clerk's Office, and a copy was distributed to the Central Library for posting on the 21st day of June, 2013 by 4:00 p.m.


Sharon Stovall

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**CITY OF PASADENA
REGULAR MEETING OF THE CITY COUNCIL
MUNICIPAL SERVICES COMMITTEE
MARCH 26, 2013
COUNCIL CHAMBERS
100 N. GARFIELD AVENUE (2ND FLOOR)**

OPENING

The Chair, called the regular meeting of the Municipal Services Committee to order at 4:00 p.m.

ROLL CALL:

Vice Mayor Margaret McAustin, Chair
Mayor Bill Bogaard (Arrived 4:06)
Councilmember Terry Tornek

Staff:

Phyllis Currie, General Manager of Water and Power
Shari Thomas, Assistant General Manager of Water and Power
Gurcharan Bawa, Assistant General Manager of Water and Power
Joe Awad, Assistant General Manager of Water and Power
Sandra Robles, Recording Secretary

PUBLIC COMMENT

No one appeared for public comment.

INFORMATION ITEMS

PUBLIC HEARING DATE FOR PROPOSED CHANGES TO THE PURCHASED WATER ADJUSTMENT CHARGE (PWAC)

Mayor Bill Bogaard
(Arrived 4:06)

Shari Thomas, Assistant General Manager of Water and Power, provided a PowerPoint presentation summarizing the agenda report, providing data on Metropolitan Water District (MWD) and Pasadena Water and Power (PWP) purchased water rates, the proposed PWAC implementation process, and responded to questions.

The Chair requested information on the amount of water the City purchased under Tiers I and II, and the approximate percentages that are attributable to PWP and MWD capacity charges.

Following discussion, staff directed to edit the draft Notice of Public Hearing report, as follows:

- Page one, Item 2, line two, replace "incremental" with "additional";
- Page three, Table A, include current charges;
- Page four, Table B, separate the information by color or other means; and
- Provide a question and answer section

On the order of the Chair, and by consensus of the Committee, the information was received and filed.

OUTAGE MANAGEMENT/COMMUNICATION SYSTEM UPDATE

Joe Awad, Assistant General Manager of Water and Power, presented a PowerPoint presentation with information on the City's current Outage Communication System, the proposed improved communication solution, integration process with multiple existing applications, future steps, and

responded to questions.

Phyllis Currie, General Manager of Water and Power, provided information on the fiscal aspects of the proposed update and the anticipated improvements to the communication system.

The Chair asked that staff utilize the City's In-Focus to inform residents of the intended upgrade to the City's communication infrastructure.

Following discussion on the order of the Chair, and by consensus of the Committee, the information was received and filed.

INTERMOUNTAIN POWER PLANT CONTRACT UPDATE

Gurcharan Bawa, Assistant General Manager of Water and Power, summarized staff's memo regarding the City's plan to transition away from coal power generation, and responded to questions

Ms. Currie responded to questions regarding California and Utah participants' agreements to amend the Intermountain Power Project (IPP) contract.

The following individuals provided comment on the item:

Aura Vasquez, Sierra Club Beyond Coal Company, requested, (along with twelve individuals who stood-up to display their support) that the City replace coal with clean energy.

David Czamanske, Pasadena Sierra Club, distributed a copy of the Sierra magazine and made several inquiries of the Integrated Resource Plan (IRP) components.

Rhoads Stephenson, La Canada Resident, expressed his concerns with the City's natural gas plan.

Morey Wolfson, Citizens Climate Lobby, commented positively on the City's IRP and expressed his concern with the City's agreement in long term coal contracts.

Jasmin Vargas, L.A. Beyond Coal National Campaign, stated her organizations support for the City to limit coal usage.

Robert Haw, Altadena Resident, stated his support for the City to limit coal usage.

Following discussion, on the order of the Chair, and by consensus of the Committee, the information was received and filed.

Councilmember Tornek asked staff for guidance and information regarding the HERO financing program that was presented to the San Gabriel Valley Council of Governments.

ADJOURNMENT

On the order of the Chair, the regular meeting of the Municipal Services Committee was adjourned at 5:46 p.m.

ATTEST:

MARGARET McAUSTIN, Chair
Municipal Services Committee

Sandra S. Robles
Recording Secretary

**CITY OF PASADENA
REGULAR MEETING OF THE CITY COUNCIL
MUNICIPAL SERVICES COMMITTEE
APRIL 9, 2013
COUNCIL CHAMBERS
100 N. GARFIELD AVENUE (2ND FLOOR)**

OPENING

The Chair, called the regular meeting of the Municipal Services Committee to order at 4:05 p.m.

ROLL CALL:

Vice Mayor Margaret McAustin, Chair
Mayor Bill Bogaard
Councilmember Terry Tornek

Staff:

Michael Beck, City Manager
Fred Dock, Director of Transportation
Shari Thomas, Assistant General Manager of Water and Power
Shan Kwan, Assistant General Manager of Water and Power
Joe Awad, Assistant General Manager Water and Power
Lisa Hosey, Assistant City Attorney
Mark Yamarone, Transportation Administrator
Sandra Robles, Recording Secretary

PUBLIC COMMENT

No one appeared for public comment.

INFORMATION ITEMS

OVERVIEW OF PWP FY 2014 CIP BUDGET

Shari Thomas, Assistant General Manager of Water and Power, provided a PowerPoint presentation summarizing the Fiscal Year Capital Improvement Program (CIP) Budget 2014, including Water and Power major project funding objectives and sources, and responded to questions.

Councilmember Tornek suggested that staff reach out to neighborhoods that will be impacted by the Tunnel Water Project and emphasized the need for staff to stay within the fiscal budget for the repowering project.

Shan Kwan, Assistant General Manager of Water and Power, stated in response to Councilmember Tornek's concern, that staff is currently working on an outreach program.

Michael Beck, City Manager, responded to questions regarding the fiscal sources and strategies related to funding the Repowering Plant project.

Following discussion On the order of the Chair, and by consensus of the Committee, the information was received and filed.

**COMPLETE STREETS PLAN – STREET TYPES UPDATE
(TRANSPORTATION)**

Mark Yamarone, Transportation Administrator, presented a PowerPoint presentation summarizing a component of the Complete Streets Plan, the Street Types Plan, including strategy, outreach and schedule, and responded to questions.

The Chair thanked the Transportation Department staff for the comprehensive PowerPoint and oral presentations.

Councilmember Tornek expressed his concern with the competing needs of pedestrian walkers and bicycle sidewalk users, and their ability to coexist.

Fred Dock, Director of Transportation, responded to questions regarding street and sidewalk design requirements and elements. In addition, Mr. Dock informed the Committee that staff is working on initiatives related to safety enforcement for cyclists.

Following discussion, it was moved by Councilmember Tornek, seconded by the Mayor, to forward the item to the Transportation Advisory Commission and Planning Commission for review, discussion, and recommendation. (Motion unanimously carried) (Absent: None).

ADJOURNMENT

On the order of the Chair, the regular meeting of the Municipal Services Committee was adjourned at 5:13 p.m.

ATTEST:

MARGARET McAUSTIN, Chair
Municipal Services Committee

Sandra S. Robles
Recording Secretary

**CITY OF PASADENA
REGULAR MEETING OF THE CITY COUNCIL
MUNICIPAL SERVICES COMMITTEE
MAY 14, 2013
COUNCIL CHAMBERS
100 N. GARFIELD AVENUE (2ND FLOOR)**

OPENING

The Chair, called the regular meeting of the Municipal Services Committee to order at 4:03 p.m.

ROLL CALL:

Councilmember Margaret McAustin, Chair
Mayor Bill Bogaard
Councilmember Terry Tornek

Staff:

Michael Beck, City Manager
Julie Gutierrez, Assistant City Manager
Phyllis Currie, General Manager Water and Power
Fred Dock, Director of Transportation
Siobhan Foster, Director of Public Works
Gurcharan Bawa, Assistant General Manager Water and Power
Shan Kwan, Assistant General Manager Water and Power
Lisa Hosey, Deputy City Attorney
David Kimbrough, Water Quality Manager
Jason Miller, Engineer
Sandra Robles, Recording Secretary

PUBLIC COMMENT

No one appeared for public comment.

**APPROVAL OF
MINUTES**

It was moved by Mayor Bogaard, seconded by Councilmember Tornek, to approve the minutes of December 11, 2012, January 8, 2013, January 22, 2013 (special meeting), February 12, 2013 (cancellation), and April 23, 2013 (cancellation), as submitted. (Motion unanimously carried)
(Absent: None)

INFORMATION ITEMS

REPOWERING UPDATE

Gurcharan Bawa, Assistant General Manger Water and Power, presented a PowerPoint presentation providing an update on the Repowering Project , information on major aspects of the project, and responded to questions.

Greg Harwood, and Dan Angelus, Project Managers of Power Engineers (participating via teleconference call), continued the PowerPoint presentation, providing information on fiscal aspects of the repowering project, scope of work, and responded to questions.

Phyllis Currie, General Manager Water and Power, responded to questions relating to the Glenarm Repowering project budget amendments, and Jason Mliiller, Engineer, responded to questions relating to the construction site.

Morey Wolfson, Pasadena resident, expressed his concerns regarding the California Clean Energy lawsuit litigation pending with the City.

The Chair directed City Attorney staff to provide an update on the litigation process with California Clean Energy lawsuit as it becomes available.

Councilmember Tornek stated his concern regarding the information related to the fiscal aspects of the project.

Following discussion, on the order of the Chair, and by consensus of the Committee, staff was directed to report back to the Committee at a future meeting with detailed financial information for the project, and any related contractual agreements.

2012 WATER QUALITY CONSUMER CONFIDENCE REPORT

David Kimbrough, Water Quality Manager, provided an oral update on the 2012 Water Quality Consumer Confidence report, and responded to questions.

Councilmember Tornek expressed strong concerns with staff not distributing the report through a direct mailing to Pasadena Water and Power (PWP) customers.

Following discussion, and by consensus of the Committee, it was determined that staff would proceed with providing the report to PWP customers as planned through the City's website, and with hard copies available upon request.

Following discussion, on the order of the Chair, and by consensus of the Committee the information was received and filed.

DISSOLUTION OF HUNTINGTON MUNICIPAL WATER DISTRICT

Shan Kwan, Assistant General Manager Water and Power, provided an oral overview on the history of the Huntington Municipal Water District, the study conducted by Los Angeles County, public hearing information, and responded to questions.

Following a brief discussion, on the order of the Chair, and by consensus of the Committee, the information was received and filed.

UNDERGROUNDING UPDATE (PUBLIC WORKS)

Due to time constraints, the Committee agreed to delay the discussion on the item until the next Committee meeting.

TRANSIT BRANDING UPDATE (TRANSPORTATION)

Fred Dock, Director of Transportation, summarized staff's memo as part of the PowerPoint presentation, including the Pasadena Area Rapid Transit System (ARTS) operational overview, the proposed rebranding

design and appearance, and responded to questions.

Councilmember Tornek stated his concern regarding the new logo's appearance and similarities with a parking logo currently in use, and suggested that staff present the item to the City Council and the Design Commission as an information item in order to further expand the branding discussion and update the community.

The Chair stated her concerns with the proposed color scheme on the updated logo.

Following discussion, the Committee thanked the Transportation Department and the Arts Center staff for their joint efforts on the project and by consensus, received and filed the information.

ADJOURNMENT

Councilmember Tornek informed the Committee that in speaking with Rose Bowl and PWP staff, the Tunnel Water Reclamation Project update will be provided at the next Committee meeting.

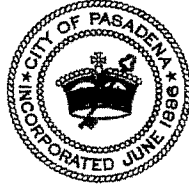
On the order of the Chair, the regular meeting of the Municipal Services Committee was adjourned at 5:45 p.m.

ATTEST:

MARGARET McAUSTIN, Chair
Municipal Services Committee

Sandra S. Robles
Recording Secretary

4.A



PASADENA WATER AND POWER

MEMORANDUM

June 25, 2013

To: Municipal Services Committee

From: Phyllis E. Currie
General Manager *Phyllis E. Currie*

Subject: Renewable Portfolio Standard Procurement and Enforcement Plans (SBX1-2)

This item is for information only.

On July 8, 2013, staff will recommend that the City Council set a July 22, 2013 public hearing date to consider and adopt revisions to the Pasadena Water and Power ("PWP") Renewable Portfolio Standard ("RPS") Enforcement Program. The public hearing and proposed revisions are necessary to conform with new regulatory guidelines recently adopted by the California Energy Commission ("CEC").

At the same time, staff will recommend that the City Council adopt a proposed RPS Procurement Plan to comply with the California Renewable Energy Resources Act, Senate Bill X1-2 ("SBX1-2") listed above. This action does not require a public hearing.

EXECUTIVE SUMMARY:

SBX1-2 was chaptered on December 12, 2011, establishing RPS requirements for all electric utilities in the State, including publicly owned utilities ("municipal utilities") such as PWP. SBX1-2 included the following key provisions:

- Established minimum RPS procurement targets, expressed as a percent of a utility's retail electricity sales volume;
- Created three Portfolio Content Categories ("Category" or "Categories") to represent different types of resources, with a preference for those in-state;
- Established three Compliance Periods covering the calendar years 2011-2020; and,
- Provided authority to the CEC to develop requirements, guidelines, and monitor compliance.

SBX1-2 requirements specifically applicable to municipal utilities include:

1. Regulatory bodies, such as the Pasadena City Council, must adopt and implement a "Procurement Plan", to demonstrate how the regulated utility intends to comply with the goals and requirements of SBX1-2;
2. Regulatory bodies must conduct a public hearing to consider and adopt an "Enforcement Program" by which they would impose and regulate the specific criteria of the Procurement Plan to meet SBX1-2 goals as stated in Public Utilities Code ("PUC") Section 399.30; and,
3. The CEC must report non-compliance to the California Air Resources Board ("CARB") to determine penalties (note that CARB has yet to develop penalties).

Adoption of the proposed Enforcement Program, Revision 1 is necessary to conform the original Enforcement Program adopted by the City Council on December 5, 2011 to new regulatory guidelines recently adopted by the CEC. The CEC has created a fourth resource Category that is applicable only to contracts executed prior to June 1, 2010 ("grandfathered" resources) and established interim RPS requirements within the Compliance Periods. The proposed revisions include other minor changes to conform with the statute and latest CEC guidelines.

At the same time, staff will recommend that the City Council adopt a proposed Procurement Plan to comply with the first requirement of SBX1-2 listed above. The Procurement Plan describes how PWP will procure appropriate amounts of each renewable resource Category during each Compliance Period to meet the requirements of SBX1-2. It also describes how PWP will procure additional resources to meet the voluntary RPS goal established in the 2012 Integrated Resource Plan ("IRP").

Draft copies of the Enforcement Program, Revision 1 and Procurement Plan available on the internet at www.PWPweb.com/RPS.

BACKGROUND:

Revised CEC Guidebook

Many provisions of SBX1-2 are subject to interpretation and further definition by the CEC. Recently, the CEC developed new regulations in the seventh edition of its "Renewables Portfolio Standard Guidebook" ("CEC Guidebook"), and "Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities" ("Enforcement Procedures") that were adopted on June 12, 2013. The major revisions in rules include:

1. Contracts executed prior to June 1, 2010 shall "count in full," but not be applied against any of the three resource Categories established in SBX1-2. The CEC established a new Category 0 for these contracts, and the energy from these resources will be deducted from PWP's total RPS requirement; and,

2. New interim RPS targets of 27% by 2017, 29% by 2018, 31% by 2019 and 33% by 2020 have been implemented for Compliance Period 3, whereas SBX1-2 only specified the final RPS target of 33% by 2020 for the same period.

The Revised Enforcement Program

The Enforcement Program includes provisions related to development, adoption, progress reporting, violation reporting, and contingency relief with respect to PWP's procurement of renewable resources. It directs PWP to develop a plan (the RPS Procurement Plan) to procure renewable resources to comply with RPS targets based on specific criteria stated in the statute and to provide timely notices and reports to the public and the CEC. The proposed revision to the Enforcement Program incorporates the latest CEC Guidebook provisions described above, and other conforming changes to reflect the new CEC requirements.

The CEC will use the City Council's adopted Enforcement Program to evaluate PWP's compliance with SBX1-2 requirements. The statute requires the CEC to report non-compliance to the California Air Resources Board ("CARB") to determine penalties.

CARB has yet to develop the compliance penalties.

Relief Mechanisms to Reduce RPS Targets

The statute provides for reduced RPS targets under certain conditions such as transmission limitations, project development delays, renewable resources procurement costs exceeding limits set by the City Council, or additional energy resources being not needed because PWP already has sufficient energy resources to meet its projected retail sales. At this time, PWP expects to comply with RPS targets as provided in SBX1-2. In the future, if PWP expects to be unable to comply with RPS targets as set by SBX1-2 due to reasons allowed by the statute, PWP will propose a revised Procurement Plan indicating new RPS targets along with justifications for consideration by the City Council.

Pasadena's RPS Goal Pursuant To Energy IRP

The City has adopted an RPS goal of 40% by 2020 that exceeds the RPS targets established by SBX1-2. PWP's detailed description of its compliance strategies for achieving both the SBX1-2 state mandated 33% RPS target and the higher voluntary 40% goal adopted by the City is included in the Procurement Plan.

As a clarification, to the extent the City of Pasadena ("City")'s own energy IRP goal is in excess of statutory requirements, achieving the higher RPS goal is solely voluntary and not subject to any provisions of the CEC's Enforcement Program or any other legislative or regulatory compliance obligation.

The Procurement Plan

The Procurement Plan maps out PWP's progress to date in procuring renewable energy to meet the complex requirements of SBX1-2. It complies with the CEC's Guidebook

and Enforcement Procedures, as well as the City of Pasadena's Enforcement Program. It also meets the more aggressive voluntary RPS goal in PWP's 2012 IRP. It provides a strategic document for procuring the right quantities of the right types (i.e., Categories) of renewables in the right Compliance Periods to ensure full conformity with applicable standards. The Procurement Plan includes the conditions under which PWP may be excused for delay of timely compliance, but no such conditions are anticipated at this time.

The RPS is broken down into three distinct Compliance Periods. Within each Compliance Period are mandatory compliance targets, specified as a percentage of retail electrical sales (load), ranging from 20% in 2011 through 33% in 2020 and beyond.

The compliance targets are further broken down into four Categories. The attributes of each Category are described below:

- Category 0: Applies to resources procured prior to June 1, 2010. Energy from these grandfathered resources will be subtracted from the total RPS requirement without being classified into any of the other three Categories). The RPS requirement, minus the grandfathered Category 0 resources, will result in a "Net Procurement Requirement", against which the other Category percentages apply.
- Category 1: Bundled in state, or out-of-state electricity products from renewable resources that are directly connected into California, or are scheduled into California without substituting electricity from another source.
- Category 2: Bundled electricity products from renewable resources, which products may be delivered at times or locations other than when the energy is actually produced, and which must be matched with incremental electricity from another resource (also known as "firmed and shaped" electricity).
- Category 3: Unbundled Renewable Energy Credits ("RECs") and other electricity products from eligible renewable energy resources that do not meet the definitions for Category 1 or Category 2.

The following table and charts summarize the requirements of SBX1-2, the CEC Guidebook and Enforcement Procedures, and Pasadena's 2012 IRP.

Table 1

Pasadena Water & Power										
CEC-Compliant Procurement Plan Requirements by Calendar Year										
	Compliance Period 1			Compliance Period 2			Compliance Period 3			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020+
SBX1-2 RPS Mandatory Procurement Requirement (% of Retail Load) ^[1]	20%			20%	20%	25%	27%	29%	31%	33%
Category 0:	No constraint									
Category 1 Minimum:	≥50% of Net Procurement Requirement			≥65% of Net Procurement Requirement			≥75% of Net Procurement Requirement			
Category 2: Maximum ^[2] :	≤50% of Net Procurement Requirement			≤35% of Net Procurement Requirement			≤25% of Net Procurement Requirement			
Category 3 Maximum:	≤25% of Net Procurement Requirement			≤15% of Net Procurement Requirement			≤10% of Net Procurement Requirement			

^[1] As imposed by the CEC Guidebook, 7th Edition and proposed CEC Enforcement Procedures. SBX1-2 does not include specific interim targets in CP3, just obligation to make "reasonable progress."

^[2] The Category 2 constraint is not specified by law, but is derived logically as the maximum residual given the Category 1 constraint.

On November 21, 2011, the City Council defined (grandfathered) all renewable energy contracts signed before June 10, 2010 as Category 1. The original Enforcement Program adopted by the City Council on December 5, 2011 deemed that these "grandfathered" contracts met the then current RPS requirements for Category 1¹. The CEC has since determined in its latest Guidebook that grandfathered contracts will NOT qualify for Category 1. The CEC has instead created a new Category 0, and deemed that grandfathered contracts will "count in full" towards meeting RPS requirements. Thus, instead of satisfying a portion of PWP's Category 1 requirements, the energy produced by grandfathered contracts is deducted from the total RPS Procurement Requirement before the Category percentages are applied. The net effect for PWP is a slight shift in the types of resources needed to balance portfolio requirements from the lower cost Category 3 to the premium Category 1.

Based on the current editions of the CEC Guidebook and Enforcement Procedures, PWP has included its biogas contracts, which were executed after June 1, 2010, in Category 1. Should future rulings change this classification, PWP will adjust the Procurement Plan accordingly.

The chart in Figure 1 below, together with the details in Table 2, provides a summary of the current status of PWP's RPS procurement activities and the amount of RPS purchases still required under the Procurement Plan. To the extent PWP's voluntary RPS goal exceeds California's RPS procurement requirements, the Procurement Plan calls for meeting this higher goal with the best-fit renewable sources available without regard to Category.

¹ Section F., and Exhibit 1

Figure 1

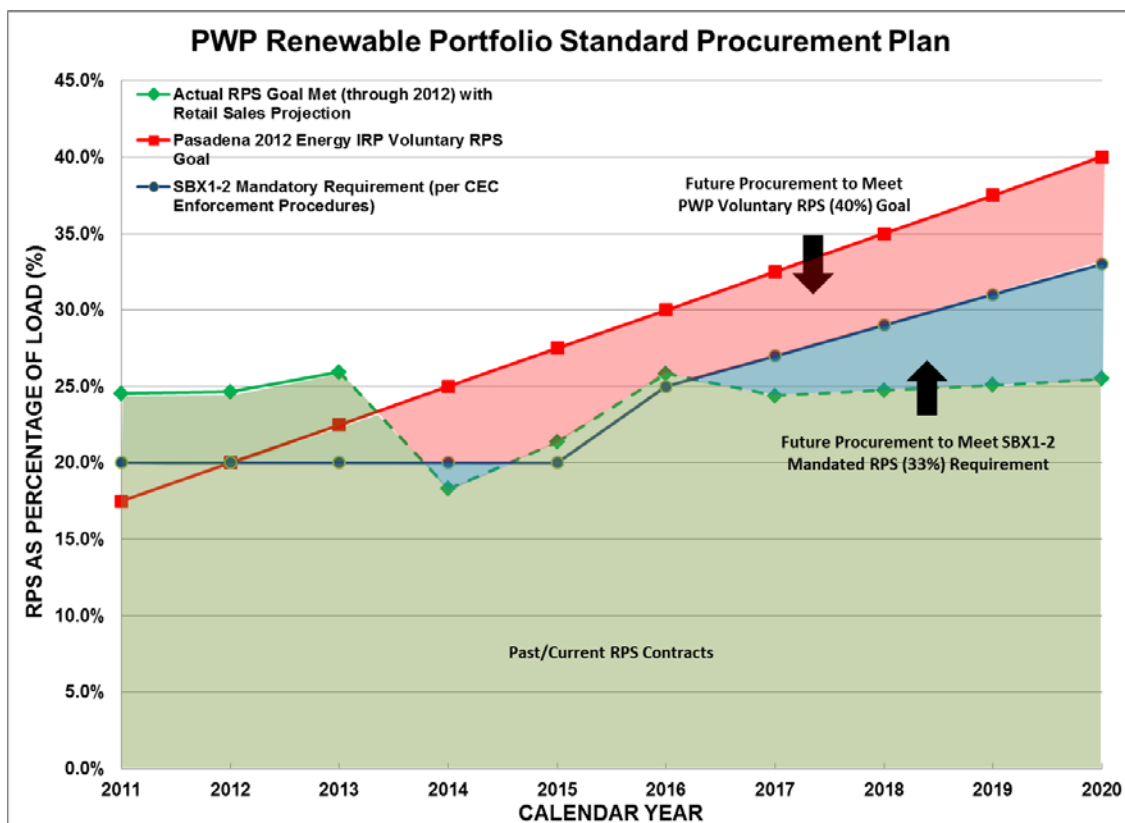


Table 2

Pasadena Water and Power SBX1-2 Procurement Plan (by Calendar Year)										
	Compliance Period 1			Compliance Period 2			Compliance Period 3			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020+
	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh
Estimated PWP Electric Sales (Load)	1,140	1,140	1,130	1,133	1,129	1,121	1,110	1,099	1,089	1,078
SBX1-2 Mandatory RPS Procurement Requirement (%)	20%			20%	20%	25%	27%	29%	31%	33%
SBX1-2 Mandatory RPS Requirement for PWP (GWh)	682			227	226	280	300	319	338	356
Future Purchases to Meet SBX1-2 Requirement (GWh)	0			19	0	36	97	115	132	148
Portfolio Content Category 1 (GWh)	0			0	0	0	43	56	68	80
Portfolio Content Category 2 (GWh)	0			4	0	13	32	35	38	41
Portfolio Content Category 3 (GWh)	0			15	0	23	22	23	25	27
TOTAL FUTURE PURCHASES FOR SBX1-2	762			227	241	280	300	319	338	356

Table 3

Pasadena Water and Power Pasadena Voluntary RPS Procurement Plan (by Calendar Year)										
	Compliance Period 1			Compliance Period 2			Compliance Period 3			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020+
	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh
Estimated PWP Electric Sales (Load)	1,140	1,140	1,130	1,133	1,129	1,121	1,110	1,099	1,089	1,078
Procurement Plan to Meet PWP Voluntary RPS Target (%)	24.5%	24.6%	25.9%	26.0%	27.5%	30.0%	32.5%	35.0%	37.5%	40.0%
Pasadena Voluntary RPS Target (GWh)	280	281	293	295	310	336	361	385	409	431
PWP Voluntary RPS Already Met w/Current Contracts (GWh)	280	281	293	207	241	244	203	204	206	208
Required Future SBX1-2 Procurement (GWh)	0			19	0	36	97	115	132	148
Additional Future Purchases for PWP Voluntary RPS (GWh)	0			68	70	56	61	66	71	76
TOTAL FUTURE PURCHASES FOR VOLUNTARY RPS	280	281	293	295	310	336	361	385	409	431

CITY COUNCIL POLICY CONSIDERATION:

The proposed Enforcement Program and Procurement Plan are mandatory under State law (Public Utilities Code Sections 399.30(e) and (f), as enacted under SBX1-2), and are consistent with the City's Urban Environmental Accords Goals with respect to increasing renewable energy and reducing greenhouse gas emissions, the General Plan Energy Element, the City Council's Strategic Planning Goals, and the 2009 Energy IRP, as updated in 2012.

ENVIRONMENTAL ADVISORY COMMITTEE RECOMMENDATION:

On June 18, 2013, the Environmental Advisory Committee recommended that the City Council adopt the proposed revised Enforcement Program and Procurement Plan.

FISCAL IMPACT:

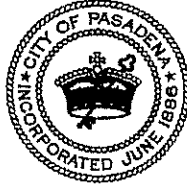
The adoption of the revised Enforcement Program and associated RPS Procurement Plan establishes the framework to procure additional renewable energy resources which may have substantial cost for PWP and its electric ratepayers. However, the actual cost implications will not be known until such time as PWP executes additional renewable energy contracts to meet mandated RPS requirements. Any costs associated with additional renewable energy contracts under the Procurement Plan will be recovered through the energy charge component of the electric rate. There is no anticipated impact to other operational programs or capital projects as a result of this action.

REFERENCE DOCUMENTS:

In order to comply with CEC regulations, full copies of the following documents are available on the internet at www.PWPweb.com/RPS

Draft RPS Enforcement Program – Revision 1
Draft RPS Procurement Plan

4.B



PASADENA WATER AND POWER

MEMORANDUM

June 25, 2013

To: Municipal Services Committee

From: Phyllis E. Currie
General Manager *Phyllis E. Currie*

Subject: Tunnel Water Project Update

This item is for information only.

BACKGROUND:

Three subterranean tunnels in the Arroyo Seco area have outfalls near the Brookside Golf Course ("Brookside"). These tunnels are commonly referred to as the Devil's Gate, Richardson, and Wilson tunnels. Each of the tunnels, built prior to the 1900s, captures groundwater via percolation. Prior to the 1940s, water from the tunnels was used as a potable water supply. Beginning in the 1940s and 1950s, use of the water from these tunnels ("tunnel water") as a potable resource was discontinued due to declining water quality, lack of reliability and age of the infrastructure.

In the early 1970s, interest in use of Devil's Gate tunnel water re-emerged as an irrigation water supply for the Brookside. The tunnel water, which supplemented a portion of the potable water, was used until 1999. Due to source reliability and erratic pressures that damaged the irrigation system when the water supply switched between tunnel water and potable water, use of the Devil's Gate Tunnel water as irrigation water to Brookside was discontinued. Since then, the tunnel water has been discharged into the Arroyo Seco storm water channel.

In recent months, staff of the Rose Bowl Operating Company ("RBOC") has been working to develop a project that would again allow use of non-potable water from the Devil's Gate and Richardson tunnels to irrigate Brookside. In May 2013, RBOC engaged the services of Bryant Taylor Gordon ("BTG"), an irrigation design and consulting firm, to evaluate the feasibility of reestablishing the connection, including estimated water flows, system improvements and costs. At RBOC's request, PWP engineering staff has reviewed the report prepared by BTG and has provided technical assistance and comments to RBOC.

PWP agrees in principle that the following proposals included in the BTG report are feasible to deliver tunnel water to irrigate the golf course:

1. Use water from Devil's Gate when available although supply is not guaranteed
2. Install a 15,000 gallon fiberglass equalization tank
3. Maintain use of one existing 10-inch and two 6-inch meters for potable water
4. Install two new 15 horsepower pumps for a design flow of 300 gallons per minute at 110 pounds per square inch
5. Install new power panel and motor control center
6. Operation and maintenance of the proposed facility is RBOC's responsibility which includes water and power charges

A more detailed engineering study will be required to provide a more accurate cost estimate. The study may also determine that additional facilities may be required, therefore adding to the project cost.

PWP has also determined that the following issues may not have been adequately addressed in the BTG report:

1. The required level of environmental analysis for the project that will need to be completed
2. A new revenue meter must be included in the design to implement the rates pursuant to the Water Rate Ordinance
3. Upon completion of the City's Recycled Water project, the tunnel water will be integrated into this resource mix and made available to all non-potable water customers
4. The issue of water rights must be investigated regarding use of the water from the Richardson Tunnel

Estimated Costs and Payback

BTG estimates the cost for the project to be \$197,000. This cost includes all construction costs and equipment. BTG's analysis also included the potential savings in irrigation costs based on minimum and maximum levels of water provided by the project. The minimum expected water delivery from the project is 50 acre feet ("AFT") per year and the maximum expected delivery is 150 AFT. The total irrigation requirement for Brookside is estimated at 540 AFT per year. The estimated savings also included additional electricity costs to operate the equipment. In addition, BTG included an estimated "sinking fund contribution" to fund future replacement of the pump stations. PWP does not believe it will be necessary to include a replacement fund because the equipment will not require replacement after the Recycled Water project is operational.

RBOC Proposal for the Tunnel Water Project

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PWP conducted its own analysis of the cost recovery period based on actual use of potable water by Brookside over a historical three-year period. Both analyses were based on the minimum and maximum delivery of water from the tunnel water project. The cost recovery periods did not vary substantially between the two analyses.

The table below summarizes the analyses provided in the BTG report compared to that provided by PWP:

	BTG Report				PWP Analysis		
	Current	50 AFT	150 AFT		Current	50 AFT	150 AFT
Water Costs	\$897,700	\$859,920	\$738,817		\$852,000	\$810,000	\$704,000
Electricity Costs*	\$0	\$11,284	\$16,389		**N/A	N/A	N/A
"Sinking Fund"	\$0	\$9,000	\$9,000		N/A	N/A	N/A
Annual Savings		\$37,782	\$158,885		\$0	\$42,000	\$148,000
Payback period		5 years, 2 months	1 year, 2 months			4 years, 9 months	1 year, 4 months

*BTG did not include transmission charges in the electricity costs; actual pump run times are estimated

** PWP's Water Costs includes electricity costs and other operating and maintenance charges, no additional electricity costs would be incurred by PWP as a result of the tunnel water project

Based on PWP's review of the BTG analysis, the proposed project is feasible. The primary risks are fluctuations in availability of tunnel water (i.e. reliability of water delivery), age and condition of the existing tunnels, and environmental impacts. These issues were previously documented and submitted to RBOC in May 2012 and updated in April 2013. It was also conveyed to RBOC during a review of the BTG feasibility study between PWP and RBOC.

PWP is proceeding with the development of the Recycled Water project. The Recycled Water project will integrate tunnel water as a source of non-potable water in addition to the water provided by Pasadena's connection to the Los Angeles-Glendale Water Reclamation Plant, of which PWP has been a party for 20 years. Upon completion of the Recycled Water project, the tunnel water agreement and pricing with RBOC would terminate. The tunnel water will be included in the Recycled Water supply and delivered to all customers of the project, including Brookside, at non-potable rate(s). Negotiations are currently underway with the City of Glendale to renew the existing participation agreement for the reclaimed water system. The environmental review process has been expanded to incorporate the tunnel water into the Recycled Water project.

Tunnel Water Rates

PWP has developed a proposal for establishing rates for the tunnel water for this project. It is important to note that this rate structure would be available to any PWP water customer who develops a new non-potable water source subject to the Terms of Agreement included below. This proposal was previously presented to RBOC in May 2012.

Pricing for Tunnel Water (Note rates will be the current rates in effect at time of billing):

1. RBOC will be charged for tunnel water at the rate established for Block 1 (or its equivalent) until RBOC's capital investment has been recovered for the project as described in the May 2013 BTG report, providing:
 - a. The original capital investment amount and the required rate of return or discount rate (if any) is agreed upon by RBOC and PWP
 - b. All tunnel water will be separately metered by PWP
 - c. RBOC will be responsible for the cost to install and connect new meters
 - d. A quarterly and annual analysis of the metered water will be performed by PWP to determine the savings and cumulative discounted savings from the project to RBOC. Savings from the project to RBOC will be determined by multiplying the difference in water cost to RBOC based on the existing rates for water usage at Block 1, Block 2, Block 3 and Block 4 (or equivalents) and Block 1 water rates by the amount of the metered water delivered by the tunnel water project.
 - e. RBOC will be deemed to have recovered its original capital investment when the cumulative discounted savings from the project is equal to the RBOC's original capital investment.
2. Upon the expiration of the condition (1) above, and if a non-potable water rate has been established, the tunnel water will thereafter be priced at the non-potable rate (projected to be discounted by a percentage from the rate established for Block 2 (or its equivalent);
Example: 30% discount from current Block 2 rate: $\$2.72 * .70 = \1.90
3. Upon the expiration of the condition (1) above, and if a non-potable rate has not been established, the tunnel water may be priced at 130% (or other percentage based on cost recovery) of the rate established for Block 1 (or its equivalent) to ensure the Water Utility's Overhead, General Fund transfer obligation and Rate of Return ("ROR") is maintained;
4. The tunnel water will be subject to the Capital Improvement Charge ("CIC") and any new rates PWP may develop;
5. The Distribution and Customer Charge ("D&C") will apply to all new connections of the Tunnel to the existing Water System and may be discontinued for any existing connections no longer in use as a result of completing the project.

Terms of Agreement

PWP proposes the following terms of agreement related to the proposed tunnel water project. Similar to the proposed rates, these terms would be available to any PWP water customer who develops a new non-potable water source subject to the rate structure described in this report. These terms were presented to the RBOC in May 2012:

1. Access to and use of the tunnel water does not convey or transfer title of the associated water rights.

2. RBOC is willing to make the original capital investment in the tunnel water project with the understanding that rights for tunnel water are not firmly established and the impacts of any successful challenges will be borne by RBOC and may affect future availability of tunnel water.
3. PWP will not test nor assure quality of tunnel water.
4. RBOC shall be responsible for any future environmental or public health impacts of tunnel water use on its property.
5. PWP does not certify, guarantee or warrant tunnel water flow and volume.
6. Production from tunnel water may be adversely impacted by a number of factors including and not limited to lowering of groundwater levels, reduction in natural recharge, low level of precipitation, well extraction by PWP and members of the Raymond Basin, collapse or break (in part or full) of the tunnel and/or conveyance system, water rights, environmental compliance, etc.
7. Maintaining local well production by PWP will have priority over production of tunnel water.
8. PWP and other members of the Raymond Basin have groundwater rights that are extracted by the use of wells. Maintaining production from these wells has priority over production of tunnel water. RBOC assumes the risk that any deleterious impact to water flows from tunnel water use due to well pumping may result in an extended term for recapturing the initial capital investment in the tunnel water project.
9. Water demands for Brookside that are not met by tunnel water will be delivered at the then current block rate structure (or equivalent) for potable water.
10. Environmental impacts of diverting tunnel water for RBOC use are not fully documented and will be the responsibility of RBOC for current and/or future compliance.
11. PWP does not guarantee the current and future condition of the tunnels including and not limited to any conveyance system tying to and from the tunnels for delivery of water.
12. PWP is not responsible to maintain, upgrade, repair, or replace the tunnel including any of the conveyance system for tunnel water use by RBOC.
13. At such time as the Recycled Water project is constructed and recycled water becomes available, it is anticipated that all customers who have access to the recycled water will be mandated to use the water from the project for irrigation and other non-potable uses.
 - a. RBOC (including Brookside) will be among the mandatory customers of Phase I of the Recycled Water project.
 - b. Upon completion of Phase I of the Recycled Water project, the tunnel water will be combined with any other source of non-potable water produced by the project for a single source of "non-potable" water.

PWP further proposes that the rates and terms described in this report will apply until the capital investment of a proposed project is recovered, but not to exceed a maximum payback period of seven years. A discount (interest) rate of 3% was assumed for purposes of developing the proposed payback period. Limiting the maximum amount of

each non-potable resource project for which cost recovery will be provided will ensure that there will be no subsidy by other ratepayers. The proposed pricing would require a public hearing process, including notification to all customers, to comply with Proposition 218. City Council action is required to approve the proposed pricing.

Next Steps

When PWP receives confirmation that the RBOC is proceeding with construction of the tunnel water project, staff will make recommendations to the City Council to implement the required changes to the Water Rate Ordinance as required by Proposition 218. The changes will include a recommendation to provide the tunnel water (or any new resource developed by its customers) at the rates and terms discussed herein. This will require the following steps:

1. Set a Public Hearing date to receive public comments on the recommended rates
2. Mail a notice to all PWP water customers and property owners of record and about the recommended changes
3. Receive public comments over a 45 day period
4. Conduct a public hearing
5. If fewer than a majority of customers and property owners protest the recommended changes, the City Council may direct the City Attorney to amend the Water Rate Ordinance to provide metered water from new resources at block 1 (or equivalent) rates until the initial capital investment required has been recovered

Fiscal Impact

Implementation of this project and the recommended changes to the Water Rate Ordinance are intended to be revenue-neutral to the Water Fund. The recommended changes would be applicable to any project that provides new non-potable water resources that meet the established criteria. In general, reduction in revenues from the sale of potable water would be offset by reduced expenses to purchase or produce the same amount of water.