Department of Water and Power



the City of Los Angeles

RONALD O. NICHOLS General Manager

ANTONIO R. VILLARAIGOSA Mayor Commission THOMAS S. SAYLES, President ERIC HOLOMAN, Vice President RICHARD F. MOSS CHRISTINA E. NOONAN JONATHAN PARFREY BARBARA E. MOSCHOS, Secretary

February 13, 2013

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

Honorable Members:

Subject: Environmental Credit and Renewable Energy Credit (REC) Ordinance and Environmental Credit and REC Policy

Pursuant to Charter Section 604(c) and 373, enclosed for approval by your Honorable Body is Resolution No. 013-185, adopted by the Board of Water and Power Commissioners (Board) on February 12, 2013, approved as to form and legality by the City Attorney, which authorizes the addition of Los Angeles Department of Water and Power Environmental Credit and Renewable Energy Credit (REC) Ordinance and Environmental Credit and REC Policy to the Administrative Code. 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:cr Enclosures: LADWP Resolution Board Letter Ordinance CAO Report Environmental Credit and Renewable Energy Credit Policy

Water and Power Conservation ... a way of life

111 North Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles 90051-5700 Telephone: (213) 367-4211 Cable address: DEWAPOLA c/enc: Mayor Antonio Villaraigosa

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Councilmember Jose Huizar, 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 Environmental Protection Agency (EPA), under the Acid Rain Program, introduced a sulfur dioxide emission allowance cap-and-trade program in which affected utility facilities are assigned allowances based on their historic fuel consumption and specific emissions rate; and

WHEREAS the Los Angeles Department of Water and Power's (LADWP) in-basin generating facilities, the Intermountain Generating Station, the Navajo Generating Station, and the Mohave Generating Station are affected facilities under the Acid Rain Program; and

WHEREAS the California Air Resources Board, under California Assembly Bill 32 (AB 32), introduced a greenhouse gas emission allowance cap-and-trade program in which affected electric sector entities are assigned allowances based on cost burden, projected cumulative energy efficiency, and early investment in renewables; and

WHEREAS the LADWP is affected under the AB 32 cap-and-trade program (as it provides electricity to retail end users in California); and

WHEREAS the South Coast Air Quality Management District, under the Regional Clean Air Incentives Market (RECLAIM) program, introduced a nitrogen oxide emission credit cap-and-trade program in which affected facilities are assigned RECLAIM trading credits based on their historic emissions; and

WHEREAS the LADWP's in-basin generating facilities are affected facilities under the RECLAIM program; and

WHEREAS the EPA's New Source Review air permitting program requires new and modified stationary sources to offset increases in emissions; and

WHEREAS the LADWP is affected by New Source Review when it installs new generating units and modifies its generating facilities and must procure Emission Reduction Credits; and

WHEREAS the U.S. Department of Energy, under the Energy Policy Act's (EPAct) Alternate Fuel Provider Rule, requires certain fleets to acquire alternative fuel vehicles and allows fleets to purchase credits from fleets that generate excess credits; and

WHEREAS the LADWP is an alternative fuel provider under EPAct since its principal business involves selling electricity at wholesale or retail and operates fifty or more light-duty vehicles within the U.S.; and

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WHEREAS Senate Bill 2(1X) [SB 2(1X)] enacted new regulatory requirements for Publicly Owned Utilities (POUs) which includes new Renewable Portfolio Standard procurement targets, resource definitions, and reporting requirements for POUs; and

WHEREAS SB 2(1X) allows the use of renewable energy credits (RECs) for SB 2(IX) compliance; and

WHEREAS these environmental and emission credits and RECs are marketable commodities which can be purchased, sold or exchanged in the market place to ensure LADWP compliance with environmental laws and regulations thereby creating the need for the adoption and implementation of LADWP's Environmental Credit and Renewable Energy Credit (Policy); and

WHEREAS the Energy Services Executive Risk Policy Committee will provide appropriate oversight and formulate and ensure compliance with the policies, procedures and strategies; and provide periodic reports with respect to the activities associated with the environmental credits and RECs and in accordance with the Policy.

NOW THEREFORE, BE IT RESOLVED that the Honorable Board adopts the Policy; and

BE IT FURTHER RESOLVED, that the Board hereby requests the City Council to adopt the Environmental Credit and REC Ordinance to allow the Board to delegate to the General Manager the authority to enter into transactions for the purchase, sale and exchange of environmental credits and RECs; and

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board at its meeting held on FEB 1 2 2013

Bailyana E. Mod Secretary

APPROVED AS TO FORM AND LEGALITY CARMEN A. TRUTANICH, CITY ATTORNEY MICHELLELYMAN DEPUTY CIPLATTORNEY

TO: BOARD OF WATER AND POWER COMMISSIONERS	DATE: January 11, 2013		
Mach. Sodach MARK J. SEDLACEK Director of Environmental Affairs Mark J. SEDLACEK Director of Environmental Affairs	SUBJECT: Environmental Credit and Renewable Energy Credit (REC) Ordinance and Environmental Credit and REC Policy		
ARAM BENYAMIN Senior Assistant	FOR COMMISSION OFFICE USE:		
CITY COUNCIL APPROVAL REQUIRED: Yes X No X CHARTER SECTION:			

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

PURPOSE

Transmitted for approval by your Honorable Board is a Resolution, approved as to form and legality by the City Attorney. The Resolution, if adopted, would request the City Council to add the proposed LADWP Environmental and REC Ordinance (Ordinance) to the Los Angeles Administrative Code (LAAC) allowing the Board the authority to authorize the General Manager to enter into transactions for the purchase and sale of environmental/emission credits and RECs for compliance with federal, state, and local environmental laws and regulations within specified price and term parameters.

The Resolution, if adopted, would also approve the Environmental Credit and REC Policy (Policy). The Policy delegates general oversight of all related environmental and emission credit activities to the existing Energy Services Executive Risk Policy Committee. The Power System and Environmental Affairs will be responsible for managing RECs and environmental/emission credits and administering the Policy.

The Policy provides descriptions of the environmental/emission credit and REC programs that LADWP is subject to, transaction types and limits that can be entered into by LADWP and establishes internal controls surrounding credit risk management activity.

The attached Resolution recommends to the Los Angeles City Council approval of the draft proposed Ordinance and Policy.

Board of Water and Power Commissioners Page 2 December 18, 2012

COST AND DURATION

Contracts and financial transactions entered pursuant to the proposed Ordinance would be subject to cost limitations on a price per environmental/emission credit or REC basis. Contracts and financial transactions would be for a period not to exceed five years in duration from the date of execution, except that purchases for a longer term may be entered into in order to match or offset the likely duration of specific output from specific facilities owned or contracted for by LADWP.

BACKGROUND

LADWP is subject to several environmental/emission credit and REC programs under federal, state and local regulatory programs. LADWP does not participate in the environmental/emission credit and REC markets to engage in risk-taking activities (i.e. speculative trading) but does participate in markets in order to maintain compliance with environmental laws and regulations. LADWP, however, recognizes that certain risks are incidental to the trading of environmental and emission credits. The LADWP Ordinance and Policy addresses the mechanisms by which LADWP will control business-related risks.

LOS ANGELES CITY COUNCIL APPROVAL

Pursuant to Executive Directive (ED)-4, the CAO's office has reviewed the matter and has recommended the Council's adoption of the proposed ordinance (see attached CAO report).

ENVIRONMENTAL DETERMINATION

In accordance with the California Environmental Quality Act (CEQA), it has been determined that the establishment of LADWP's Ordinance and Policy is exempt pursuant to the General Exemption described in the CEQA Guidelines Sections 15061(b)(3).

RECOMMENDATION

It is recommended that your Honorable Board adopt the attached Resolution requesting the Council's approval of the draft Ordinance and providing the Board's approval of the Policy.

JMG:mt Attachments e-c/att: Ronald O. Nichols Richard M. Brown Aram Benyamin James B. McDaniel Philip Leiber Gary Wong Mark J. Sedlacek Jodean M. Giese FileNET-ES13-0015

ORDINANCE NO.

An ordinance adding a new Section 23.144 to Chapter 7, Article 3, Division 23 of the Los Angeles Administrative Code to provide authority to the Board of Water and Power Commissioners and the General Manager of the Department of Water and Power to enter into contracts and financial transactions for the purchase and sale of environmental credits, including emission credits and renewable energy credits (RECs).

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section 1. A new Section 23.144 is added to Chapter 7, Article 3, Division 23 of the Los Angeles Administrative Code to read:

Sec. 23.144. Authority of the Board of Water and Power Commissioners and the General Manager of the Department of Water and Power to enter into contracts and financial transactions for environmental credits, including emission credits or allowances and RECs.

(1) Notwithstanding any other ordinance, rule or law of the City of Los Angeles to the contrary, the Board of Water and Power Commissioners and the General Manager of the Department of Water and Power shall have the authority to enter into contracts and financial transactions for environmental credits and RECs, subject to the following:

(a) Definitions.

"Environmental Credit" means any environmental credit, attribute, allowance or benefit as may be defined by law, regulation, industry practice or convention, including but not limited to emissions credits, or alternative fuel vehicle credits used for the purposes of compliance with environmental or energy laws, regulations and policies.

"Renewable Energy Credit" or "REC" means any credit, attribute, allowance or benefit that is an environmental certificate representing proof that a certain quantity of energy was generated or purchased from a renewable energy resource, often denominated in units of megawatt-hours (MWh), although other units may be used.

(b) This section applies only to the purchase, sale or exchange of Environmental Credits and RECs by the Department of Water and Power for compliance with environmental or energy laws, regulations and policies which support its production of electricity to serve its retail customers or for environmental purposes. The Department is not participating in the environmental markets to engage in speculative activities but rather to maintain compliance with environmental laws, regulations and policies.

(c) Contracts and financial transactions entered into pursuant to this section shall be subject to the following limitations:

1) RECLAIM Trading Credits or RTCs: Spot purchase of single-year vintage credits shall not exceed \$60 per pound.

2) Emission Reduction Credits or ERCs: purchase of PM10/PM2.5, sulfur oxides (SOx), reactive organic gases (ROG), and carbon monoxide (CO) ERCs shall not exceed the following: \$700,000/lb/day for PM10/PM2.5, \$200,000/lb/day for SOx, \$40,000/lb/day for ROG, and \$15,000/lb/day for CO.

3) Energy Policy Act Alternative Fuel Vehicle Credits: Purchase shall not exceed \$5,000 per credit.

4) Greenhouse Gas (GHG) Allowances, Offsets and Low Carbon Fuel Standard Credits: Purchase shall not exceed \$150 per allowance. Greenhouse gases include but are not limited to carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and hydrocarbons.

5) Renewable Energy Credits: Purchase shall not exceed \$100/REC.

6) Contracts and financial transactions entered into pursuant to this section shall be for a period not to exceed five years in duration from the date of execution, except that purchases for a longer term may be entered into in order to match or offset the likely duration of specific output from specific facilities owned or contracted for by the Department.

(d) Prior to entering into any contract or financial transaction, the Board of Water and Power Commissioners by resolution shall do the following:

1) Establish an environmental and emission credit policy (Policy) relating to the purchase, sale and exchange of Environmental Credits and RECs. The Policy will address the mechanisms by which the Department of Water and Power will control business-related risks.

2) Authorize the general payment, security, default, remedy and other terms and conditions as specified by the Board of Water and Power Commissioners to be utilized in every contract or financial transaction.

(e) The Board of Water and Power Commissioners under the authority of Charter Section 604(c) is authorized to delegate to the General Manager of the

Department of Water and Power the authority to enter into contracts and financial transactions pursuant to this section provided such transactions comply with the limitations set forth in this Ordinance.

(f) The Department of Water and Power shall perform an annual audit using either an outside auditor or a comparable third party approved by the Board of Water and Power Commissioners relating to the activities authorized under this section. This audit need not be performed separately but may be conducted in conjunction with other audits performed for the Department. The audit report shall provide, but is not limited to, an assessment of the adequacy of risk management controls and compliance with the provisions set forth in this section. Within five days after receipt of the audit report, the audit report shall be distributed by personal delivery or first class mail to the Board of Water and Power Commissioners, the City Council, and the Mayor.

j T Sec. 2. The City Clerk shall certify to the passage of this ordinance and have it published in accordance with Council policy, either in a daily newspaper circulated in the City of Los Angeles or by posting for ten days in three public places in the City of Los Angeles: one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; and one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records.

I hereby certify that this ordinance was passed by the Council of the City of Los Angeles, at its meeting of _____.

JUNE A. LAGMAY, City Clerk

By___

Deputy

Approved _____

Mayor

Approved as to Form and Legality

CARMEN A. TRUTANICH, City Attorney

By _ Deputy Lity Attorney

Date _12

File No. _____

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		DATE	COUNCIL FILE NO.
Ronald O. Nichols, Ge Department of Water		FEB 1 1 2013	
FROM The Mayor			COUNCIL DISTRICT
	WP ENVIRONMENTAL CREDIT		
Approved and	d transmitted for further process See the City Administrative Of	ficer report attached.	ideration.
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OFFICE OF THE CITY ADMINISTRATIVE OFFICER

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AO File No. 0320-00164-000 ouncil File No. ouncil District:)
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SUMMARY

The Department of Water and Power (DWP; Department) requests approval of a proposed Resolution to add a DWP Environmental Credit and Renewable Energy Credit (REC) Ordinance (Ordinance) to the Los Angeles Administrative Code (LAAC). Adoption of the Ordinance will provide the DWP Board of Commissioners (Board) the authority to authorize the General Manager to enter into transactions for the purchase, sale, and exchange of environmental emission credits and RECs, subject to the trading protocols with price and term limits as included in the Ordinance and listed on Attachment 1, to comply with Federal, State, and local environmental mandates and regulations. An emission credit is a right or authorization to produce emissions while an REC is an environmental certificate confirming that a certain amount of energy was generated or purchased from a renewable energy resource. Both types of credits can be held, purchased, or sold.

The proposed Resolution also approves an Environmental Credit and REC Policy which delegates general oversight of all related environmental and emission credit activities to the existing DWP Energy Services Executive Risk Policy Committee (Committee). Consequently, the DWP Committee will be responsible for the management and administration of the programs relating to emission credits, RECs, and allowances necessary to comply with requirements of applicable mandates or regulations. A description of the Committee and its responsibilities is shown on Attachment 2.

Council approval of this request is needed pursuant to Charter Sections 604(c), "General Managers Powers and Duties," and Section 373, "Long Term Contracts Approved by Council," since the proposal provides the DWP General Manager additional authority to enter long term contracts or financial transactions that may exceed three years. The City Attorney has approved the proposed resolution as to form and legality.

BACKGROUND

DWP is subject to several emission credit and REC programs under Federal, State, and local regulatory programs. The Department analyzes its level of RPS compliance on an ongoing basis and plans to participate in the emerging environmental credit and REC markets to maintain compliance with environmental laws, regulations, and policies. These markets are intended to provide the producers of environmental emissions with an ability to purchase, sell, or exchange emission credits in order to satisfy regulatory compliance requirements. The DWP Power system plans to perform analysis on an ongoing basis to determine the most effective manner for achieving current or forecasted regulatory compliance and will direct staff to execute transactions for the purchase, sale, or exchange of credits.

DWP states that the proposed addition to the LAAC is important to meet several environmental regulation mandates. A list of these mandates and the impact to DWP is as follows:

- U.S. Environmental Protection Agency (EPA) Acid Rain Program affects DWP inbasin generating facilities, Intermountain Generating Station, Navajo Generating Station, and Mohave Generating Station;
- California Air Resources Board (CARB) Assembly Bill 32 (AB32) Cap-And-Trade Program affects DWP, in general, since it provides electricity to retail end users in California;
- South Coast Air Quality Management District (SCAQMD) Regional Clean Air Incentives Market (RECLAIM) Program for nitrogen oxide emissions affects DWP in-basin generating facilities;
- U.S. Environmental Protection Agency New Source Review permitting program affects the DWP installation of new generating units and modification of existing generating facilities;
- U.S. Department of Energy Energy Policy Act (EPAct) Alternate Fuel Provider Rule affects the DWP fleet of vehicles;
- California Senate Bill SB2(1X) enacted new regulatory requirements that affect publicly owned utilities by allowing the use of RECs for compliance with SB2(1X).

<u>Emission Credits</u> – The trading of emission credits and execution of all compliance-related forms for regulatory agency approval will be conducted by the DWP Environmental Affairs group. Prior to conducting any emission credit transactions, the Committee will provide authorization to the designated representatives to purchase, sell, and manage an authorized amount of emission credits. DWP states that it is difficult to predict how often a trade will be executed as it depends on the price, volume of credits available, level of credits needed.

On November 14, 2012, as a component of the emission credit Cap-and-Trade program, the California Air Resources Board (CARB) offered 23.1 million carbon emission credits for the first phase of trading beginning January 1, 2013 and 39.5 million for the second phase starting in 2015. Each permit allows the release of one metric ton of carbon.

CAO File No. 0320-00164-0000

<u>Renewable Energy Credits</u> – RECs are issued through the Western Renewable Energy Generation Information System (WREGIS), a renewable energy tracking system for the Western Electricity Coordinating Council (WECC) region. Launched in mid-2007, WREGIS is governed by a sevenmember committee consisting of representatives from various stakeholder groups (see Attachment 3). The WREGIS requires renewable energy generating resources to provide verifiable energy output on a periodic basis and issues RECs with unique serial numbers attesting that the energy from the resource is renewable. Once a REC is created for energy from a resource, one and only one entity, at any particular time, is able to claim title to that certificate. The entity that holds title can either trade it, retire it to meet compliance obligations, or voluntarily retire it—mostly done by WREGIS, after a specified period of time.

Similar to the emission credits, RECs will also be traded by the DWP Wholesale Energy Resource Management group subject to prior authorization by the DWP Committee. According to the DWP, RECs are currently traded company-to-company in private (i.e., over the phone) transactions – either directly, or facilitated by brokerage firms. In either case, the transactions are documented by written contracts.

The Department will face certain levels of financial risk with each transaction. To control the associated financial risks of these markets, emission credits and REC transactions will be subject to price and term limits as described in the Ordinance and listed on Attachment 1. The Department states that it is difficult to forecast future emission credit and REC prices due to uncertainty within the developing market. In order to provide a trading protocol with sufficient price range that minimizes the need for frequent amendments to the proposed Ordinance, the basis for each price parameter includes both historical and forecasted cost data.

DWP states that other cities have provided their respective municipal utility service with similar delegations of authority to purchase credits for emissions and renewable energy including Burbank Water and Power (Burbank), Glendale Water and Power (Glendale), and Sacramento Municipal Utility District (SMUD). These municipal utilities are affected by many of the same mandates and regulations and required a similar delegation of authority in order to attain their compliance.

OPINION OF THE INDEPENDENT AUDITOR AND THE CITY CONTROLLER

On April 7, 2011, the Office of the City Controller (Controller) released its performance audit of the DWP Renewable Portfolio Standard (RPS) Program which discusses the importance of the City's compliance with RPS requirements and includes general recommendations to the City and DWP regarding how to meet future RPS goals. A specific recommendation relating to the use of RECs advises, "DWP and the City should evaluate the use and relative economic advantage of tradable RECs and non-certified renewables, to the extent allowed by regulation, as a means of complying with City requirements at a lower cost." DWP states that approval of the proposed action is consistent with the recommendation of the Controller.

On November 30, 2011, the Department's independent auditor, KPMG, issued its annual audit report that provided a satisfactory review of the Department financial position and trading activities for the fiscal years ending June 30, 2011 and 2010. According to DWP, the auditor found that trading activity was in compliance of City ordinances and DWP risk management policies and procedures. However, the scope of work for the audit did not include a review of environmental credits; thus the auditor did not provide any findings or analysis relating to the use of RECs or emission credits for regulatory compliance.

Subsequent to the submission of the original request by DWP, the Department has advised the City Administrative Officer (CAO) that contracts and financial transactions for environmental credits, including emission credits and RECs, shall not exceed a term of five years in duration, instead of ten years as shown in the draft DWP Environmental Credit and Renewable Energy Credit Ordinance. A revised draft ordinance that provides a corrected maximum term not to exceed five years is forthcoming for Mayor and City Council consideration. The above mentioned aspects of the proposed resolution, and this report, are based upon revised information received from the Department subsequent to the initial request submittal.

CONCLUSION

Approval of the proposed DWP Environmental Credit and REC Ordinance is necessary to provide the Department authority to purchase, sell, and trade emission credits and RECs for compliance with regulatory mandates. It is noted that while the emission credit and REC market is still developing and expected to be continuously affected by changes to regulatory environment that may impact the structure and cost of credits, other municipal power companies such as Burbank, Glendale, and SMUD have been given similar authorization, as proposed by the DWP, to participate in the same emission and REC markets to achieve compliance with the same regulatory mandates. Due to the uncertainty of the cost for RECs and emission credits and their trading markets, the proposed trading protocols need to be carefully established, implemented, and monitored. As such, this Office recommends that the DWP Energy Services Executive Risk Policy Committee submit a detailed report, on at least a quarterly basis, regarding all emission credit and REC transactions for DWP Board review. Additionally, the Energy Services Executive Risk Policy Committee can be requested to provide semi-annual updates to the DWP Board regarding trends, issues, and developments in the environmental credit market, including REC and emission credits.

RECOMMENDATION

That the Mayor:

- 1. Approve the Department of Water and Power proposed Resolution to:
 - a. Add the DWP Environmental Credit and Renewable Energy Credit Ordinance to the Los Angeles Administrative Code to provide the DWP Board of Commissioners the authority to authorize the General Manager to enter into transactions for the purchase and sale of environmental credits, including emission credits and Renewable Energy Credits, within a specified price range and a term not to exceed five years in duration, to comply with Federal, State, and local environmental laws and regulations; and
 - b. Adopt the Environmental Credit and REC Policy which delegates to the DWP Board of Commissioners, without requiring additional Council action, the management and administration of all environmental and emission credit program activities including the execution of agreements or financial transactions related to the purchase or sale of emission credits or allowances to meet requirements of any mandates or regulations, subject to provisions of Charter Section 245;
- 2. Request the DWP Energy Services Executive Risk Policy Committee to:
 - a. Submit a detailed report, on at least a quarterly basis, regarding all emission credit and REC transactions for DWP Board of Commissioners review; and
 - b. Provide updates, on at least a semi-annual basis, regarding trends, issues, and developments in the environmental credit market, including REC and emission credits, to the DWP Board of Commissioners;
- 3. Return the proposed resolution to the Department for further processing, including Council consideration.

FISCAL IMPACT STATEMENT

DWP's purchase and sale of emission credits and RECs results in an expenditure from the Power Revenue Fund; however, it is not possible to determine the fiscal impact at this time due to fluctuations in the financial markets and regulatory environment. Since the Department of Water and Power is bound only by the City Debt Management Policies, the City Financial Policies are not applicable. Approval of the proposed resolution will have no impact on the City's General Fund.

TIME LIMIT FOR COUNCIL ACTION

The Charter does not specify a time limit for adoption of the Ordinance by the Mayor and Council.

Attachment 1 – Emission Credit or REC Transaction Limitations

The proposed DWP Environmental Credit and Renewable Energy Credit Ordinance includes the following transaction limitations:

1. Regional Clean Air Incentives Market (RECLAIM) Trading Credits (RTC):

Purchases of Single-year vintage credits shall not exceed \$60 per pound.

2. Emission Reduction Credits (ERC) shall not exceed:

\$700,000/lb/day for Particulate Matter (PM10 / PM2.5)
\$200,000/lb/day for sulfur oxides (SOx)
\$40,000/lb/day for reactive organic gases (ROG)
\$15,000/lb/day for carbon monoxide (CO)

3. Energy Policy Act Alternative Fuel Vehicle Credits shall not exceed:

\$5,000 per credit

4. Greenhouse Gas (GHG) Allowances, Offsets and Low Carbon Fuel Standard Credits shall not exceed:

\$150 per allowance.

Includes but are not limited to carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and hydrocarbons.

5. Renewable Energy Credits shall not exceed:

\$100 per REC.

6. Term limitations for contracts and financial transactions shall not exceed:

5 years in duration for RECs and Emission Credits.

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Attachment 2 – DWP Energy Services Executive Risk Policy Committee

In accordance with DWP Board Resolution No. 003166, as amended, the DWP Board established the DWP Energy Services Executive Risk Policy Committee (Committee), which reports to the Department General Manager and is chaired by the Chief Financial Officer, is comprised of the following members:

Members of the DWP Energy Services Executive Risk Policy Committee
Chief Financial Officer
Chief Operating Officer-Power System
Chief Administrative Officer
Director of Generation
Director of Resource Development, Procurement, and Regulatory Compliance
City Attorney (non-voting member)

Decisions and recommendations made by this Committee shall be based on achieving a unanimous consensus among members of the Committee. To the extent that the Committee cannot reach a consensus, the Committee shall meet with the General Manger to obtain a final decision.

Responsibilities of the Committee currently include:

	isibilities
Oversee	eing purchases and sales of wholesale energy, transmission services,
and and	illary services
Oversee	eing the wholesale energy risk management program
Formula	ting and recommending risk management policies, procedures and
strategie	es to the General Manager for consideration
Establis	hing necessary internal controls to ensure compliance with approved
policies	and procedures
Furnishi	ng periodic reports to the General Manager

Attachment 3 – Western Renewable Energy Generation Information System

The trading market for renewable energy certificates (REC) is the Western Renewable Energy Generation Information System (WREGIS), a centralized, renewable energy tracking system for the region covered by the Western Electricity Coordinating Council (WECC). The system is designed to issue, register and track RECs for verification of compliance with regulatory and voluntary market programs. WREGIS issues one REC for each MWh of renewable energy generated by registered participants who have private accounts, similar to bank accounts, where the RECs are deposited upon creation. Once a certificate is deposited it can be sold, exchanged, retired, or exported to a compatible tracking system according to the needs of the REC owner. Launched in mid-2007, WREGIS is governed by a seven-member committee consisting of representatives from various stakeholder groups (see Table 1).

Table 1 – WREGIS Committee Members

Committee Seat and Member Name	Organization
WECC Board Member, Pat Oshie (Chair)	Washington Utilities and Transport Commission
WECC Board Member, Bill Chamberlain	Western Electricity Coordinating Council
State / Provincial Representative, Suzanne Korosec	California Energy Commission
State / Provincial Representative, Anne-Marie Cuneo	Public Utilities Commission of Nevada
Industry / Load-Serving Entity, John Pappas	PG&E
Industry / Generating Unit, Gregg Morris	Future Resources Associates
Industry / Other, Robert Walker	Cargill Power Markets, LLC

DEPARTMENT OF WATER & POWER CITY OF LOS ANGELES

ENVIRONMENTAL CREDIT AND RENEWABLE ENERGY CREDIT POLICY



POWER SYSTEM & Environmental Affairs JANUARY 11, 2013



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Environmental Credit and Renewable Credit Policy



I.

Background

Los Angeles Department of Water and Power (LADWP) is subject to several environmental and emission credit programs under federal, state and local regulatory programs. LADWP does not participate in the environmental/emission credit and renewable energy credit (RECs) markets to engage in risk-taking activities typical to a power trading organization (i.e. speculative trading) but does participate in markets in order to maintain compliance with environmental laws and regulations. LADWP, however, recognizes that certain risks are incidental to the trading of environmental/emission credits and RECs. This LADWP Environmental Credit and REC Policy ("Policy"), to be approved by LADWP's Board of Water and Power Commissioners addresses the mechanisms by which LADWP will control businessrelated risks. The following are descriptions of the environmental/emission credit and REC trading programs that impact LADWP.

Environmental Protection Agency (EPA) Acid Rain Program

Title IV of the federal Clean Air Act set a goal of reducing annual sulfur dioxide (SO2) emissions by 10 million tons below 1980 levels. The Acid Rain Program introduced a market-based cap-and-trade emission credit system to reduce SO2 levels. Affected electric utility units were allocated emission credits (also known as allowances) based on their historic fuel consumption and a specific emission rate. Each allowance is equivalent to one ton of SO2. LADWP's in-basin natural gas-fired generating stations, and the Intermountain, Mohave and Navajo coal-fired Generating Stations are affected facilities under the Acid Rain Program. LADWP has and will continue to have excess allowances for the following reasons:

- In-basin generating unit allocation was based on significant oil consumption in the 1980's
- Unused allowances can be banked indefinitely
- Navajo Generating Station installed scrubbers to reduce SO2 emissions
- Mohave Generating Station is currently not in operation

As of 2011, DWP has over 200,000 excess allowances banked from 2000 to 2010.

New Source Review (NSR) Permitting Program

As part of permitting new or modified (e.g. repowerings) power plants, major stationary sources are required under federal NSR regulations to procure Emission Reduction Credits (ERCs) to offset the additional air emissions from these sources. The specific pollutants, which are purchased on a one-time basis (versus purchasing a specific vintage year), are particulate matter less than 10 microns (PM10), oxides of sulfur (SOx), and reactive organic gases (ROG). Based on current plans, LADWP is expected to have sufficient ERCs for future repowerings.



South Coast Air Quality Management District (AQMD) NOx RECLAIM Program (RECLAIM)

RECLAIM is a market-driven air regulatory program that superseded many existing NOx rules of the South Coast Air Quality Management District (AQMD). The existing "command-and-control" rules that limit the emission rates from specific pieces of equipment were replaced by a facility-wide emissions cap which declines each year through 2012 (all years thereafter are capped at the 2012 level). Facilities received emission allocations, called RECLAIM Trading Credits (RTCs), in the amount of their declining cap. Each RTC is equivalent to one pound of NOx. The allocations were based on historical emissions. Facilities must hold enough RTCs to cover their actual emissions. RECLAIM is a market-driven program as it allows a company to purchase and sell RTCs which allows for the emissions reductions to be made in the most cost-effective manner.

LADWP's Harbor, Haynes, Scattergood and Valley generating stations are subject to the NOx RECLAIM program. There were 281 facilities in the RECLAIM universe as of June 30, 2011 (Reference: Annual RECLAIM Audit Report, March 2, 2012).

In 2012 and all years thereafter, LADWP's in-basin generating stations will be allocated 708,060 lb (354 ton) cycle 1 RTCs and 150,622 lb (75 ton) cycle 2 RTCs. The cycle 1 compliance year is from January 1 through December 31 and the cycle 2 year is from July 1 through June 30. Harbor, Haynes and Scattergood are cycle 1 facilities. Valley is a cycle 2 facility. Different compliance periods were established to help prevent RTC price instability at the end of a compliance period. LADWP is expected to have sufficient RTCs for compliance.

California Air Resources Board (CARB) AB 32 Cap-and-Trade

The California Global Warming Solutions Act of 2006 (AB 32) required CARB to develop a scoping plan to reduce greenhouse gas (GHG) emissions in California to 1990 levels by 2020. In December 2008, CARB adopted its scoping plan which includes a comprehensive set of actions to reduce GHG emissions. The scoping plan directed CARB staff to develop a cap-and-trade regulation, which is a market-based compliance program.

CARB staff proposed a cap-and-trade regulation that includes covered entities emitting more than 25,000 metric tons CO2 equivalent (CO2e). This includes GHG emissions from electricity generation, including imports, industrial combustion at large stationary sources, and industrial process emissions. The electricity sector received emission allocations, called allowances, based on cost burden, projected cumulative energy efficiency, and early investment in renewables which was reflected in data submittals to the California Energy Commission (CEC). Each allowance is equivalent to one metric ton of CO2 equivalent. The allowances are allocated from the year 2013 to 2020.

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Although excess allowances can be banked for future years' compliance, CARB rules have various limits as to the amount of allowances that can be held and amount of allowances that can be purchased through its allowance auctions to prevent entities from exercising market power.

Description	Period 1		Period 2			Period 3		
	2013	2014	2015	2016	2017	2018	2019	2020
DWP Allocation (1000 metric tons)	13,594	13,350	12,920	13,045	13,216	13,258	12,704	11,680

Energy Policy Act (EPAct)/Alternate Fuel Provider Rule

The EPAct and Alternative Fuel Provider Rule requires certain fleets to acquire alternative fuel vehicles (AFVs). LADWP is an alternative fuel provider under EPAct since its principal business involves selling retail electricity and it also operates 50 or more light-duty vehicles within the U.S, at least 20 percent of which are used primarily in a single Metropolitan Statistical Area.

Affected fleets are required to acquire a certain percentage of AFVs each model year when adding new vehicles to their fleets. As of 2001, AFV acquisitions must be 90 percent of new light-duty vehicles for alternative fuel providers.

Affected fleets may comply by acquiring new or used AFVs, purchasing credits from other covered fleets, or using credits they have earned. They may also purchase biodiesel fuel blends of 20 percent biodiesel or greater or acquire conventional fueled vehicles and have them converted within 4 months of purchase. One credit is given for each 450 gallons of pure biodiesel purchased for use in blends of 20 percent or higher.

With respect to compliance with the program, DWP has been doing a combination of the following:

- o Acquiring AFVs
- Purchasing credits via a broker
- Purchasing biodiesel fuel.

Although LADWP purchases hybrid vehicles, these hybrid vehicles do not generate EPAct credits.

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Renewable Portfolio Standard

Senate Bill 2(1X) (SB2(1X)) was effective on December 10, 2011. This bill, known as the California Renewable Energy Resources Act, sets new Renewable Portfolio Standard (RPS) procurements targets, renewable resource eligibility definitions, and reporting requirements for POUs.

SB2(1X) requires the California Energy Commission (CEC) to develop specific regulations to enforce SB2(1X). It is the intent of LADWP's RPS Policy to comply with the provisions of SB2(1X), and with the applicable enforcement regulations adopted by the CEC. LADWP will also take steps to enforce the RPS requirements in accordance with the CEC enforcement regulations, when they are developed.

With respect to the use of renewable energy credits (RECs), the primary method of renewable resource procurements will be through the development and acquisition of physical generation assets and energy purchase contracts, in which LADWP will purchase the "renewable energy credit" (REC) from a renewable resource, bundled with the associated energy.

Public Utilities Code Section 339.16(b) defines eligible renewable energy resources in three distinct portfolio content categories, commonly known as "buckets." Bucket 3 allows the use of unbundled RECs (without the associated energy) for a certain level of compliance. In order for RPS compliance targets to be managed effectively, LADWP may purchase, sell or trade unbundled RECs.

Low Carbon Fuel Standard (LCFS)

The LCFS is a greenhouse gas control measure adopted pursuant to AB 32. The rule's intent is to reduce, on a full-fuel lifecycle basis, the carbon intensity of transportation fuels in California.

For transportation fuel supplied through electric vehicle (EV) charging equipment in a single or multi-family residence, an Electric Distribution Utility such as LADWP is eligible to opt-in the LCFS program in its service territory. To receive credits, the Electric Distribution Utility is required to 1) use all credit proceeds as direct benefits for current EV customets; 2) educate the public on the benefits of EV transportation; 3) provide rate options that encourage off-peak charging and minimize adverse impacts to the electrical grid; and 4) include in annual compliance reporting an itemized summary of efforts to meet requirements 1 through 3; costs associated with meeting the requirements; accounting of credits generated, sold, and banked; accounting of the number of EVs known to be operating in the service territory. Currently, LADWP is not subject to the LCFS program.

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II. SCOPE OF POLICY

This Policy applies to all activities relating to emission credits or allowances, RECs, EPAct and LCFS credits for the purpose of compliance with environmental laws, rules and regulations and policies.

III. STATEMENT OF POLICY

This Policy establishes the General Manager's authority to enter into purchases and sales of environmental and emission credits or allowances, RECs, LCFS and EPAct credits; identifies the transaction types that can be entered into by LADWP; and establishes internal controls surrounding credit risk management activity.

IV. PURPOSE OF POLICY

The purpose of this policy is to establish a risk management program that is designed to manage LADWP's exposure to risks resulting from purchases and sales of emission credits or allowances, RECs, LCFS and EPAct credits.

V. COMMITTEE RESPONSIBILITIES

In accordance with Section 10.5.3(1)(g)(ii) of the City of Los Angeles Administrative Code, LADWP established an Energy Services Executive Risk Policy Committee (Committee).

The Committee will provide oversight in the formulation of policies and procedures, and strategies that will ensure compliance with the Acid Rain, NSR, AB 32, RECLAIM, RPS and EPAct Programs. Decisions and recommendations made by this Committee shall be based on a consensus among voting members of the Committee. To the extent that the Committee cannot reach a consensus, the Chair of the Committee shall forward such matter to the General Manager (GM) for a final decision.

The Committee shall be responsible for:

- Approving a protocol to account for receipts and use of credits in operations, declaring surplus credits, and establishing a reserve level of surplus credits for unforeseen circumstances;
- Formulating strategies for the purchase and disposition of allowances;
- Establishing the necessary controls to ensure compliance with approved policies, procedures, and strategies;
- Furnishing periodic reports of activities related to the use of allowances to executive management.

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VI. AUTHORIZED TRANSACTIONS

The General Manager is delegated authority to enter into purchases and sales of emission credits or allowances, EPAct and LCFS credits and RECs, to meet requirements of federal, state, or local laws, rules and regulations. This authorization extends to the following transactions, which are not considered to be speculative if they are made in order to manage compliance risk and/or financial risk, and if they comport with the other requirements of this Policy:

- Auction Purchases
- Auction Sales
- Purchases or sales through a broker or directly with another party
- Spot purchases or sales
- Purchases or sales of long-term or multi-term streams of emission credits
- Exchanges among product types, and/or among product vintages
- These transactions include broker and transaction fees

VII. TRANSACTION LIMITS AND REQUIREMENTS

The Board of Water and Power Commissioners under the authority of Charter 604(c) is authorized to enter into contracts and financial transactions pursuant to Section 23.144 of the Los Angeles Administrative Code provided the following limitations are observed:

- RECLAIM Trading Credits Spot purchase of single-year vintage credits shall not exceed \$60 per pound.
- (2) Emission Reduction Credits purchase of PM10/PM2.5, SOx, ROG, and CO ERCs shall not exceed the following: \$700,000/lb/day, \$200,000/lb/day, \$40,000/lb/day, and \$15,000/lb/day, respectively.
- (3) Energy Policy Act Alternative Fuel Vehicle Credits Purchase shall not exceed \$5,000 per credit.
- (4) Greenhouse Gas (GHG) Allowances, Offsets and LCFS Credits Purchase shall not exceed \$150 per allowance. Greenhouse Gases include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and hydrocarbons.
- (5) Renewable Energy Credits (RECs) Purchase shall not exceed \$100 per REC.
- (6) Contracts and financial transactions entered into shall be for a period not to exceed five years in duration from the date of execution, except that purchases for a longer term may be entered into in order to match or offset the likely duration of specific output from specific facilities owned or contracted for by the Department.

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The Committee shall periodically review these limits for reasonability and, as warranted, shall recommend any resulting changes in this Policy to the Board of Water and Power Commissioners.

VIII. COUNTERPARTY CREDIT

LADWP shall only enter into contracts and financial transactions for environmental/emission credits and RECs with creditworthy counterparties. All contracts and financial transactions for environmental and emission credits shall comply with the applicable rules set forth in the Counterparty Evaluation Credit Policy approved by the Board on May 6, 2008.

IX. INTERNAL CONTROLS

The Director of Environmental Affairs (DEA) and Senior Assistant General Manager – Power System (Senior AGM – Power) or his/her designees shall establish a system of internal controls to provide reasonable assurance that the objectives are met and that all transactions are in compliance with the Policy.

1. Independent Monitoring and Reporting

The Committee shall ensure that all purchase and sale transactions for environmental/emission credits and RECs are independently monitored and periodic reports with respect to such activities shall be provided to the GM, on at least a quarterly basis.

2. Transaction Controls

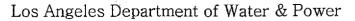
All purchase and sale transactions of environmental/emission credits and RECs entered into shall be independently reviewed by appropriate personnel.

X. REPORTING AND MONITORING

Reports summarizing environmental/emission credit and REC activities shall be distributed to the GM, the Committee and other interested parties by the DEA and Senior AGM - Power periodically. The nature and frequency of such reports shall be determined by the Committee.

XI. OTHER

This Policy shall supersede the Sulfur Dioxide Emission Allowance Policy approved by the Board on August 20, 2009.





XII. POLICY REVIEW

This Policy shall be adopted through a Board Resolution. This Policy shall be reviewed at least annually to ensure its consistency with the overall objectives of the environmental/emission credit and REC programs, as well as its relevance to current law, financial and economic trends. Any amendments to this Policy shall be submitted to the Board for consideration and approval.