

Los Angeles



Department of Water & Power

ERIC GARCETTI  
Mayor

Commission  
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RONALD O. NICHOLS  
*General Manager*

December 4, 2013

The Honorable City Council  
City of Los Angeles  
Room 395, City Hall  
Los Angeles, California 90012

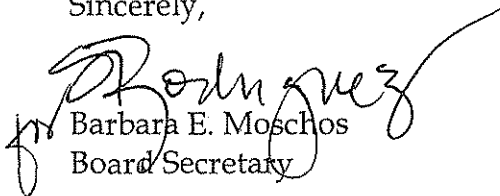
Honorable Members:

Subject: LADWP Apex Power Project Power Sales Agreement No. BP 13-055 with Southern California Public Power Authority and LADWP Apex Project Agency Agreement No. BP 13-056 with SCPA for Project Management Services

Pursuant to Charter Section 674(a)(1) and 674(a)(2), enclosed for approval by your Honorable Body is Resolution No. 014 115, adopted by the Board of Water and Power Commissioners (Board) on December 3, 2013, approved as to form and legality by the City Attorney, which authorizes execution of LADWP Apex Power Project Sales Agreement No. BP 13-055 with Southern California Public Power Authority for 527 Megawatts of Combined Cycle Capacity and LADWP Apex Project Agency Agreement No. BP 13-056 with SCPA for Project Management Services. As directed by the Board, transmitted to you are supporting documents.

If there are any questions regarding this item, please contact Ms. Winifred Yancy, Manager of Intergovernmental Affairs and Community Relations, at (213) 367-0025.

Sincerely,

  
Barbara E. Moschos  
Board Secretary

BEM:oja

Enclosures: LADWP Resolution

Board Letter

CAO Report

Apex Power Sales Agreement No. BP 13-055

Apex Power Project Agency Agreement BP 13-056

Asset Purchase Agreement

Los Angeles Aqueduct Centennial Celebrating 100 Years of Water 1913-2013

111 N. Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles, CA 90051-5700  
Telephone: (213) 367-4211 www.LADWP.com

c/enc: Mayor Eric Garcetti  
Councilmember Felipe Fuentes, Chair, Energy and the Environment Committee  
Gerry F. Miller, Chief Legislative Analyst  
Miguel A. Santana, City Administrative Officer  
Rafael Prieto, Legislative Analyst, CLA  
William R. Koenig, Chief Administrative Analyst  
Winifred Yancy

WHEREAS, the Los Angeles Department of Water and Power's (LADWP) owns 477 megawatts of capacity of the coal powered Navajo Generating Station (NGS); and

WHEREAS, LADWP intends to divest of its portion of NGS and replace it with a combination of renewable resources, energy efficiency resources and a natural gas powered Combined Cycle facility on or before March 1, 2014; and

WHEREAS, the strategies in LADWP's Integrated Resource Plan (IRP) include regulatory requirements, policy objectives, and increases in eligible renewable energy resources, while maintaining service reliability, using existing assets near eligible renewable energy resources, and minimizing the financial impact on ratepayers; and

WHEREAS, the IRP has identified that divesting of NGS would require a new reliable fossil fueled power plant to replace a portion of the NGS capacity and energy; and

WHEREAS, LADWP advertised a Request for Proposal for a Combined Cycle Plant (RFP) on the LADWP's Real Estate website on June 29, 2012; and

WHEREAS, LADWP received nineteen bidders responding; seven of them were for existing plants, one of which was from Las Vegas Power Company, LLC which proposed the sale of the Apex Combined Cycle Generating Station (Project) located in Unincorporated County, north of Las Vegas, Nevada; and

WHEREAS, the Board of Water and Power Commissioners (Board) approved the Southern California Public Power Authority (SCPPA) Planning and Development Agreement No. 013-028 under Resolution No. 013-265, which authorized LADWP to participate with SCPPA for the purpose of evaluating, acquiring and purchasing the energy from an existing Combined Cycle Generating Facility; and

WHEREAS, pursuant to the Planning and Development Agreement, SCPPA has negotiated and entered into an Asset Purchase Agreement with Las Vegas Power Company, LLC for SCPPA to purchase the Project in its entirety; and

WHEREAS, the Asset Purchase Agreement will require SCPPA to assume and enter into a Water Agreement with Las Vegas Valley Water District (Water Agreement) for the purchase of water for plant operations and an Energy Sales Agreement with Silver State Energy Association (Energy Sales Agreement) for the sale of up to 50 MW of off-peak energy; and

WHEREAS, the SCPPA Apex Power Project Power Sales Agreement (PSA) No. BP 13-055 between the Southern California Public Power Authority and the City of Los Angeles, acting by and through the LADWP, will authorize LADWP to purchase Project energy from SCPPA and sets forth mutual covenants and agreements in order for LADWP to pay SCPPA for its costs of acquisition and the energy and capacity of the Project for term expected to be between 20 - 25 years, subject to bond market conditions for the SCPPA Bonds; and

WHEREAS, the Apex Power Project Agency Agreement No. 13-056 provides for the designation of LADWP as the Project Manager to administer the scheduling of the project energy on behalf of and for the benefit of SCPPA and LADWP as well as the administration of the Water Agreement and Energy Sales Agreement on behalf of SCPPA and sets forth mutual covenants and agreements necessary for the administration, management, operation and maintenance of the Project; and

WHEREAS, the PSA enables SCPPA to consummate an Asset Purchase Agreement (Purchase Agreement) between Las Vegas Power Company, LLC, and SCPPA, which provides for the purchase of the Project through the issuance of bonds.

NOW, THEREFORE, BE IT RESOLVED that the SCPPA Apex Power Project Power Sales Agreement No. BP 13-055 (PSA) between the Southern California Public Power Authority and the LADWP, now on file with the Secretary of the Board and approved as to form and legality by the City Attorney, be and the same is hereby approved; and

BE IT FURTHER RESOLVED that the SCPPA Apex Power Project Agency Agreement No. 13-056 (Agency Agreement) between SCPPA and LADWP, now on file with the Secretary of the Board and approved as to form and legality by the City Attorney, be and the same is hereby approved; and

BE IT FURTHER RESOLVED that in order to fulfill LADWP's duties under the Agency Agreement, that the Board respectfully requests that the City Council approve an ordinance substantially in conformance with the proposed draft ordinance (attached), which authorizes the sale of electric energy or generating capacity to SCPPA from time to time as determined necessary, as provided in the Wholesale Marketing Energy Risk Management Policy under Resolution No. 003-309 dated June 17, 2003 as amended by Resolution No. 006-225 dated June 6, 2006. The ordinance provides that the durations are not to exceed to the term of the Agency Agreement in order to administer the Energy Sales Agreement, and permits a delegation of authority by the Board to enter into such contracts to the General Manager; and


BE IT FURTHER RESOLVED that the President or the Vice President of this Board, or General Manager, or such person as the General Manager shall designate in writing, and the Secretary, Assistant Secretary, or the Acting Secretary of the Board (Designated Officers), are hereby authorized and directed to execute the SCPPA Apex Power Project Power Sales Agreement No. BP 13-055 and the Apex Power Project Agency Agreement No. BP 13-056, subject to Los Angeles City Council approval of such agreements by ordinance, pursuant to Section 674 of the Charter of the City of Los Angeles; and

BE IT FURTHER RESOLVED, that the Designated Officers are hereby authorized on behalf of LADWP, to execute, deliver and perform such further agreements, certificates, filings, financing statements, instruments, actions and other documents as may be necessary or appropriate to consummate the transaction contemplated or required by the Apex Power Project Power Sales Agreement No. BP 13-055 and the Apex Power Project Agency Agreement No. BP 13-056; and

BE IT FURTHER RESOLVED that the Chief Accounting Employee of LADWP, upon proper certification, is authorized and directed to draw demands on the Power Revenue Fund, in payment of the obligations arising under PSA No. BP 13-055 and Agency Agreement No. BP-056; and

BE IT FURTHER RESOLVED that the Board requests that the City Council approve, by ordinance, pursuant to Section 674(a)(1) and (2) of the City Charter, (a) the Apex Power Project Power Sales Agreement No. BP 13-055, (b) the Apex Power Project Agency Agreement No. BP 13-056 and (c) the sales of electric energy and capacity to SCPA in administering the Energy Sales Agreement in accordance with the Agency Agreement.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of the resolution adopted by the Board of Water and Power Commissioners of the City of Los Angeles at its meeting held DEC 03 2013.


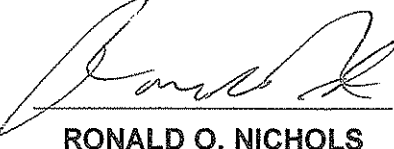
  
ASSISTANT BOARD SECRETARY

APPROVED AS TO FORM AND LEGALITY  
MICHAEL N. FEUER, CITY ATTORNEY

DEC 03 2013

BY   
TIMOTHY J. CHUNG  
DEPUTY CITY ATTORNEY

**LOS ANGELES DEPARTMENT OF WATER AND POWER (LADWP) BOARD APPROVAL LETTER**

<b>TO: BOARD OF WATER AND POWER COMMISSIONERS</b>	<b>DATE:</b> November 26, 2013	
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">   <b>ARAM BENYAMIN</b>                  Senior Assistant                  General Manager -                  Power System             </div> <div style="text-align: center;">   <b>RONALD O. NICHOLS</b>                  General Manager             </div> </div>  <hr/>  <hr/>	<p><b>SUBJECT:</b></p> <p>LADWP Apex Power Project Power Sales Agreement (PSA) No. BP 13-055 with Southern California Public Power Authority (SCPPA) for 527 Megawatts (MWs) of Combined Cycle Capacity and LADWP Apex Project Agency Agreement (AA) No. BP 13-056 with SCPPA for Project Management Services</p>	
	<p><b>FOR COMMISSION OFFICE USE:</b></p> <p><b>RESOLUTION NO.</b> _____</p>	
<p><b>CITY COUNCIL APPROVAL REQUIRED:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><b>IF YES, BY WHICH CITY CHARTER SECTION:</b> 674(a)(1) and 674(a)(2)</p>	

**PURPOSE**

Obtain authority to enter into the Apex Project PSA No. BP 13-055 between SCPPA and the City of Los Angeles (City) acting by and through LADWP which authorizes LADWP to purchase energy from SCPPA and sets forth mutual covenants and agreements in order to pay SCPPA for its costs of the energy and capacity of the SCPPA Combined Cycle Project (Project). The PSA enables SCPPA to obtain financing and consummate an Asset Purchase Agreement (Purchase Agreement) between Las Vegas Power Company, LLC (a wholly-owned affiliate of LS Power Company), and SCPPA, which provides for the purchase of the Project located in unincorporated Clark County, north of Las Vegas, Nevada, starting as of the Purchase Agreement closing date. The capacity and energy from the Project are part of the LADWP exit from coal-fired generation and greenhouse gas reduction consistent with state regulatory mandates.

Obtain authority to enter into the Apex AA No. 13-056 between SCPPA and LADWP, which provides for the designation of LADWP as the Project Manager to administer and manage the Project on behalf of SCPPA.

Request City Council approval by ordinance of the PSA and AA.

## **COST AND DURATION**

SCPPA will be obligated to purchase the Project pursuant to the Purchase Agreement at a cost of \$295 million and will finance the acquisition through the issuance of bonds. Under the PSA, LADWP will pay for the energy from the Project through repayment of the bonds, as well as all operating and maintenance, property, fuel and transportation costs associated with the generation and delivery of the energy produced by the Project.

SCPPA will seek bond financing for a total of \$325 million. The additional \$30 million will be used for additions and betterments of the Project to bring it up to LADWP standards and integrate the project into LADWP's electric grid. This bond financed portion will also include planning for a transmission analysis and options, such as a future direct generation tie line.

### **Funding Source**

Funding is budgeted in Power Revenue Fund's Fuel and Purchased Power Budget in FI 305-3148.

### **Fiscal Impact Statement**

LADWP's costs estimated are as follows:

- Debt Service: \$26M per year
- Transmission \$24.5M per year
- Operating and Maintenance: \$14M per year
- Fuel costs : \$20M per year at current natural gas prices

The annual expenditures to LADWP may total an average of \$84.5 million per year for 25 years, or \$2.11 billion total over the initial 25-year term.

The financial plan approved as part of the Fiscal Year 2012 rate ordinance originally budgeted \$500 million for the acquisition of the Project, and the actual price of the Project has been negotiated down to \$295 million.

## **BACKGROUND**

### **Navajo Divestiture**

Senate Bill (SB) 1368, the California Greenhouse Gas Emissions (GHG) Performance Standard Act, enacted in 2006, prohibits California utilities from entering into long-term financial commitments or contract renewals for base load generation unless it complies

with the GHG emissions performance standard. As this standard also applies to existing power plants for any long-term investments or contractual extensions, it affects LADWP's coal-fired generation resources.

The Navajo Generating Station (NGS) is a coal-fired generation station located near Page, Arizona. It consists of three units with a combined capacity of 2,250 MW. Salt River Project is the Operating Agent. As one of six owners, LADWP has a 21.2 percent ownership share in the station's generation. NGS operates under a co-tenancy agreement which shall remain effective throughout the initial term of the land lease with the Navajo Nation and throughout the lease extension thereafter.

While LADWP is contractually committed to NGS until December 31, 2019, significant progress has been made to exit from the project by 2015. Early divestiture of NGS is in LADWP's best interest for a number of reasons:

1. A better sales price than waiting until the 2019 deadline.
2. Assisting in purchase of renewables and energy efficiency which will displace a portion of the energy from the project.
3. Avoids the risk that pending federal regulations could potentially encumber the plant with expensive mitigation requirements.
4. Better availability of replacement generation.
5. Reduced CO2 emissions, relieving LADWP from having to purchase emission credits to comply with the statewide cap and trade program.
6. Makes room on the transmission network for importing additional solar and geothermal resources.

LADWP's Integrated Resource Plan (IRP), discussed further below, identifies the replacement of the energy lost as a result of the NGS divestiture with a combination of energy efficiency, renewable resources (consisting of wind, solar and geothermal), as well as energy from a combined cycle, natural gas generating facility. LADWP has installed over 1500 GWh of energy efficient measures, deployed over 1300 MW of renewable resources, has an additional 800 MW of renewable resources in construction with a 2016 in-service date, and will continue to invest in these energy saving measures into the foreseeable future. While these resources have provided a substantial amount of energy into LADWP's energy mix, they do not lend themselves readily to replacing the capacity that the baseloaded NGS plant provided. The purchase of energy from the Project will provide capacity that will be used to firm and back up the energy efficiency and renewable resources, and provide a mechanism to integrate them reliably into LADWP's grid.



### **LADWP's IRP**

The LADWP's goal is to develop long-term resources that are sensitive to the local and regional economy, and operationally flexible to changes in state and federal regulations, fuel prices, and advances in power generation technologies. The policy that shapes and guides this acquisition is the Integrated Resource Plan (IRP).

The LADWP's IRP presents several potential strategies for meeting LADWP's regulatory mandates and policy objectives for increasing renewable energy generation, reducing greenhouse gas emissions, maintaining electric power service reliability, and minimizing the financial impact on ratepayers.

The IRP establishes key selection principles for generation projects. Those are:

- Maintain a high level of electric service reliability by taking advantage of the geographic diversity of generation projects.
- Maximize the use of existing LADWP assets, such as the Navajo-McCullough transmission line.
- Take advantage of the benefits of clustering resources to optimize efficiency for operations and maintenance of facilities.
- Ownership or ownership options of projects using proven technology in strategic locations.
- Maintain options/flexibility.

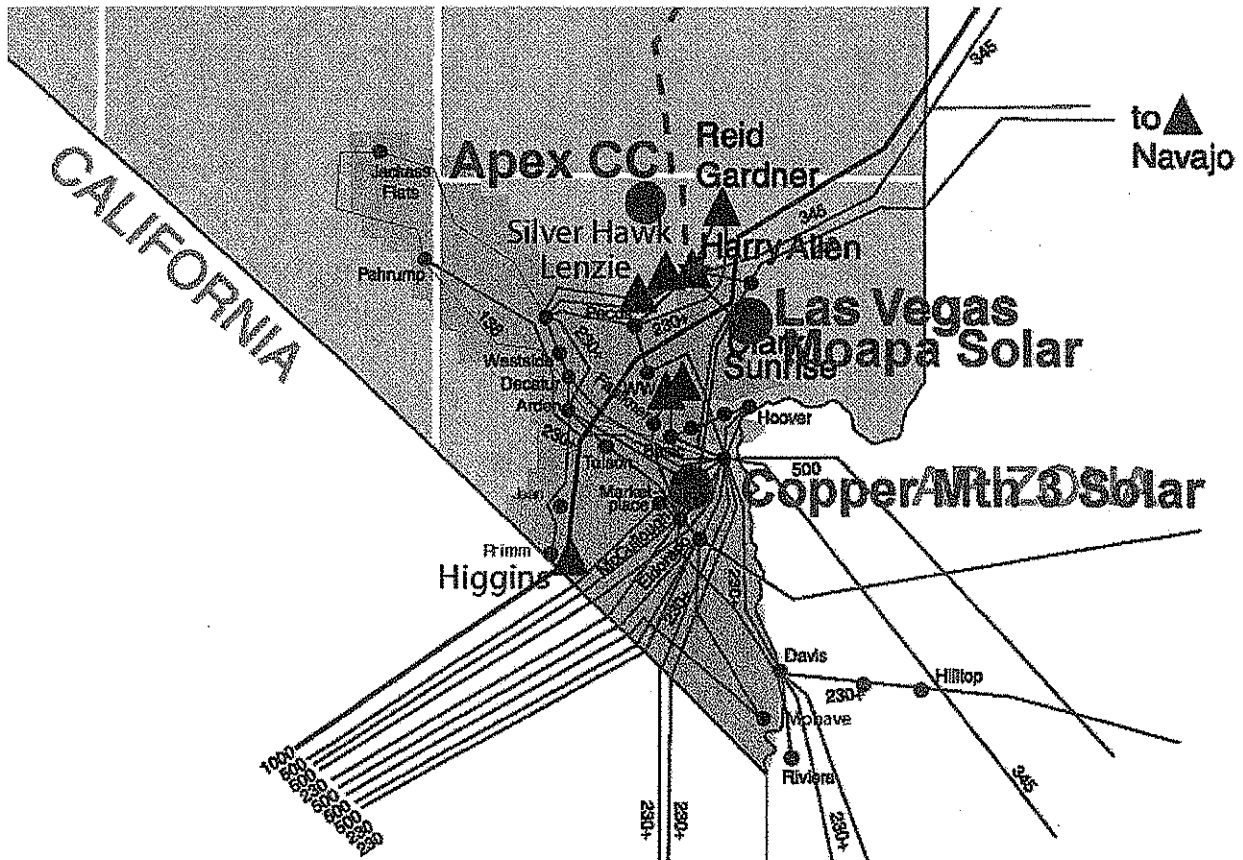
The LADWP rigorously evaluates each potential strategy to identify and recommend the best overall tactical plan to meet these key objectives.

### **Apex Power Project**

The Project is located in unincorporated Clark County, north of Las Vegas, Nevada, as shown in the map below. The Project includes one combined cycle generating station consisting of one steam turbine generator, and two simple cycle 165 MW combustion turbine generators. The Project also includes the heat recovery equipment, air inlet filtering, closed cycle cooling system, emission control system, exhaust stack, distributed control system, and all necessary noise control equipment. The summer rating of the Project is 527 MWs, but produces 500 MW during the summer high peak hours due to ambient conditions.

Project capacity is 527 MWs, with an estimated capacity factor of 50 percent. Purchase of 2308 Gigawatt Hour (GWh) of energy output annually will enable LADWP to meet approximately 9.02 percent of LADWP's resource requirements. The energy will be delivered to the Mead 230kV Substation or such point of delivery as determined by the

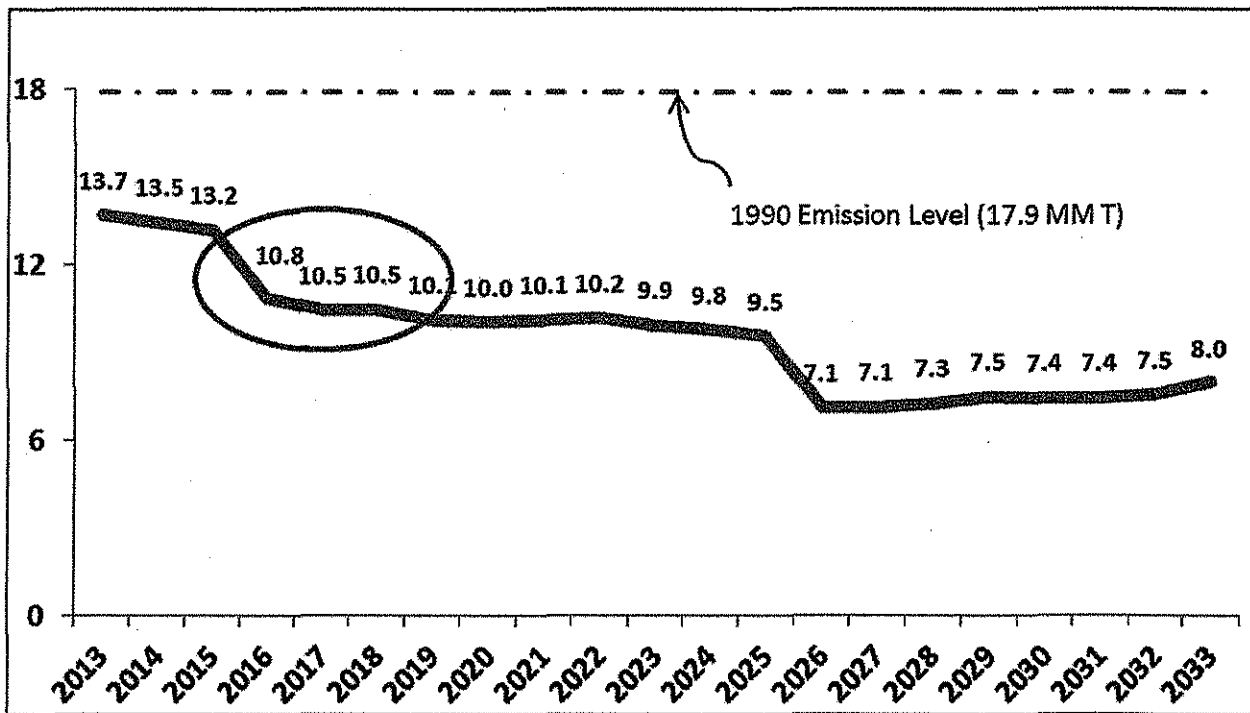
LADWP, SCPA and LS Power over transmission rights that are acquired with SCPA's purchasing of the Project and existing transmission of the LADWP.



The purchase of the energy from the Project meets the IRP principles in that the property's location is able to take advantage of utilizing LADWP's existing infrastructure: such as interconnecting to LADWP's transmission facilities in Nevada; connecting to the Kern River Pipeline and access LADWP's Wyoming natural gas supplies; and having the energy generated from this facility delivered through LADWP's Victorville-Los Angeles 230 kilovolt transmission line. The PSA and AA secure LADWP's access to energy from the Project from SCPA, as well as providing for LADWP management of operations, maximizing plant flexibility. The Project provides for geographic diversity by providing LADWP with its first, fossil fuel plant located outside of the state of California. This geographic diversity could provide some much needed support in the event of any localized natural disaster.

The IRP Group has further determined that without SCPPA's acquisition of the Project and the sale of the energy to LADWP, LADWP may be mildly capacity deficient through 2023, after which LADWP becomes moderately capacity deficient. In addition, until our LADWP's in-basin repowering program is complete, LADWP is susceptible to reliability problems for those units waiting to be replaced. In particular, Scattergood Units 1, 2, and 3 and Haynes Units 1 and 2 are at least 50 years old, and in the last several years have experienced declining reliability. Compounding this problem is the fact that, because these units will be replaced in the next 7 to 10 years, capital investments needed to extend their life have been discontinued. Mitigating the in-basin capacity and reliability deficiencies are an additional benefit for securing energy from the Project for increased reliability.

The IRP Group anticipates that the acquisition of the Project will result in a significant reduction of greenhouse gases compared to the present dispatch of generation through Navajo. As demonstrated in the graph below, the IRP expects the Project will be responsible for a reduction of 147,000 metric tons of greenhouse gas emissions versus using LADWP in-basin generation and by enabling the divestiture of Navajo Generating Station, it will contribute to an additional cumulative reduction of 6.52 million metric tons over the period 2015 through 2019.



**SCPPA Asset Purchase Agreement**

SCPPA is a joint powers authority formed in 1980 to facilitate joint power and transmission projects for the benefit of Southern California municipal utilities. SCPPA members include the City of Los Angeles, the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Pasadena, Riverside, and the Imperial Irrigation District. LADWP is currently a participant in numerous SCPPA projects, including but not only: Palo Verde Nuclear Power Project, the Southern Transmission System, Mead-Adelanto Transmission System, the Mead-Phoenix Transmission System, and many renewable projects. SCPPA was selected because having the future potential of adding other SCPPA members to participate in the Project could spread the risk associated with acquiring an existing power plant, and help in financing the Project.

The Project proposed by Las Vegas Power Company, LLC, was one of the 4 proposals short-listed, and the LADWP requested that SCPPA finance and acquire this Project. SCPPA and LADWP subsequently negotiated the Purchase Agreement with Las Vegas Power Company, LLC, for the sale of the Project to SCPPA.

The Purchase Agreement provides for SCPPA's purchase of the Project from Las Vegas Power Company, LLC for \$295,000,000. The Project is comprised of the real property, the generating facility, personal property necessary to operate the facility, access rights and interconnection rights. SCPPA will issue bonds in reliance on the PSA with LADWP and will pay the full \$295,000,000 purchase price at closing.

**PSA No. 13-055**

Through the PSA between SCPPA and LADWP, SCPPA will sell to LADWP the energy produced by the Project and will pass through the debt service on the bonds and all operation and maintenance expenses to the LADWP.

The PSA provides for the following:

- LADWP will purchase, starting on the closing of the purchase of the Project, from SCPPA the right to access and use 100 percent of the output of the Project until the bonds are completely paid, which will be over a period of up to 25 years, (subject to potential required output sales under SCPPA's Energy Sales Agreement with Silver State Energy Association [described below]).
- The total estimated annual debt payment on the bonds for acquisition of the Project is \$26 million over the 25-year term.
- The current total estimated annual operating and maintenance costs of the Project, including fuel, is \$34 million, based on the current natural gas price.

- Identifies the roles and obligations of SCPA and LADWP, including, but not limited to, project deliverables, project manager, setting up of an annual budget and reporting requirements.
- Establishes payment mechanisms, including, but not limited to, payment amounts, charges, interest payments and billing procedures.
- Establishes the rights and obligations of SCPA and LADWP to deliver energy and capacity.
- Encompasses other services, including scheduling, arrangement of transmission services and metering.
- Requires LADWP and SCPA to comply with the bond financing operating and reporting requirements.
- Upon full repayment of the bonds and satisfaction of the PSA, SCPA will transfer ownership of the Project to LADWP.

**AA No. BP 13-056**

The AA provides for the designation of LADWP as the Project Manager to administer and manage the Project on behalf of SCPA. SCPA maintains a small staff to minimize administrative and general fees charged to the projects, and the largest Participant of each project typically acts as SCPA's agent for project management and administration. As the initial sole off taker of the energy from the Project, LADWP will be SCPA's agent for the Project management and administration.

Under the AA, LADWP agrees to act as Project Manager for SCPA and to carry out the activities necessary to manage, operate and maintain the Project. The AA identifies the roles and obligations of SCPA and LADWP in connection with the Project scheduling, reviews, monitoring, accounting, billing, reporting and controls. The AA will also provide for LADWP to manage the Water Agreement and Energy Sales Agreement (described below).

Los Angeles City Council Approval

Per Charter Section 674(a)(1) and (2), Los Angeles City Council (City Council) approval is required. Accordingly, attached is the City Administrative Officer (CAO) report dated November 1, 2013.

**METHOD OF SELECTION**

Competitive     Cooperative Purchase     Sole Source     Single Source

On June 29, 2012, a Request for Proposal (RFP) for a Combined Cycle Plant was advertised on the LADWP's Real Estate website. A pre-proposal bidder's conference

was held on July 16, 2012. The RFP closed on August 29, 2012, with nineteen bidders responding; seven of them were for existing plants. All of these projects were over 500 MWs, which is the typical size for a standard combined cycle power block.

Internal Review narrowed the list down to 4 projects, all existing and in-service.

The proposals were evaluated on the following criteria (Criteria):

1. New or Existing Project
2. Nameplate Capacity
3. Commercial Operation Date (COD)
4. Location
5. Point of Delivery
6. Heat Rate
7. Acquisition Cost
8. Delivery Cost
9. Transmission Availability
10. Mechanical Configuration
11. Site Control
12. Commercial Terms and Conditions

The four projects of interest are listed below:

- 830 MW – Victorville, CA, delivered to Victorville – COD 2003
- 527 MW – Las Vegas, NV, delivered to Mead/McCullough – COD 2003
- 550 MW – Gila, AZ, delivered to Marketplace – COD 2003
- 530 MW – Mohave Valley, AZ, delivered to Marketplace – COD 2001

On April 25, 2013, the LADWP's Board of Water and Power Commissioners approved SCPPA Planning and Development Agreement No. BP 13-028 under Resolution No. 013 265, which authorized LADWP to participate with SCPPA for the purpose of evaluating, acquiring and purchasing the energy from an existing Combined Cycle Generating Facility.

A task order request to assist with the technical review of the projects of interest (POIs) was issued to the three vendors under contract with the Renewable Services Contract. WorleyParsons (WP) was awarded the Task Assignment.

WP was selected to perform two subtasks. Subtask 1 created a request for information to the POIs, based on operational, mechanical, and electrical criteria (Criteria). Subtask 2 evaluated the information provided by each POIs in response to the request for information and site visits, and determined the status of each facility with respect to

the Criteria. The deliverable was a report containing a comparison and ranking for each plant proposed, and was delivered on March 30, 2013. This report indicated that Apex would be the most attractive plant to acquire.

LADWP staff created a draft economic pro forma estimating the total delivered cost of each POI's generation to our load center. This pricing information was included in developing a weighted scoring matrix that ranked each POI based on price, size, labor, transmission, flexibility and clustering. Based on the economic pro forma and the results of the site visits, LADWP Management decided to pursue negotiations for the Apex Power Project.

### **Due Diligence**

SCPPA and LADWP arranged for an insurance company to perform a Loss Asset Survey (LAS). The LAS consisted of a two day visit by two independent engineers to the Project site and determine its functional and operational status.

SCPPA and LADWP arranged for an independent engineering firm, SAIC Energy, Environment & Infrastructure, LLC to provide independent engineering services to assess the proposed acquisition of the combined cycle Project. The SAIC report determined that the plant was a well run plant, that has been operated and maintained well within industry standards.

LADWP's operational teams went out during the week of June 17, 2013, to perform their survey and evaluation of the site. All teams determined that the Project was a well-operated site and all maintenance appeared to be up to date.

### **Risk Management**

The Project Purchase Agreement provides representations and warranties secured by a monetary guarantee for a 5-year period from Broadway Gen. Funding. SCPPA and LS Power have negotiated a liability cap of 12 percent of the purchase price (approximately \$35.4 million). The monetary guarantee is backed by the DeSoto Generating Facility, an asset held by Broadway Gen. Funding, estimated to be worth approximately \$60 million.

LADWP's Risk Management team estimated the probable maximum loss for this Project during the first 18 month period would be below \$15 million. LADWP and SCPPA required Las Vegas Power Company to provide an additional security to its representations and warranties in the form of a \$10 million irrevocable Letter of Credit.

Finally, the Purchase Agreement requires Las Vegas Power Company to credit SCPPA \$250,000 from the purchase price for the purchase of a stand alone All Risk Property policy with a \$1 million deductible to limit SCPPA's financial impact.

### **Natural Gas Hedging Strategies**

While LADWP replaces coal fired generation with a combination of energy efficiency, renewables, and gas generation, LADWP will encounter more exposure to fluctuating natural gas prices. LADWP's natural gas position is being investigated by outside expertise to recommend specific hedging strategies to moderate some of the natural gas price risk.

### **Other Agreements**

#### **Plant Operating Agreement**

The Project is currently being operated and maintained by the Wood Group under an existing operating agreement that will be assumed by SCPPA. The employees of the Wood Group are members of the International Brotherhood of Electrical Workers. The contract with the Wood Group has been renewed until 2017, but is terminable by LADWP, after one year of LADWP ownership, subject certain terms in the operating agreement.

#### **Water Agreement to Operate Plant and Energy Sales Agreement**

A water agreement was in place between Las Vegas Power Company and the Las Vegas Valley Water District (LVVWD) for 350 acre-feet of water per year at no cost to Las Vegas Power Company. The prior Water Agreement also required the owner of the Project to offer 25 percent of the Project output to Nevada entities. The Water Agreement (Water Agreement) became effective in 2001 and was set to expire in 2026; substantially earlier than the duration of the bonds necessary for SCPPA's acquisition of the Project. Because of these two provisions, it was necessary for the parties to renegotiate and amend the Water Agreement to be consistent with the bond issuance and to modify the 25 percent reserved energy sales requirement.

In response to these needs, Las Vegas Power Company and LVVWD amended the Water Agreement and entered into a separate Energy Sales Agreement, which modified certain terms that will be effective only if and when SCPPA acquires the Project. The terms of the amended Water Agreement are for:

1. The extension of the term for an additional 25 years to have a term consistent with the term of the bonds.



2. A reduction of water usage from 350 acre-feet per year to 250 acre-feet per year.
3. A payment of \$303 dollars per acre-foot for the water used.
4. A separate Energy Sales Agreement that allows for the sale of up to 50 MW of off peak power to Silver State Energy Association by SCPPA (Energy Sales Agreement).

This newly negotiated 50 MW off peak power does not have to come from the Project and does not reduce the reliability of the Project in that still allows LADWP to access 100 percent of the Project capacity during peak hours.

This amended Water Agreement will be assigned to SCPPA and become effective at closing for the acquisition of the Project, at which time; the Energy Sales Agreement will also become effective.

#### **Transmission Agreement**

The Project currently has 500 MW of firm transmission to LADWP's Balancing Authority (BA) by wheeling through Nevada Energy's Harry Allen Substation to the Mead Substation. This contract has 10 years left in its term and costs approximately \$20 million per year.

LADWP will investigate the feasibility of building a new transmission line from the generating station to the Crystal substation, which is part of LADWP's BA. This new proposed transmission line to be investigated could bypass Nevada Energy's Harry Allen Substation and deliver to LADWP's load center via the Crystal Substation.

#### **ENVIRONMENTAL DETERMINATION**

In accordance with Section 15060 (c)(2) of the California Environmental Quality Act (CEQA) Guidelines, an activity is not subject to CEQA if it will not result in a direct or reasonably foreseeable indirect physical change in the environment. Since this acquisition is of an existing power plant located in Nevada and no construction is needed, it is not subject to CEQA.

**RECOMMENDATION**

It is requested that your Honorable Board adopt the attached Resolution approving and recommending City Council's approval, by Ordinance of LADWP Apex Power Project PSA No. BP 13-055 with SCPPA for 527 MWs of Combined Cycle Capacity and LADWP Apex Power Project AA No. BP 13-056 with SCPPA for Project Management Services.

RC:nsh

Attachment

e-c/att: Ronald O. Nichols  
Richard M. Brown  
Aram Benyamin  
James B. McDaniel  
Philip Leiber  
Gary Wong  
Randy S. Howard  
Robert Castro



NOV 04 2013

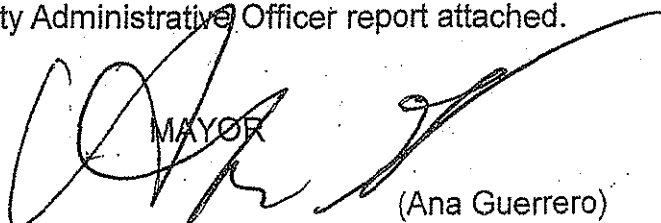
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## TRANSMITTAL

TO Ronald O. Nichols, General Manager Department of Water and Power	DATE NOV 04 2013	COUNCIL FILE NO.
FROM The Mayor	COUNCIL DISTRICT	

**SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY  
POWER SALES AGREEMENT NO. BP 13-055 AND RELATED AGENCY AGREEMENT  
NO. BP 13-056 FOR THE APEX GENERATION FACILITY POWER PROJECT**

Approved and transmitted for further processing including Council consideration.  
See the City Administrative Officer report attached.

  
MAYOR  
(Ana Guerrero)

# OFFICE OF THE CITY ADMINISTRATIVE OFFICER


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Date: November 1, 2013

CAO File No. 0150-10102-0000  
Council File No. none  
Council District: outside City limits

To: The Mayor

From: Miguel A. Santana, City Administrative Officer



Reference: Communication from the Department of Water and Power dated October 21, 2013; referred for report by the Mayor on October 29, 2013

Subject: **POWER SALES AGREEMENT WITH SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY NO. BP 13-055 AND RELATED AGENCY AGREEMENT NO. BP 13-056 FOR THE APEX GENERATION FACILITY POWER PROJECT**

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## SUMMARY

The Department of Water and Power (DWP) Board of Commissioners (Board) requests:

- Approval, by ordinance, to enter into a Power Sales Agreement (PSA) No. BP 13-055 between DWP and the Southern California Public Power Authority (SCPPA) to purchase 527 megawatts (MW) of natural gas generated Combined Cycle energy annually from SCPPA. The PSA also enables SCPPA to enter into an Asset Purchase Agreement (Purchase Agreement) with LS Power, LLC, which provides for the purchase of the Apex Natural Gas Combined Cycle Power Project (Apex) located in Unincorporated Clark County, north of Las Vegas, Nevada, at the end of the 20-year term of the Purchase Agreement. SCPPA will transfer ownership to DWP at the end of the 20-year term.
- Approval, by ordinance, to enter into an Agency Agreement (AA) No. BP 13-056 between DWP and SCPPA which designates DWP as the Project Manager to administer Apex including fiscal matters on behalf of SCPPA.

The Apex Power Generation Facility includes one combined cycle generating station consisting of one steam turbine generator, and two simple cycle 165 MW combustion turbine generators, which has a closed cycle cooling system and a total expected capacity of 527 MW. The energy from Apex will represent 9.02 percent of the Department's total resource requirements annually and will be integrated with renewable energy resources to ensure a reliable energy supply. It is noted by the DWP that the PSA is based on an execution date of February 2014.

City Council approval of the PSA and the AA is required pursuant to City Charter Sections 373 regarding rules for long-term contracts and 674(a) (1) and (2) regarding the purchase of power generating capacity. The proposed resolution, PSA, and AA have been reviewed by the City Attorney and approved as to form and legality. Since the Agency Agreement will be administered by DWP staff, City Charter Section 1022 regarding the use of independent contractors is not applicable.

## BACKGROUND

In 2006, the California Legislature passed Senate Bill (SB) 1368 which limits long-term investments or contractual extensions in baseload generation by the State's utilities to power plants that meet an emissions performance standard (EPS) established by the California Energy Commission and the California Public Utilities Commission. Subsequently, in 2008 the Mayor established a City goal regarding the divestiture of coal from DWP's energy resources, which would allow the City to comply with SB 1368. In order to ensure compliance with SB1368 and minimize any ramifications of future coal legislative mandates such as AB32, the greenhouse cap-and-trade system, the Department began to develop a strategic plan to transform its energy resource mix to meet several State mandates and ensure system reliability. In 2010, the Board of Water and Power Commissioners approved the DWP's 2010 Integrated Resource Plan (IRP) outlining the replacement of seventy percent of the power supply for the following 15 years. DWP's IRP presents several potential strategies for meeting the regulatory requirements and policy objectives for increasing renewable energy generation and reducing greenhouse gases. The City Council was briefed on the IRP and also committed to the IRP initiatives.

Modeling of DWP power resources determined that the coal fired facilities, Navajo Generating Station (Navajo, NGS) and the Intermountain Power Plant (IPP), must be eliminated to comply with SB 1368 and replaced with a combination of renewable energy, demand response, Energy Efficiency (EE), short term market purchases, and conventional gas-fired generation. In the IRP DWP recommends no change in the IPP contract until 2027. However, because Navajo must be compliant with SB 1368 by 2019, DWP recommends divestiture of Navajo by 2015, which is consistent with Board policy, City goals, and public/stakeholder comments regarding the replacement of coal as early as possible. The replacement of Navajo will reduce CO2 emissions by 7.5 metric tons annually.

## NAVAJO DIVESTITURE

Navajo is a coal-fired generation station located near Page, Arizona and consists of three units with a combined capacity of 2,250 MW. The Salt River project is the Operating Agent and DWP is one of six owners with a 21.2 percent ownership share in the station's generation. Although DWP is contractually committed to Navajo until December 31, 2019, negotiations have led to significant progress to exit from the project by 2015. DWP's reasons for early divestiture are:

1. A better sales price in 2014 than the estimated price in 2019
2. Avoids the risk of unknown future regulatory expensive mitigation requirements.
3. Better availability of replacement generation.
4. Reduced CO2 emissions, and reduction of the purchase of emissions credits for Navajo under the cap-and-trade system.
5. Releases transmission network for importing solar and geothermal generated energy.
6. Provides time to handle contingencies.

On June 29, 2012, a Request for Proposal (RFP) for a Combined Cycle Plant was advertised on the DWP website. Of the 19 proposals received; seven were for existing plants with over 500

MW, which is considered a standard combined cycle power unit. The DWP review process narrowed down the list to four projects; subsequently, DWP management team members selected Apex based on established criteria. The DWP determined that purchasing Apex through the Southern California Public Power Authority (SCPPA) would reduce the financing of the project. Therefore, Apex will be funded and implemented through SCPPA bonds.

## **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY**

The Southern California Public Power Authority (SCPPA) is a non-profit joint powers authority. SCPPA was formed in 1980 for the purpose of planning, financing, developing, acquiring, constructing, operating and maintaining projects for the generation and transmission of electric energy. The members include the municipal utilities of the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, Vernon and the Imperial Irrigation District. SCPPA is governed by a Board of Directors, which consists of representatives from each of its members. The management of SCPPA is under the direction of an Executive Director, who is appointed by the Board. SCPPA's role has evolved over the years to include legislative advocacy at the state and national levels. SCPPA currently holds capacity entitlements in various generation projects and 100 percent of the output is sold and controlled by its member utilities.

## **INTEGRATED RESOURCE PLAN**

DWP's goal is to develop long-term resources that are sensitive to the local and regional economy and operationally flexible to changes in state and federal regulations, fuel prices, and advances in power generation technologies. The policy that shapes and guides this acquisition is the Integrated Resource Plan (IRP). The IRP presents several potential strategies for meeting DWP's regulatory mandates and policy objectives for increasing renewable energy generation, reducing greenhouse gas emissions, maintaining electric power service reliability, and minimizing the financial impact on ratepayers.

The IRP identifies the replacement of the energy lost as a result of the NGS divestiture with a combination of energy efficiency, renewable resources (consisting of wind, solar and geothermal), as well as energy from a combined cycle, natural gas generating facility. DWP has installed over 1500 GWh of energy efficient measures, deployed over 900 MW of renewable resources, and will continue to invest in these energy saving measures into the foreseeable future. While these resources have provided a substantial amount of energy into DWP's energy mix, they do not lend themselves readily to replacing the capacity of the NGS plant baseload energy provided. The proposed purchase of energy from the Apex facility will provide capacity that will be used to firm and back up the energy efficiency and renewable resources, and provide a mechanism to integrate them reliably into DWP's electrical grid. The purchase of the Apex 527 MW natural gas combined cycle generation facility is the cleanest fossil fuel generation source available that can provide baseload energy and complies with AB 1368.

## THE APEX GENERATION FACILITY POWER PROJECT

Apex is owned and operated by LS Power, LLC serving the Las Vegas Power Company. LS Power LLC engages in the development, construction, acquisition, and management of power generation and transmission infrastructure in the United States. The company owns and operates natural gas, coal, wind, and solar power generation facilities. It serves investor-owned utilities, electric cooperatives, and municipal utilities. LS Power Development, LLC was founded in 1990 and is based in New York, New York with projects and additional office locations in the United States. Since their inception, LS Power has developed, constructed, managed or acquired more than 27,000 MW of competitive power generation and 470 miles of transmission infrastructure, for which they have raised over \$22 billion in debt and equity financing.

The Apex Project is a ten year old 527 megawatts (MW) natural gas combined cycle generation plant located near Las Vegas, Nevada. The Department will be able to take advantage of the existing DWP transmission facilities in Nevada to route energy through DWP's Victorville-Los Angeles transmission line. The project provides for DWP ownership through SCPPA, as well as providing for DWP control of operations. The expected date of transfer to SCPPA is February 2014. The term for the proposed PA between SCPPA and LS Power for the Apex Project is 20 years. SCPPA will transfer ownership to DWP at the end of the 20-year term.

## PROJECT COST AND SOURCE OF FUNDING

The current Power System financial plan that provided the basis of the Incremental Rate Ordinance No. 112273 (CF No. 12-1504), adopted October 5, 2012, considered the purchase of natural gas plant and budgeted \$500 million for the acquisition to comply with AB 1368 requirements; however, the cost of the Apex project has been reduced to \$295 million as a result of negotiations. The estimated average rate impact of the purchase for the typical customer consuming 500kWh will be \$0.03 monthly or \$0.36 annually.

SCPPA will purchase the Apex Project pursuant to the PA at a cost of \$295 million and will finance the acquisition through the issuance of bonds. Under the PSA, DWP will pay for the energy from Apex through repayment of the bonds, as well as all the operating and maintenance, property, fuel and transportation costs associated with the generation and delivery of the energy produced. An additional \$30 million in bond financing will be necessary for additions and betterments to bring Apex up to DWP standards as well as to finance a portion of the planning of a proposed new transmission line from Apex to the DWP Crystal Substation. The new transmission line is under consideration by DWP and its construction cost is not included in the Apex PSA. The required bond financing for Apex totals \$325 million. DWP states that 75 percent of the bonds will be tax-exempt and 25 percent taxable bonds. The use taxable bonds will allow DWP to sell a portion of the output to the Las Vegas Water District as provided for in the Purchase Agreement as well as provide other wholesale opportunities.



DWP's costs under the PSA with SCPPA are as follows:

• Debt Service:	\$26 million per year
• Transmission:	\$24.5 million per year
• Operations and Maintenance:	\$14 million per year
• Natural Gas Costs	<u>\$20 million per year</u>
Total	\$84.5 million per year or \$1.69 billion over 20 years

## TRANSMISSION

Apex currently has 500 MW of firm transmission which can be added to DWP's balancing authority (BA) by wheeling energy through Nevada Energy's Harry Allen Substation. This contract will not expire until 2023 and costs approximately \$20 million annually. However, DWP plans to investigate the feasibility of building a new transmission line from Apex to the DWP Crystal substation, which is ten miles away and is part of the DWP BA which bypasses the Nevada BA. DWP estimates that this could be accomplished in the near future and the cost of building the new transmission line could be less than paying for two years of transmission service to the Nevada BA.

## RATE IMPACT

The estimated average rate impact of the generation station purchase for the typical customer consuming 500kWh will be \$0.03 monthly or \$0.36 annually. This estimate is based on a number of assumptions DWP has made including natural gas prices, CO2 emission costs, debt financing costs, and other factors. This estimate also incorporates the difference between the cost of operating Navajo through the end of the contractual term (\$653 million) and the cost of operating Apex for the same term (\$690 million). DWP indicates that the method of developing these assumptions is consistent with past Integrated Resource Plans and rate cases. Any variance in this estimate would be recovered through the Energy Cost Adjustment Factor (ECAAF) related pass-through charges.

DWP indicates that while the proposed early disposition of NGS and acquisition of the replacement power plant results in this small rate increase over the next four years, this is an appropriate risk mitigation strategy as the costs for replacement generation could be significantly higher in future years if DWP were to stay with NGS through 2019.

## DUE DILIGENCE

SCPPA and DWP arranged for a number of reviews of the facility to assess the current condition of the Apex Facility and its readiness to operate at a level compliant with legislative mandates and DWP requirements. These reviews included:

- A Loss Asset Survey by an insurance company.
- A two day visit by two independent engineers was conducted to determine its functional

and operational status.

- A survey by DWP's technical team that visited the site on June 19-20, 2013 to evaluate the site.
- DWP contracted with Worley Parsons to assist in the technical review.
- An additional independent engineering firm, SAIC Energy, Environment & Infrastructure, LLC provided independent engineering services to evaluate the combined cycle plant and provide their report. SAIC Energy visited the site on June 21, 2013.

The SAIC Energy report determined that the plant was a well-run plant, that has been operated and maintained well within industry standards and the other groups concurred.

## **RISK MANAGEMENT**

The Apex facility is secured for an 18 month period through a guarantee from LS Power, the parent company selling the asset. DWP's Risk Management team determined that if Apex did encounter any unexpected maintenance issues, they estimated that the total cost incurred during this 18 month period would likely be below \$15 million. DWP's umbrella insurance company covers any claim in excess of \$10 million, so DWP required LS Power to offer an additional guarantee in the form of a \$10 million Letter of Credit.

## **OTHER AGREEMENTS**

### **Plant Operating Agreement**

Apex is currently being operated and maintained by the Wood Group under an existing operating agreement expiring in 2017 that will be assumed by SCPPA. The employees of the Wood Group are members of International Brotherhood of Electrical Workers (IBEW). SCPPA has advised it is their intention to continue this agreement through 2017 and the employees will become contracted employees of SCPPA. Additionally, DWP is working to develop a transition plan for these SCPPA contract employees to become DWP employees. DWP will have the option to terminate or continue the operating agreement one year after the execution of the Agency Agreement as Project Manager to administer Apex operations.

### **Water Agreement to Operate the Plant and Energy Sales Agreement**

A water agreement is currently in place between Las Vegas Power Company and the Las Vegas Valley Water District (LVVWD) for 350 acre-feet of water per year at no cost to Las Vegas Power Company. This Agreement provides the water that is needed to cool the plant. The existing Water Agreement also required the owner of Apex to offer 25 percent of the output to Nevada entities. The Water Agreement (Water Agreement) became effective in 2001 and will expire in 2026; substantially earlier than the duration of the bonds necessary for SCPPA's acquisition of Apex. Because of these two provisions, it was necessary for the parties to renegotiate and amend the Water Agreement to be co-terminus with the bond issuance and to modify the 25% reserved energy sales requirement.

The terms of the amended Water Agreement are for (1) the extension of the term for an additional 25 years to have a term which will be at least as long or longer than the term of the SCPPA bonds; (2) a reduction of water usage from 350 acre-feet per year to 250 acre-feet per year; (3) a payment of \$303 dollars per acre-foot; and (4) a separate Energy Sales Agreement that allows for the sale of up to 50 MW of off peak power to Silver State Energy Association by SCPPA (Energy Sales Agreement). This newly negotiated 50 MW off peak power does not have to come from Apex and does not reduce the reliability of the Apex because it still allows LADWP to access 100 percent of the Apex capacity during peak hours.

This amended Water Agreement will be assigned to SCPPA and become effective at closing for the acquisition of the Project, at which time; the Energy Sales Agreement will also become effective.

### **Natural Gas Supply**

The natural gas to Apex is being supplied through a Kern River pipeline that lies immediately adjacent to the Apex property. This gas is currently procured through a non-firm arrangement, and this arrangement has been reviewed by DWP's gas analysts, who determined that there is an excess of capacity on this pipeline, which is adequate to provide sufficient gas to the plant for the foreseeable future. Given this conclusion, DWP intends to continue using this practice at an estimated cost of \$20 million per year.

The above mentioned aspects of the proposed resolution, agreements, and this report, are based upon revised information received from the Department subsequent to the initial request submittal.

### **RECOMMENDATIONS**

That the Mayor:

1. Approve, by ordinance, the execution of BP 13-055 between DWP and the Southern California Public Power Authority (SCPPA) to enter into a Power Sales Agreement (PSA) to purchase 527 megawatts (MW) of natural gas Combined Cycle energy annually from SCPPA. The PSA also enables SCPPA to enter into an Asset Purchase Agreement (Purchase Agreement) with LS Power, LLC, which provides for the purchase of the Apex Natural Gas Combined Cycle Power Project (Apex Power Project) located in Unincorporated Clark County, north of Las Vegas, Nevada, at the end of the 20-year term of the Purchase Agreement. SCPPA will transfer ownership to DWP at the end of the 20-year term.
2. Approve, by ordinance, the execution of an Agency Agreement (AA) No. BP 13-056 between DWP and SCPPA which designates DWP as the Project Manager to administer the Apex Power Project including fiscal matters on behalf of SCPPA.

3. Return the proposed resolution to the Department for further processing, including Council consideration.

### **FISCAL IMPACT STATEMENT**

The proposed Agreements will have no direct impact on the City General Fund. The Power Revenue Fund will provide an average annual expenditure of \$84.5 million, or \$1.69 billion total over the 20 year duration of the Agreement. Funding is budgeted in the Power Revenue Fund's Fuel and Purchased Power Budget. DWP states that the average rate impact for the typical customer with 500 kWh will be \$0.03 monthly or \$0.36 annually. The current Power System financial plan that provided the basis of the current Power Rate (CF No. 12-1504), adopted October 5, 2012, included the purchase of a natural gas plant .

### **Time Limit for Council Action**

The City Attorney advises that there is no time limitation for items approved by ordinance.

*MAS:OAV:10140074*

