



[LADWP](#)

LADWP – OVERSIGHT COMMITTEE MEETING

OCTOBER 5, 2019

Summation of the meeting by Adriana De La Cruz, on behalf of the T & I committee of the MVCC.

MEETING commenced at 8:58 AM

The subject of the meeting was the LA 100 Study. The advisory group (also known as the LA 100 Advisory group) for this alternative energy plan meets every quarter. This is another follow up presentation that they report to the LADWP Oversight Committee for feedback (of their progress report).

The advisory 100 group has since set up protocols and have defined the mission of the study. In 2018, the focus was on determining the technical aspect (language/terminology) and methods (controls) by which the study would be measured (conducted). The various jobs (manpower) and economic (cost analysis), as well as the eventual/substantial investment by the LADWP board to implement the recommendations presented by the group. In January of this year, the LADWP had put the study on hold due to a Federal Government audit. Then in February, Mayor Garcetti announced he would not be reopening any of the coastal power plants. Another development occurred in April, when focus was on the “Green New-Deal” initiatives. Finally, last month, LADWP renewed its vendor contract for NREL (National Renewable Energy Laboratories), a solar energy research institute, to continue the study and take into consideration possibly aligning the study with California Senate Bill (SB-100) commonly known as the California Renewable Portfolio Standard Program.

What was discussed during the presentation by an NREL representative was focused on various subjects of “power.” The present directive of the LADWP to try to increase “electrification” of many of its municipal buildings, charging stations in its parking garages and increasing the alternative means of transportation (infrastructure).

Please see the chart that NREL presented to the LADWP Oversight committee. It contains the various options of how to achieve at the minimum 60% of alternative energy output by the year 2030. The chart specifies four scenarios, that has a combination of alternative power sources that culminate into meeting the requirement as required. Currently there is an LA-100 Advisory group overseeing the study.

More information regarding the study can be found at
WWW.LADWP.COM/CLEANENERGYFUTURE

NREL – National Renewable Energy Laboratories



CALIFORNIA SB-100



California
LEGISLATIVE INFORMATION

Senate Bill No. 100

CHAPTER 312

An act to amend Sections 399.11, 399.15, and 399.30 of, and to add Section 454.53 to, the Public Utilities Code, relating to energy.

[Approved by Governor September 10, 2018. Filed with Secretary of State September 10, 2018.]

LA 100 ADVISORY GROUP **STUDY CONSIDERATIONS**

Maintaining system reliability

- Types/availability of clean energy resources
- Role of energy storage, energy efficiency, demand response, and Energy Imbalance Market (EIM)
- Developing technologies
- Necessary infrastructure upgrades
 - Critical transmission investments
 - Role of LADWP's existing natural gas generating units
 - Once Through Cooling (OTC) Study
- Optimization of costs
- Impact to local economy
- Impact to rate payers

WEBSITE OF THE STUDY (hyperlink)

Or

https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-cleanenergyfuture?_adf.ctrl-state=iepv1r9oh_4&_afLoop=225848043347779

**Neighborhood Councils - Department of Water and Power
Memorandum of Understanding Oversight Committee**

Special Meeting Agenda

Saturday, October 5, 2019, 8:45 a.m.

Los Angeles Department of Water and Power, John Ferraro Building, A Level Conference Rooms
111 North Hope Street, Los Angeles, CA 90012

Courtesy parking in the DWP lot, entrance off Hope Street

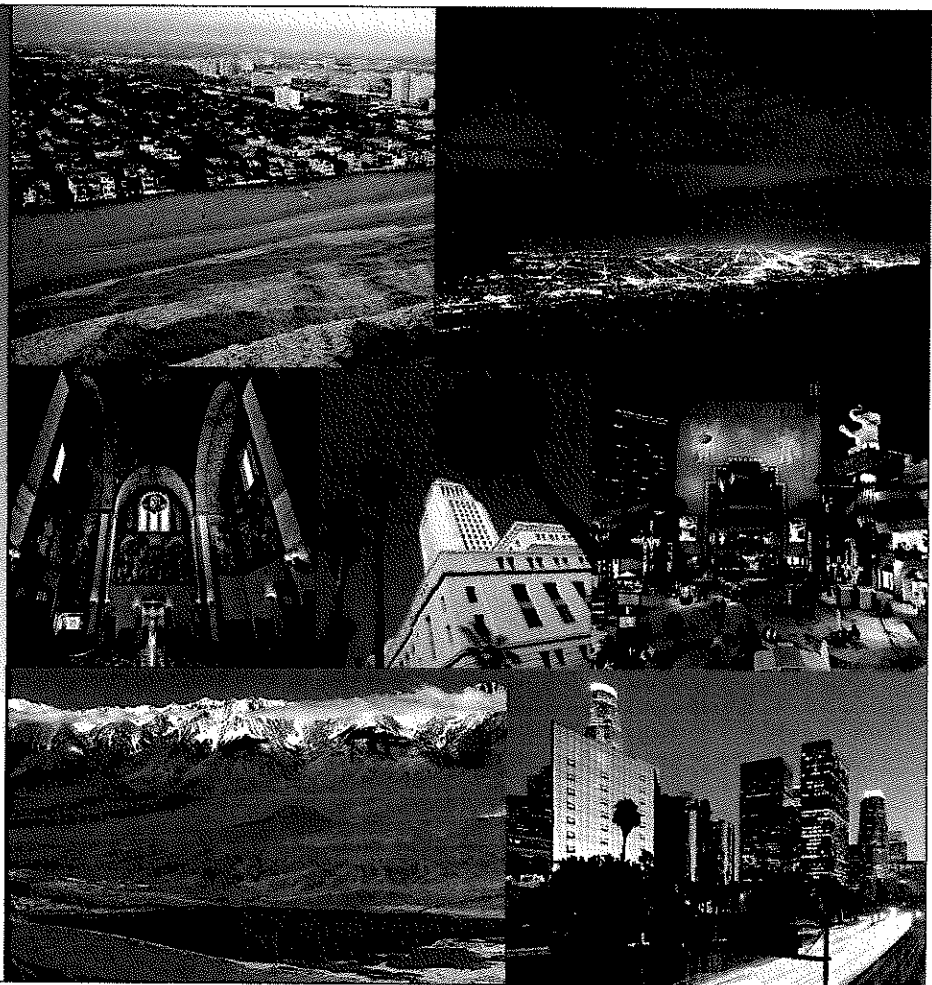
1. **Call to Order and Opening Remarks (Tony Wilkinson, Chair, 818-212-5384, tonyw.civic@gmail.com)**
[2m]
2. **Self-Introductions of Participants and Guests (*Please sign the sign-in sheet!*)** [3m]
3. **Announcement that meetings of the NC-DWP MOU Oversight Committee and Jack Humphreville's DWP (Advocacy) Committee are held regularly at LADWP headquarters, 111 North Hope Street, Los Angeles 90012 at 8:45 am on the first Saturday of the month (MOU in even numbered months, DWPC in odd numbered months). The Los Angeles Neighborhood Council Coalition (LANCC) meeting usually follows at 10:00 am at the same location.** [1m]
4. **The LA100 study is in response to the request of the City Council that LADWP report on the feasibility of achieving 100 percent renewable power from the municipal utility. DWP has assembled a diverse Advisory Group, including representatives from Neighborhood Councils, to assist in this process. After recent policy decisions by the Mayor, the timeline for the process was recently extended. Preliminary results are expected from computer models by December 2019. Community outreach about the policy options and costs will be conducted in 2020. The research project is funded at \$14 million.** [34m]
More information, including the Advisory Group presentations, can be found at
<http://ladwp.com/cleanenergyfuture>
5. **Feed in Tariff (FIT) Program: Ratepayer Advocate Fred Pickel will briefly discuss why the current FIT plan is not in ratepayers' interests, the planned expansion of the program which the Board recently sent to the City Council, and an alternative.** [34m]
The Office of Public Accountability (OPA) report on the proposed 300MW expansion is linked on the home page of the OPA website
<http://opa.lacity.org/>
6. **A DWP Inspector General (IG): The Ratepayer Advocate will review the past discussions regarding an Inspector General for DWP (which the Mayor recently announced), a Ratepayer Advocate, or both, and provide some thoughts about the role of an IG in the future.**
7. **Adjournment: Before 10:00 a.m.**



Feed-in-Tariff 2019 Expansion Comments

**Office of Public
Accountability/
Ratepayer Advocate
City of Los Angeles
opa@LAcity.org
tel. 213-978-0220**

October 5, 2019



Existing Feed-in-Tariff Program Concerns

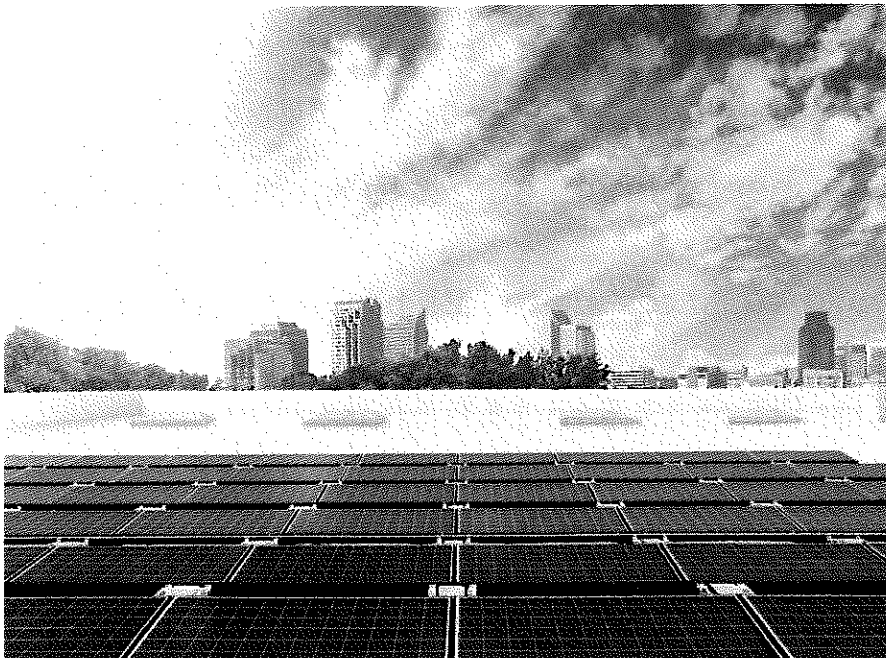
- Projects have not been bid or subject to market pricing test.
 - 300 MW, if build, could cost up to \$1.5 billion over 20 years
- Remote utility-scale solar is now 2.5 ¢/kWh or less, versus local solar FiT at 13.5 to 14.5 ¢/kWh
 - Recent small commercial solar cost as low as 9.9 ¢/kWh
- FiT is a difficult business model to execute for both DWP and developers
- The existing FiT program is 7 years old with slow progress, poor economies of scale, and only construction job creation. It needs reformulation.

LA's Progress on Solar, August 2019

Solar		In-service, MW
Utility Scale	Purchased	1064
	DWP built	25
Local Solar	Net Metered (retail)	317
	Feed-in-Tariff	66

Summarized from DWP August 2019 Renewables report

TESLA | Commercial Solar



Select Your Solar

Available only in California | Size Guide

Buy Show incentives* No Yes

40 kW \$52,062*	120 kW \$134,652*	240 kW \$241,892*
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Estimated return of 8% to 12% per year. Higher if utility prices increase

Subscribe

40 kW 12.9¢/kWh	120 kW 10.9¢/kWh	240 kW 9.9¢/kWh
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<https://www.tesla.com/energy/design/commercial>

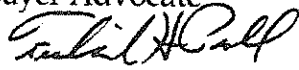
From Tesla Size Guide: A 240 kW system is best suited for a building with an estimated roof of 34,000 sq ft (e.g., 100 ft by 340 ft). Solar coverage is around 20,100 sq ft.

REPORT FROM

OFFICE OF PUBLIC ACCOUNTABILITY

Date: September 24, 2019

To: The Board of Water & Power Commissioners
Martin L. Adams, General Manager & Chief Engineer, Department of
Water & Power

From: Frederick H. Pickel, Ph.D., Executive Director/Ratepayer Advocate


Reference: 300MW Feed In Tariff Program Expansion
Agenda Item # 22

RECOMMENDATIONS

OPA recommends that the Board reject the DWP proposal to expand the Feed In Tariff (FiT) program by 50MW or 300MW, until such time as the program: 1) no longer relies on investment returns determined by third or interested parties to be "necessary" for real estate owners and banks, 2) is bid in some manner, or 3) addresses the reliability needs of the distribution system.

The program's proposed price of 14.5 cents per kwh is many multiples (5.8) above that needed to supply desert solar or reduce carbon. It siphons away resources better spent fixing this program so it can grow, without relying on retail prices for wholesale procurement. No one OPA knows of is following DWP's "leadership" in over-compensating wholesale power, and the program thus reflects poorly on the City.

DISCUSSION

The current FiT program expended 15.8 cents/kwh in fiscal year end 2017, or \$8.1 million on 52 GWH.

To OPA's knowledge, this is the procurement cost, and does not include program management costs. The Board should inquire of FSO what the program costs (e.g., employee time, overhead costs) have been for the FiT program since its inception. It is no longer new and is at a steady state. The Board's expansion decision should incorporate an awareness of the full costs to build the program up to today's level.

The FiT program has not documented its claims of job development. Not one job was tied by DWP to an individual project's financing, made possible by the FiT program subsidy.

Government jobs programs generally tie a subsidized project to an incremental job that would not have been created but for the project subsidized. Such government loan and job development programs contractually have the right to track payroll records, so that incremental jobs for multiple years can be audited despite the employer's personnel turnover. Ratepayers should not receive less evidence than taxpayers for programs that subsidize private solar operators and building owner's profits while claiming *incremental* private jobs.

DWP's management of its net metering program, smart inverter standards, and interconnection templates, constitutes an impressive amount of progress in the last year. OPA commends the DWP for the discipline and determination in improving these retail customer's services.

OPA is also aware that DWP plans similar and significant improvements to the FiT program, so that rooftops or parking lots with capacity beyond a retail customer's load can be fully developed. OPA commends DWP for taking the steps to analyze how and where to focus such projects.

The challenge is whether to continue a program just for continuity's sake, when it is wasteful or discredits the DWP. DWP has limited resources, not the least of which is managerial talent and attention. DWP has assembled a multi-disciplinary team to re-vamp the FiT so that above market wholesale prices are justified by clear reliability benefits to the distribution system at identifiable locations, as OPA has recommended. To continue a program initiated by the particular fiscal need of school district rooftops *over a decade ago*, without looking forward to the next decade and challenges in the distribution grid, is a missed opportunity. DWP seems to grasp how it can align this program with true system challenges at the distribution level. The fact that the funds wasted in the meantime are relatively small is cold comfort.

OPA does not agree that DWP's preference to obtain City Council approval for future tranches of solar, up to 300MW, years before demand for them is expected, or program design changes are finalized, is appropriate. It shows little confidence that future elected officials would be able to appreciate a better program when they see it. Further, it puts something anemic on life-support that the DWP will then have to spend scarce managerial resources proving it is supporting "fully", or at least is allowing to languish through no fault of theirs.

Should the Board disagree with OPA's recommendation to suspend additional volume, OPA would encourage it to:

- 1) reduce the authorized amount to 25-35MW,
- 2) reduce the prices, and
- 3) report back on an improved program in six months.

cc:

The City Council Committee on Energy, Climate Change & Environmental Justice
The Honorable Eric Garcetti, Mayor
Sharon Tso, Chief Legislative Analyst
Richard H. Llewellyn, City Administrative Officer



RESOLUTION NO. _____

BOARD LETTER APPROVAL

A handwritten signature in black ink, appearing to read 'Reiko Kerr', written over a horizontal line.

REIKO A. KERR

Senior Assistant General Manager – Power System
Engineering, Planning, and Technical Services

A handwritten signature in black ink, appearing to read 'Martin L. Adams', written over a horizontal line.

MARTIN L. ADAMS

General Manager and Chief Engineer

DATE: September 6, 2019

SUBJECT: Clean Grid LA: 300 Megawatt Feed-in Tariff Program Expansion

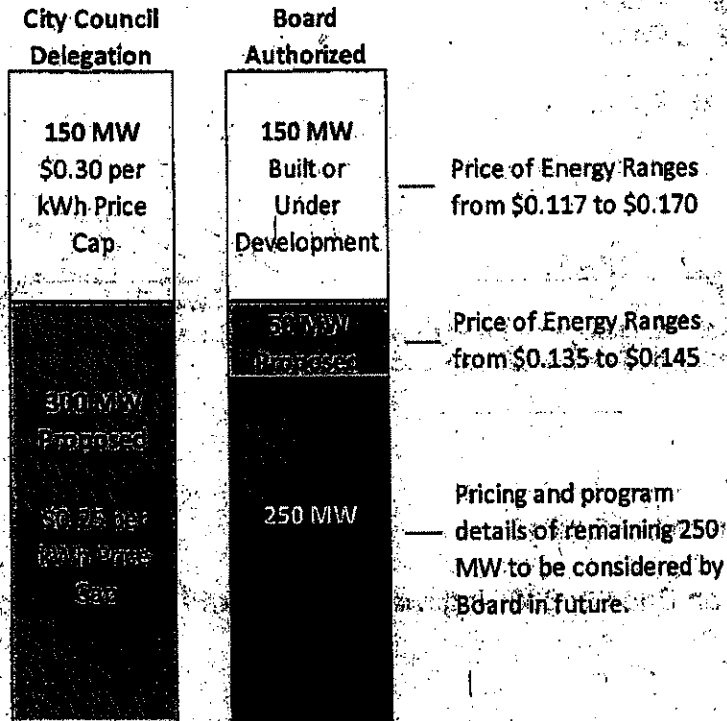
SUMMARY

The proposed Ordinance increase the Los Angeles Department of Water and Power Board of Water and Power Commissioners (Board) authority to enter into agreements for the purchase of local renewable energy from 150 megawatts (MW) to 450 MW. This ordinance will also increase the maximum allowable effective capacity of each local renewable energy facility from three to ten MW and reduce the maximum average purchase price from \$0.30 per kilowatt-hour (kWh) to \$0.25 per kWh.

City Council approval is required. Los Angeles City Charter Section 373 requires City Council approval of certain long-term contracts. Charter Section 674 requires City Council approval by ordinance of contracts for the purchase of energy. Upon approval of the ordinance, the Board will be authorized to continue the FIT program for 300 MW in addition to the previously-approved 150 MW. The Resolution also authorizes a 50 MW extension to the Feed-In Tariff (FIT) Program, to be operated pursuant to the attached revised FIT Program Guidelines that reflect the proposed ordinance to amend the Los Angeles Administrative Code (LAAC) Section 10.5.2, allow for further extension of the commercial operation deadline, and incorporate a new pricing table. Additionally, any unused capacity from the FIT 150 will be allocated pursuant to the attached revised FIT Program Guidelines.

RECOMMENDATION

It is recommended that the Board adopt the attached Resolution recommending City Council's approval of an ordinance to amend Section 10.5.2 of Article 1 of Chapter 1 of Division 10 of the LAAC for continued operation of LADWP's FIT Program, with modifications, and authorizing the extension of the current FIT Program and revised FIT Program Guidelines for an additional 50 MW. This 50 MW authorization would be the first offering of the 300 MW of additional capacity delegated from City Council to the Board.



ALTERNATIVES CONSIDERED

LADWP also procures renewable energy through large-scale solar development; however, these projects are typically located outside of the Los Angeles area due to large land requirements. The FIT Program encourages renewable energy development close to load demands, avoiding the losses associated with transmitting and distributing power over long distances.

Unlike LADWP's local solar Net Energy Metering (NEM) program, energy delivered through FIT facilities is eligible for renewable energy credits (RECs) and contributes to the LADWP's Renewable Portfolio Standard (RPS) targets.

As the FIT Program is currently fully subscribed, not adopting the Resolution would result in LADWP ending the FIT Program and cancelling all applications exceeding the current allocation.

FINANCIAL INFORMATION

This Resolution will increase the Board's authority to enter into an additional 300 MW of FIT contracts, for a total authority of 450 MW with an average purchase price not to exceed \$0.25 per kWh. However, the pricing proposed for the first 50 MW of the 300 MW expansion ranges from \$0.135 to \$0.145 per kWh. Therefore, the first 50 MW of the 300 MW FIT expansion is expected to have a budget that is not to exceed \$11,962,500 in annual energy payments. The budget, schedule, and rate impact of any future FIT

Program for the remaining 250 MW capacity will be discussed when such program is proposed and considered by Board.

BACKGROUND

The FIT program allows developers to sell the output of local renewable energy projects directly to LADWP (as opposed to consuming the energy to satisfy the customer's load). Currently these projects cannot exceed three MW or \$0.30 per kWh. LADWP has offered prices below the cap set by City Council, most recently at \$0.145 per kWh.

Additionally, local generation can be rapidly developed, deferring the need for costly new transmission lines — which can take over a decade to plan and construct. FIT Program participants are eligible for the investment tax credit, bringing an important amount of Federal funding into Los Angeles. By supporting and allowing the development of new rooftop solar systems, the FIT Program helps to create local jobs, support local sustainable businesses, and also indirectly provide monthly dividends to commercial building owners who rent out their rooftop space.¹

Under the current FIT program, 65.5 MW have been placed in-service and 78 MW have been subscribed to or are under construction. Additionally, 16.5 MW have been placed on hold due to permitting requirements. Currently, LADWP offers FIT contracts at \$0.145 per kWh, or \$145 per megawatt-hour (MWh).

On April 17, 2012, the Board adopted the FIT Demonstration Program Guidelines, Standard Offer Power Purchase Agreement (SOPPA), and the Standard Offer for Customer Generation Interconnection Agreement (IA), to be effective upon the adoption of an ordinance authorizing the Board to enter into long-term FIT contracts and to delegate that authority to the General Manager.

On May 17, 2012, Ordinance No. 182108 amended the LAAC to authorize the Board to enter into 150 MW of long-term FIT contracts and to delegate that authority to the General Manager.

On January 11, 2013, the Board adopted the 100 MW FIT Set Pricing Program (FIT 100), FIT Set Pricing Program Guidelines, SOPPA, and IA.

On April 16, 2013, the Board adopted the FIT50 program via Resolution 013-249, consisting of an additional 50 MW of local solar, as the remaining part of the full 150 MW FIT Program and in conjunction with the Beacon Bundled Solar Program, and also called for a plan to capture any potential FIT50 capacity that may fail to develop, as either an addition to FIT100 or some other FIT offering, so that the total FIT development goal remains at 150 MW.

On February 18, 2014, the Board adopted the revised FIT Set Pricing Program Guidelines, SOPPA, and IA for use in the 100 MW Set Pricing Program.

¹ UCLA Luskin Center for Innovation. (2019). *Feed-in Tariff Analysis: LADWP Clean Grid L.A.: 300 MW Feed-in Tariff (FIT) Expansion/September 6, 2019*

On June 3, 2014, the Board adopted Resolution 014-229, authorizing LADWP to enter into Competitive Offer Power Purchase Agreements (COPPA) for the development of FIT50 projects.

On May 16, 2017, the Board adopted Resolution 017-234 for the 65 MW FIT Capacity Re-offer, as the unclaimed part of the FIT 100 program.

On February 12, 2019, Mayor Eric Garcetti announced that LADWP will not repower Once-Through-Cooled units at LADWP's three major coastal natural-gas power plants, accelerating L.A.'s transition to 100 percent clean energy by 2045 and putting the City of Los Angeles on track to meet carbon neutrality by 2050.

On March 19, 2019, the 150 MW capacity established by Ordinance No. 182108 was fully subscribed to by projects in service and projects under development. Due to project cancellations and Conditional Use Permit requirements, 6.5 MW of the 150 MW capacity has become available.

On April 29, 2019, the Mayor released L.A.'s Green New Deal—an update to the 2015 Sustainable City pLAN—with a scientifically-driven strategy for achieving a zero-carbon grid and deliver environmental justice and equity through an inclusive economy, creating pipelines to good paying green jobs in Los Angeles. The pLAN specifically calls on LADWP to expand the FiT Program and targets an increase in local solar to 900-1,500 MW by 2025, 1,500-1,800 MW by 2035, and 1,950 MW by 2050.

PROPOSED FIT PROGRAM EXPANSION

Proposed City Council Ordinance

To ensure a thriving solar industry in Los Angeles, capacity expansion of the FiT Program is necessary. On March 19, 2019, the 150 MW capacity established by Ordinance No. 182108 was fully subscribed to by projects in service and projects under development. The proposed ordinance will expand the Board's authority to enter into contracts for the purchase of local renewable energy from 150 MW to 450 MW.

Project Capacity Expansion

To expedite the interconnection and application review processes and reduce metering costs, the proposed ordinance includes an expansion of individual project capacity per application from three MW to 10 MW.

Average Purchase Price Reduction

To ensure ratepayer benefits are realized from the decrease of solar costs since the program inception, the proposed ordinance reduces the FiT program maximum average purchase price of energy from \$0.30 per kWh to \$0.25 per kWh.

Program Capacity Allocation

Under the proposed program expansion, subsequent to City Council's adoption of the ordinance, LADWP will initially offer 50 MW of additional (and any unused capacity from the FIT 150), pursuant to the attached revised FiT Program Guidelines.

Eligible Renewable Technologies

As part of the proposed expansion, the program will now be open to all RPS-eligible renewable technologies. Currently, the FIT Program is only open to solar and landfill gas facilities.

Owens Valley Eligibility Expansion

With the expansion of the FIT Program to a total of 450 MW the initial offering of 50 MW to the FIT Program will allocate two MW of capacity to government entities, including tribal communities, that are existing customers in the Owens Valley portion of the LADWP service territory. Due to sufficient baseload energy resources in that part of LADWP's service territory, Owens Valley projects will be limited to solar photovoltaic (PV) technology. The existing FIT Program limited the Owens Valley to four MW which was quickly allocated, leaving local public entities without an opportunity to participate. Public agencies' approval processes can take significant time, thus making it difficult to meet short timelines associated with the program application process deadlines. These public agency systems will provide a broader public benefit. Due to existing limits on circuit hosting capacity, projects in the Owens Valley will have a maximum aggregated capacity of 500 kilowatts. As with all FIT projects, project capacity will be limited to distribution circuit capabilities as determined by integration studies conducted by LADWP Distribution Planning Section. Any portion of the two MW of capacity not allocated to the public entities within six months of the beginning of the application period will be made available to other projects in the Owens Valley, consistent with the FIT Program Guidelines.

Price of Energy

Under the proposed program, the purchase price varies depending on project size to reflect the economies of scale for large-capacity facilities. Additionally, given the continuous production from non-PV renewable energy facilities, including during periods of low demand, the purchase price is reduced. The proposed pricing structure for FIT projects is as follows:

Project Capacity	FIT Pricing Table		Owens Valley Projects Purchase Price of Energy (Solar PV)
	In-Basin Projects Purchase Price of Energy (Solar PV)	Purchase Price of Energy (Non PV)	
30 kW - 500 kW	\$0.145/kWh	\$0.115/kWh	\$0.115/kWh
> 500 kW - 3 MW	\$0.140/kWh	\$0.110/kWh	\$0.110/kWh
> 3 MW	\$0.135/kWh	\$0.105/kWh	\$0.105/kWh

Consistent with prior FIT offerings, the purchase price of energy listed in the FIT Pricing Table will be reduced for projects in the Owens Valley portion of the LADWP service territory.

FIT Program Guidelines

The attached revised FIT Program Guidelines reflect the proposed amendment to the LAAC Section 10.5.2, allow for further extension of the commercial operation deadline, open the program to RPS-eligible renewable technologies, and incorporate a new pricing table, as well as other administrative updates.

The attached FIT SOPPA and IA have been revised to reflect the changes to the attached revised FIT Program Guidelines.

Due to operational impacts, an Executive Directive No. 4 waiver was requested. The City Administrative Officer Report is under development.

ENVIRONMENTAL DETERMINATION

Determine item is exempt pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15061(b)(3). It has been determined that the amendment to expand the LADWP FIT Program is exempt pursuant to the General Exemption described in CEQA Guidelines Section 15061(b)(3). General Exemptions apply in situations where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.

CITY ATTORNEY

The Office of the City Attorney reviewed and approved the Resolution as to form and legality.

ATTACHMENTS

- Resolution
- Ordinance
- FIT Program Guidelines
- SOPPA
- IA