



VIRTUAL NET ENERGY METERING PILOT PROGRAM GUIDELINES

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1.0 Definitions

For the sole purpose of these Guidelines, the capitalized terms listed below shall have the specific meanings ascribed to them in this section:

“A2B Letter” means the LADWP authority-to-bill letter which serves as the invoice for interconnection costs.

“Applicant” means the person or entity submitting the Virtual Net Energy Metering (VNEM) Application.

“Application” means the VNEM Application form listed in Attachment 3 of these Guidelines and related required documentation to initiate the process of entering into a VNEM Power Purchase Agreement (VPPA) with the Los Angeles Department of Water and Power (LADWP).

“Business Day” means any calendar day that is not a Saturday, a Sunday, or a day on which commercial banks are authorized or required to be closed in Los Angeles, California or New York, New York.

“CAMR” means the LADWP’s Comprehensive Affordable Multifamily Retrofits (CAMR) program which assists L.A.’s low income, multifamily property owners.

“Capacity” means the CEC-AC rating of the Facility in kilowatts or megawatts alternating current.

“CEC” means the California Energy Resources Conservation and Development Commission, also known as the California Energy Commission, or its successor agency.

“CEC-AC” means the alternating current rating used by the California Energy Commission which is based upon the product of the Photovoltaics for Utility Scale Applications (PVUSA) Test Condition (PTC) rating of the module, module quantity, and the inverter efficiency.

“Clean Energy Adder Contributions” or “CEA” means the funds collected through the Renewable Energy Resource Reference (RERR) Rate Agreements to support clean energy initiatives offered by LADWP.

“Commercial Operation” means the completed permitting, construction, and testing of the Facility such that the Facility is both authorized and able to deliver energy at full capacity to the point of interconnection.

“Commercial Operation Deadline” means the date by which the Participant must achieve Commercial Operation.

“Customer” means an existing LADWP customer, or a third party who will establish a customer account with LADWP, upon interconnection to LADWP’s Distribution System.

“Delivery Point” means the location where the electrical energy is required to be delivered to LADWP by the Applicant.

“Disadvantaged Communities” means communities designated as Disadvantaged Communities by the most recent determination of the California Environmental Protection Agency (CalEPA) pursuant to SB 535.

“Distribution System” means the conductors, transformers, and related equipment utilized by LADWP to deliver electric power to its customers.

“Development Security Deposit (DSD)” means a \$50 security deposit for each kilowatt of Capacity of the Facility.

“Eligible Renewable Energy Resource” for the sole purpose of this program means a solar photovoltaic electric generation facility that complies with the criteria of Section 10.5.2(1)(d) of the Los Angeles Administrative Code or any successor thereto.

“Facility” means the facility used to produce energy from an Eligible Renewable Energy Resource pursuant to this program, including all property interests and related electrical and non-electrical equipment.

“Guidelines” means these VNEM Program Guidelines as adopted by the Board, including all amendments, revisions, and any successor thereto.

“Interconnection Agreement (IA)” means the VNEM Customer Generation Interconnection Agreement as adopted by the Board, including all amendments, revisions, and any successor thereto.

“kV” means a kilovolt (1,000 volts).

“kW” means a kilowatt (1,000 watts) of electric power in alternating current.

“kWh” means the power in kilowatts produced in one hour.

“LADWP” means the Los Angeles Department of Water and Power.

“MW” means a megawatt (1,000,000 watts) of electric power in alternating current.

“Participant” means an Applicant that has satisfied all Application process requirements and entered into a VNEM Power Purchase Agreement (VPPA) with LADWP.

“Project” is interchangeable with the term “Facility”.

“Purchase Price of Energy” means the base price (in dollars per kilowatt-hour) to be paid to the Participant for energy delivered to LADWP.

“Site” means the real property (including all fixtures and appurtenances thereto) and related physical and intangible property generally owned or leased by the Applicant where the Facility is located or will be located, and including any easements, rights-of-way or contractual rights held or to be held by Applicant for transmission lines and/or roadways servicing such Site or the Facility located (or to be located) thereon.

“Site Control” means the Applicant shall (i) own the Site; or (ii) be the lessee or licensee of the Site under a lease or license which permits the Applicant to perform its obligations under this program.

“Stand-Alone Integration Study” means an optional project integration feasibility study done before application submission.

“VNEM Power Purchase Agreement (VPPA)” means a standard agreement to sell energy from an Eligible Renewable Energy Resource to LADWP under this program.

“Virtual Net Energy Metering (VNEM)” means the LADWP Virtual Net Energy Metering Pilot Program to purchase renewable electric energy under a standard offer contract.

2.0 Overview

These Guidelines provide background information and procedures for participation in the Virtual Net Energy Metering Pilot Program (VNEM). To the extent any provision of these Guidelines conflict with the terms of Participant’s VPPA, the VPPA shall take precedence.

Participants in the VNEM Pilot Program will install solar photovoltaic (PV) systems at multifamily residential sites within the City of Los Angeles and sell the entire Facility energy output to LADWP.

In order to expand solar benefits to residential Customers residing in multifamily dwellings, the proceeds from the sale of local renewable energy must include distributions to residents at the Site. The total proportion of proceeds from the sale of energy allocated to all residential Customers shall be fixed at no less than forty percent (40%) of the total payment.

Payments shall be issued via individual checks to the Participant and Customers residing at the addresses identified in the VPPA. Eligible Customers shall have individual LADWP electric meters and must be on the same Site as the Facility meter. Customers may not participate in any other LADWP NEM program at the Site for the duration of the VPPA. Each Customer will receive a statement showing their share of the payment amount (as identified in the VPPA) and payment for that share. If there is no active Customer at an address at the end of the month, the share of the payment amount for that address shall be reallocated proportionally among the other residential Customers.

Undeliverable checks and checks not cashed after two years shall be voided, and such funds will be reallocated for the next available calendar month proportionally among the then current residential Customers.

The Comprehensive Affordable Multifamily Retrofits (CAMR) program assists L.A.’s low income, multifamily property owners by offering no-cost property assessments to identify efficiency opportunities to help owners and their residents save energy and reduce costs. In addition, qualified property owners will receive aid with work scope development and the contractor procurement process and may receive additional solar incentives based on CAMR guidelines. The VNEM Application Fee, Integration Study Fee, Interconnection Study Fee, and Stand-Alone Study Fee may be included as project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.

VNEM PROGRAM HIGHLIGHTS

- ✓ Applicants must meet all eligibility and minimum technical requirements.
- ✓ Applications will be accepted on a first come, first served basis.
- ✓ Applicants will be responsible for all costs associated with performing the interconnection study and installation of equipment.
- ✓ Projects that could adversely impact the distribution grid or trigger network upgrades may be rejected.
- ✓ Applicants must enter into a VNEM Power Purchase Agreement (VPPA) and an Interconnection Agreement (IA).
- ✓ The VPPA and IA are non-negotiable and can have a term of up to 20 years; or a term of 10 years with an option for an additional term of up to 10 years.
- ✓ Project must achieve Commercial Operation within 12 months after the effective date of the VPPA.
- ✓ Energy produced from a Project may only be sold to LADWP.
- ✓ No less than 40% of the proceeds from Project sales will be allocated for the benefit of LADWP's metered residential customers residing in multifamily dwelling units at the Facility Site.
- ✓ LADWP will disperse payments based on energy produced at the end of each calendar month in accordance with terms and conditions of the VPPA.

ADDITIONAL VNEM PROGRAM HIGHLIGHTS FOR CAMR PROJECTS

- ✓ VNEM Project Minimum Capacity (AC-CEC) is reduced to 10 kW for CAMR projects.
- ✓ Application, Integration Study, Stand-Alone Study Fee & Interconnection Study Fees may be included as project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
- ✓ CAMR VNEM projects may also qualify for a solar installation incentive not otherwise available to VNEM projects.
- ✓ For more information on CAMR, visit: <https://ladwpcamr.com/>.

2.1 Purpose and Key Goals

The LADWP is committed to solar power as a clean, efficient, and sustainable source of energy. Local solar is an important component of the LADWP's renewable energy programs and will help the LADWP meet its renewable energy targets, while reducing the carbon footprint of its power generation portfolio. For more information, please visit www.ladwp.com/cleanenergyfuture.

L.A.'s Green New Deal—Sustainable City pLAn 2019 established the initiative to launch a new Virtual New Energy Metering Pilot Program for multifamily households to go solar and implement a feasibility study.

The VNEM Pilot Program is designed with the following key goals in mind:

- Contribute to LADWP's Renewable Portfolio Standard targets
- Enable geographic diversity from distributed renewable resources close to load centers
- Expand access to the benefits of solar and support development opportunities in local communities
- Support L.A.'s Green New Deal—Sustainable City pLAn 2019

In order to encourage additional development of small and medium-scale distributed renewable energy projects within the service territory, LADWP seeks to purchase energy from Eligible Renewable Energy Resources under a long-term VNEM Power Purchase Agreement (VPPA), with a minimum of ten (10) years, up to twenty (20) years in duration. Applicants may also select a VPPA with a term of ten (10) years in duration, with an option for an additional term of up to ten (10) years.

3.0 Eligibility Requirements

Applicants must satisfy the following requirements in order to be considered for program participation.

3.1 Project Size and Benefits

Eligible Projects shall have a Capacity ranging from 30 kW to 3 MW for solely VNEM Projects; however, VNEM projects enrolled in CAMR may have a minimum Capacity of 10 kW. Capacity (CEC-AC) for solar photovoltaic projects will be determined by multiplying the module PTC (PVUSA Test Conditions for rating module performance) rating by the total quantity of modules and the inverter efficiency.

The total pilot program Capacity is 5 MW.

Each eligible Project will allocate at least 40 percent of the proceeds from the sale of the total energy output to residential service customers with accounts that are associated with multifamily dwelling units at the Site. Only those residential service Customers that are under a rate schedule of R1A-Standard Residential, R1B-Time-of-Use, R1D-Low-Income, or R1E-Lifeline are eligible to be counted toward this minimum, along with Commercial Customers associated with an LADWP electric meter for the common areas of the residence (sometimes referred to as "House" meter).

3.2 Technologies and Qualified Facility Components

The VNEM program is limited to only solar photovoltaic (PV) technology. Only photovoltaic modules and inverters that are certified by a nationally recognized testing laboratory are eligible.¹

All Facility components must follow prudent utility practices for quality.

All flat plate photovoltaic modules must be certified as meeting the requirements of the Underwriters Laboratory Standard (UL) 1703 or UL 61703.

For custom photovoltaic modules not certified by UL 1703 or UL 61703, parties may seek certification by the Los Angeles Department of Building and Safety Electrical Test Lab (www.ladbs.org). Facilities will not be approved by LADWP inspectors until proof of certification is received by LADWP.

All inverters must be permanently utility interactive at the point of interconnection to the grid, must be certified by a nationally recognized testing laboratory for safe operation, and must be certified as meeting the requirements of UL 1741SA and IEEE 1547, including testing conformance to IEEE 1547.1. LADWP reserves the right to adopt additional codes, standards, and conditions, at any time, at its sole discretion.

Refer to LADWP's Electric Service Requirements manual² for the latest service equipment and installation requirements.

The lease of generating equipment is allowed upon approval from LADWP. Applicants who wish to lease their generating equipment shall submit a copy of the equipment leasing agreement prior to VPPA execution.

3.3 Independent Service Connection

Projects shall not be interconnected at the existing pull section, switchboard, or meter panel that is providing service to the Site. A separately-metered switchboard or meter panel with an independent service connection is required. Exceptions to this policy may be granted on a case by case basis by the service planning district engineer, provided the following:

- There is adequate space for making taps in the existing pull section.
- The pull section is sized for the equivalent service disconnect (existing + new), or a "Maximum Amperage Agreement" is recorded on the property to acknowledge the de-rating of the building's switchboard.

3.4 Applicant Qualifications

Applicants must meet the following requirements to participate:

- Prior successful development and construction of at least one similar project or greater using the proposed technology by one or more members of the development team.
- Submit a single-line electrical diagram of the proposed Facility.

¹ The CEC maintains a Solar Equipment List (SEL) that can be accessed online at <https://www.energy.ca.gov/programs-and-topics/topics/renewable-energy/solar-equipment-lists>.

² LADWP's Electric Service Requirements manual can be accessed online at <https://www.ladwp.com/codes>.

- Submit a preliminary plot plan or Site development diagram showing the layout of the proposed Facility, equipment locations, nearest major intersection or landmark, and proposed point of interconnection.
- Provide a 24 hour by 12 months energy production profile in expected kWh

Failure to provide the information and demonstrate that each minimum requirement has been met will result in disqualification.

3.5 Parcel and Circuit Limitations

The renewable generator(s) that constitutes the Facility shall be within the boundaries of one legal parcel identified by the assessor's parcel number on the Application form. Each individual parcel will be limited to one application.

LADWP will perform integration feasibility studies to identify any potential issues that may limit the number or size of projects per circuit due to reliability concerns or the need for network upgrades. LADWP reserves the right to reject a Project if it requires a network upgrade and/or impacts the reliability of the distribution grid.

3.6 Location

Projects must be located within LADWP's electric service territory and be located in the City of Los Angeles. Maps of the geographic boundaries for LADWP's service territory are included as Attachment 2 (LADWP In-Basin Service Territory Map).

3.7 Site Control

A Proof of Site Control Form must be submitted with the application to indicate that the Applicant has obtained sufficient level of the right to enter and construct a Facility at the proposed Site, and can be found in Attachment 3. The Applicant is not required to be the owner of the Project Site at time of Application, but must meet one of the requirements listed in the Proof of Site Control Form.

Site Control in the form of a lease, a license, or ownership must be obtained prior to VPPA execution.

LADWP reserves the right to request additional information concerning the circumstances surrounding the Applicant's declared Site Control status.

3.8 Commercial Operation

Only Projects with a Commercial Operation date after the execution of the VPPA shall be eligible.

Projects shall be structurally and electrically complete, acquire all applicable permits, pass all required testing, and be authorized and able to deliver energy at full capacity to the point of interconnection.

Commercial Operation shall be no later than twelve (12) months following the execution of the VPPA (Commercial Operation Deadline). Failure to meet this deadline will result in contract termination.

The Commercial Operation Deadline set forth in the VPPA may be extended for up to six (6) months. Participant must submit a request for extension of the Commercial Operation Deadline to LADWP in writing to VNEM@ladwp.com, describing in reasonable detail the cause of the delay, at least 30 days prior to the Commercial Operation Deadline. Any decision to grant such extension shall be at the sole discretion of LADWP.

3.9 Participation in Other LADWP Programs

Other than CAMR projects and Clean Energy Adder contributions, Projects that have received rebates or incentives from any other LADWP ratepayer-funded program are not eligible for the VNEM Program. Net-metered projects, which are serving the electrical load, are not eligible for the VNEM Program.

3.10 Solar Master Conditional Use Permit

For Projects not covered by the solar master conditional use permit (CPC-2014-4595-CU), Applications will be accepted but will not advance to the interconnection study phase until proof of a Conditional Use Permit (CUP) for the Project is submitted. Projects that are covered by CPC-2014-4595-CU will continue to be required to demonstrate that they have obtained all necessary permits as a condition of the VPPA.

In the event of oversubscription, Projects not covered by CPC-2014-4595-CU will surrender their queue position if proof of a CUP is not submitted.

4.0 Application Submission

All program materials, including the Application forms, are available on the VNEM Program website (www.ladwp.com/solar). Applications will be accepted as set forth in Section 5.1. A diagram of the VNEM participation process is included in these Guidelines as Attachment 1.

The terms of the VPPA, IA, and Guidelines are non-negotiable. Applicants shall review the terms of all program documents carefully before submitting Applications. LADWP reserves the right to reject all Applications. All submitted materials will become property of LADWP and may be incorporated into a contract between LADWP and the selected Applicant.

4.1 Required Information and Documents

Original LADWP forms must be used; otherwise, the Application will be considered non-responsive and disqualified. Please see Section 4.2 for submission procedure. All forms and further instructions are listed in Attachment 3: Application and Submittal Documents, describing necessary fees, project information, and compliance with the Contractor Responsibility Ordinance, City Ethics Commission requirements and the Iran Contracting act of 2010. Applicants shall comply with other City ordinances and policies prior to the execution of the VPPA. Please refer to Section 5.5 for additional information.

4.2 Application Submission Procedure

Applicants shall submit one (1) signed Application via electronic mail. The parties agree that facsimile signatures or signatures scanned into .pdf (or signatures in another electronic format designated by LADWP) and sent by e-mail shall be deemed original signatures. Applications for the VNEM Pilot shall be addressed to:

• **E-MAIL ADDRESS:** vnem@ladwp.com

The VNEM Program administrative staff will be responsible for receiving and logging all incoming electronic applications received via e-mail. The Applications must be received at the e-mail address listed above, where applications will be logged in the order received by date and time. Applications will be processed as set forth in Section 5.0. An application is deemed complete once all the requested documents including the Program Participation Fees are received.

The Applicant shall be responsible for submitting all required fees and costs due at the time of application within 10 days of Application submittal. Failure to timely submit fees will terminate the Application and related queue position. A new Application submission will be required to participate in the program. The VNEM Program Participation fees should be submitted to:

**LOS ANGELES DEPARTMENT OF WATER AND
POWER
ATTN: VNEM
111 NORTH HOPE STREET, ROOM L43
LOS ANGELES, CA 90012**

The Program Participation Fees shall be enclosed in a sealed package or envelope, plainly marked in the upper left-hand corner with the name and the address of the Applicant. The package or envelope shall bear the words "Program Participation fees for", followed by the Application's project name and address, and also clearly state the fees are for "**VNEM**". Checks submitted via electronic mail or facsimile will not be accepted.

The Vendor Liaison Center (VLC) is responsible for receiving and logging all incoming Program Participation Fees. Program Participation Fees must be received by the VLC at the exact address listed above where it will be time and date stamped. The VLC is open on weekdays from 8 am to 4pm. The VLC can be accessed through the lobby level entrance after checking in with security.

No allowance will be made for delays in U.S. Mail, consumer mailing services, or the LADWP internal mail service. Applications received after the program is oversubscribed will be placed on a waitlist in the order received.

Applicants for the CAMR program can go to <https://ladwpcamr.com/> for additional information.

4.3 Program Participation Fees and Costs

4.3.1 Fee Schedule

The following table provides a summary of fees and costs an Applicant will incur throughout the process:

VNEM Fee Schedule			
Item	Amount	Refund Policy	Additional Notes
Application Fee (30 kW - 500 kW)	\$500 per project	Non-refundable	Due at time of application. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
Application Fee (> 500 kW – 3 MW)	\$1,000 per project	Non-refundable	Due at time of application. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
Integration Study Fee (30 kW - 500 kW)	\$750 per project	Non-refundable	Due at time of application. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
Integration Study Fee (> 500 kW – 3 MW)	\$1,500 per project	Non-refundable	Due at time of application. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
Interconnection Study Fee	\$1,500 per project	Non-refundable	Due at time of application. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
VNEM Development Security Deposit	\$50 per kW	Refundable upon reaching COD	Due twenty (20) Business Days following notification of interconnection cost estimates.
10% of Estimated Interconnection Costs	TBD	Non-refundable	Due twenty (20) Business Days following notification of interconnection cost estimates.
Balance of Estimated Interconnection Costs	TBD	Non-refundable	Due six (6) months after VPPA execution, or {whatever it says in the PPA}.
(Optional) Stand-Alone Integration Study ≤ 500 kW	\$1,000 per project	Non-refundable	If Applicant wishes to proceed, a \$250 credit will be applied toward the Application if submitted within 90 days. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.
(Optional) Stand-Alone Integration Study 501 kW – 3 MW	\$2,000 per project	Non-refundable	If Applicant wishes to proceed, a \$500 credit will be applied toward the Application if submitted within 90 days. This fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.

4.3.2 Application Fee

A check for the application fee must be submitted to LADWP with the VNEM Application. For systems up to and including 500 kW, the application fee is \$500. For systems above 500 kW and up to and including 3 MW, the application fee is \$1,000. The application fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.

The application fee is non-refundable, however, Applicants that did not receive a reservation due to oversubscription or failing preliminary technical screening will be refunded the fee.

4.3.3 Integration Study Fee

A check for the integration study fee must be included with the Application. For systems up to and including 500 kW, the integration study fee is \$750. For systems above 500 kW and up to and including 3 MW, the integration study fee is \$1,500. If the Applicant makes significant changes to the design that would adversely affect the Department's distribution system, a new integration study will be required.

The integration study fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.

4.3.4 Cost of Interconnection

A check for the interconnection study fee must be included with the Application. The interconnection study fee is \$1,500 for all systems. At the completion of an interconnection study, an LADWP design engineer will provide an Applicant the interconnection cost estimate. An initial payment of ten (10) percent of the interconnection cost estimate will be due to LADWP within twenty (20) Business Days after the estimate is issued. The remainder of the interconnection costs will be due within six (6) months after the execution of the VPPA.

The interconnection study fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.

4.3.5 Stand-Alone Integration Study Fee - Optional

Applicants who decide to pursue the Stand-Alone Integration Study service will be assessed \$1,000 for Projects up to and including 500 kW, \$2,000 for Projects above 500 kW and up to and including 3 MW.

This fee is non-refundable. However, if the Applicant chooses to move forward with the project, then the Applicant will be credited 50% of the application fee (\$250 or \$500). In order to qualify for the credit, the capacity of the proposed project must remain the same during the official application process and Applicant must submit a check for the study fee within 90 days of the application.

The optional Stand-Alone Integration Study fee may be included in the overall project costs eligible for CAMR reimbursement subject to the CAMR program guidelines.

4.3.6 Development Security Deposit (DSD)

Within twenty (20) Business Days of notification of interconnection cost estimate, the VNEM Applicant must submit to LADWP, a DSD in the amount of \$50 per kW of Project Capacity as the DSD in the form of a separate certified or cashier's check.

Liquidated damages will be drawn upon the DSD if either the VPPA Milestone or the Commercial Operation Deadline is not met. See the VPPA for details regarding milestone deadline and Commercial Operation Deadline.

Liquidated Damages will be collected from the DSD for failure to achieve Milestones or Commercial Operation in a timely manner. Because it is impractical or extremely difficult to determine actual damages to which LADWP would be entitled in the event Projects fail to progress toward and achieve Commercial Operation in a timely manner, the liquidated damages provided in the VPPA are a fair and reasonable estimate of actual damages to LADWP in the event the Project milestones are not met.

Upon reaching Commercial Operation, if the Commercial Operation Deadline is met, a Participant must submit a request in writing to LADWP for the refund of the DSD.

4.4 Signature

By signing the Application, the Applicant declares the following:

- 1) The information provided in the Application is true and correct.
- 2) The Applicant has read, understands, and agrees to be bound by the VNEM Program Guidelines.
- 3) The Applicant has read and understands the VPPA and IA.

4.5 Communication

The Applicant shall designate a project manager on the Application who will serve as the sole source of contact between the Applicant and LADWP.

All formal communications and requests shall be submitted in writing to VNEM@ladwp.com. Program status updates will be posted on the VNEM website.

For CAMR Applicants please reach out to the CAMR program:

CAMRinfo@aea.us.org

(833) 827-CAMR (2267)

<https://ladwpcamr.com/>

5.0 Post Submission Process

5.1 Application Processing

Applications will be prioritized on a first-come, first-served basis by the date and time that they are submitted. Applicants will be notified within fourteen Business Days if their Applications are complete or incomplete. Incomplete Applications will receive a queue position based on the date and time the Application is made complete. In the event of an oversubscription, any Applications that are not initially selected will be placed on a VNEM Pilot wait list in the queue order in which they were received by ranking.

5.2 Queue Management

LADWP will notify Applicants of a confirmed reservation by email. If an Application or Applicant was on the waitlist and is then selected to move forward (due to another Applicant dropping out), the Applicant

will be notified by email.

Applications that did not receive a reservation will be returned to the Applicant with the fees.

If an Application is deficient, the Applicant will be notified by email and the Applicant must reapply to be considered. A resubmitted Application will be treated the same as a newly submitted Application (i.e., no priority will be given to resubmitted Applications).

5.3 Integration and Interconnection Study Process

LADWP will perform an integration study (to verify that the distribution feeder has available capacity) and perform an interconnection study to estimate the cost of extending the Department's system to the site. Based on the interconnection study, LADWP will provide an interconnection cost estimate for Applications that pass the integration study screening process. LADWP may deny a Project if the transmission or distribution grid that would serve as the point of interconnection is inadequate. Applicants must submit a copy of their CUP in order to initiate the interconnection study. Applicants will be contacted by an LADWP Service Planning engineer for the interconnection study. Applicants shall submit any additional Project information, as deemed necessary by the Service Planning engineer, in a timely manner.

Applicants that fail to respond to the Service Planning engineer's requests for Project information will be considered deficient and subject to cancellation.

Applicants may elect to withdraw their Application after the interconnection study if their interconnection cost or requirements are not feasible for the Project.

If an Applicant decides to continue with the Project, all contractual documentation indicated in Section 5.5 of the Guidelines will be due twenty (20) Business Days after the interconnection study is completed.

5.4 VPPA and Interconnection Agreement

5.4.1 VPPA Submittal Requirements

Prior to the execution of the VPPA, Applicants shall submit the following:

1. Two original, signed copies of the VNEM Power Purchase Agreement, including allocation
2. Two original, signed copies of the VNEM Customer Generation Interconnection Agreement
3. DSD in the amount of \$50/kW of Project Capacity
4. Proof of Site Control through documentation of ownership, lease, or license
5. Copy of equipment leasing agreement (if applicable)
6. Initial payment of 10 percent of the interconnection cost estimate
7. Requisite resolutions, incumbency certificates, and any other documents evidencing authority to execute and deliver the agreements by the named representatives of the Applicant
8. Copy of City of Los Angeles Business Tax Registration Certificate or Vendor Registration Number, as appropriate
9. Supplier/Contractor Data Form
10. All remaining City of Los Angeles Business Compliance Forms:
 - Business Tax Application Form (if the Business Tax Registration Certificate is

- not available at the time of application)
 - Affirmative Action Policy - Affirmative Action Plan (Los Angeles Administrative Code §§ 10.8.4 *et. seq.*)
 - Child Support Obligations - Certification of Compliance with Child Support Obligations (Los Angeles Administrative Code §§ 10.10 *et. seq.*)
 - Contractor Responsibility Ordinance - Pledge of Compliance (Los Angeles Administrative Code §§ 10.40 *et. seq.*)
 - Equal Benefits Ordinance - Equal Benefits Ordinance Compliance Affidavit (Los Angeles Administrative Code §§ 10.8.2.1)
 - Nondiscrimination, Equal Employment Practices - Equal Employment Practices Certification (Los Angeles Administrative Code §§ 10.8.2 and §§ 10.8.3 *et. seq.*)
 - Sweat-Free Procurement - Contractor Code of Conduct (Los Angeles Administrative Code §§ 10.8.2.1 *et. seq.*)
11. Taxpayer Identification Number (if not available at time of application)
 12. Certificate of Registration with the California Secretary of State (if the business was organized outside of the state of CA)

5.4.2 Additional Submittal Requirements

No payment will be made under this Agreement without a valid customer account, Taxpayer Identification Number and Vendor Registration Number.

The VPPA must be signed and submitted twenty (20) Business Days after notification of interconnection cost estimates, along with all accompanying documents outlined in Section 5.5.1. The VPPA and IA can be found at the program website at (www.ladwp.com/solar) and click on VNEM.

Each metered Customer at the Site must be identified by meter number in the VPPA (specifically, Appendix F – Allocation). Customers who will not receive payment for a portion of the Facility energy shall be listed with a zero in the ‘Percentage’ column.

After LADWP executes the VPPA, the Applicant will be referred to as a Participant in the VNEM Program and a seller of energy.

5.5 Interconnection Requirements and Standards

Participants shall interconnect to the LADWP distribution grid at either 4.8 kV or 34.5 kV voltage level. The final delivery point and the voltage level of interconnection will be determined during the integration study.

Metering and interconnection standards can be found in LADWP’s [Electric Service Requirements Manual](#)³.

Prior to interconnection, Participants must establish a customer account with LADWP to support the Project for billing and payment purposes. This account will be assigned the appropriate commercial rate

³ LADWP’s Electric Service Requirements manual can be accessed online at <https://www.ladwp.com/codes>.

schedule from the [Electric Rate Ordinance](#)⁴.

5.6 Metering and Controls

LADWP shall install revenue grade, dual channel, digital metering equipment and recorders with cellular communication capabilities at the delivery point of the Facility to measure electric energy production and other electric parameters deemed appropriate by LADWP. Participants will not be allowed to opt out of the use of such metering requirements. If required, as determined by LADWP, Participant must provide and maintain a dedicated T1 communications line, at Participant's sole expense, exclusively for the purpose of delivering data from metering equipment and receiving remote control signals.

The appropriate commercial rate schedule from the [Electric Rate Ordinance](#)⁵ shall apply to any energy consumed from LADWP's grid.

All energy produced by the Project may only be sold to LADWP. A project consuming more than ten (10) percent of its energy production over a twelve (12) month period shall be disqualified from the VNEM program and placed on the applicable Customer Generation Rate. For more details, refer to LADWP's Electric Rates Ordinance.

5.7 Changes and Transfers/Assignment

Changes in Project location will not be allowed. Change in Capacity may be approved at the sole discretion of LADWP and shall require an additional Integration Study Fee.

Changes to the expected energy output, as indicated in the energy production profile, will not be allowed once the VPPA has been executed by LADWP.

Changes to technology or equipment provider (e.g. manufacturer of solar panels) are permitted with written approval from LADWP.

Applicants that wish to transfer a Project prior to VPPA execution may do so with prior written consent from LADWP. The Applicant will be responsible for resubmitting all applicable VNEM Application forms with the transferee's information.

Participants shall not assign any of its rights or delegate any of its obligations without prior notice and written consent from LADWP, as set forth in Section 12.6 of the VPPA.

5.8 RPS Compliance

Participants are responsible for registering and maintaining their Project as RPS compliant with the CEC. Participants shall pre-certify the Project with the CEC prior to Commercial Operation. Participants shall certify the Project with the CEC within 90 days of Commercial Operation. See link below regarding the guidelines for CEC pre-certification and certification: <http://www.energy.ca.gov/renewables/documents>

Prior to Commercial Operation Participants must provide CEC pre-certification documentation to LADWP.

⁴ LADWP's Electric Rate Ordinance can be accessed online at <https://www.ladwp.com/account/customer-service/electric-rates>.

⁵ LADWP's Electric Rate Ordinance can be accessed online at <https://www.ladwp.com/account/customer-service/electric-rates>.

After Commercial Operation is achieved, LADWP will register the Project in its Western Renewable Energy Generation Information System (WREGIS) account. LADWP will then provide the Participant with the WREGIS generating unit identification and WREGIS activation date to obtain final CEC certification. Once the Project is certified with the CEC, Participant shall submit the certification documentation to LADWP. All renewable energy credits and environmental attributes of the Project shall be transferred automatically to LADWP.

When completing the CEC certification form, list LADWP as an additional authorized person under Section V: Application Contact Information of the CEC-RPS-1 form. An example is provided below:

Name: LADWP Virtual Net Energy Metering Program
Phone: (213) 367-2100
Email: VNEM@ladwp.com

This allows LADWP to make changes and inquiries to the CEC certification form on behalf of the Participant.

5.9 Permitting

Participants shall obtain all necessary permits, and comply with all applicable regulatory requirements including but not limited to the California Environmental Quality Act (CEQA), to construct and operate the renewable energy facility at their own expense.

Participants shall be responsible for compliance with all applicable City, County, State, and Federal regulatory requirements.

Participants will be required to obtain all necessary City building, safety, and planning permits prior to construction. For more information, please visit www.ladbs.org and www.cityplanning.lacity.org.

Failure to obtain proper permits from Los Angeles Department of Building and Safety (LADBS), Los Angeles Department of City Planning, or other applicable agency could cause delays resulting in liquidated damages and termination of the VPPA.

5.10 Milestones

The following milestones must be achieved:

1. Interconnection Cost Milestone

Applicant must pay the full interconnection cost for the Project within 60 days of the date of the final A2B Letter (invoice). Failure to achieve this milestone will result in liquidated damages of \$50/kW.

2. VPPA Milestone

Applicant must submit either (i) project Permits, or (ii) proof of material procurement for the rated Capacity of the Facility, six (6) months after VPPA execution date. Failure to achieve this milestone will result in liquidated damages of \$50/kW and termination of contract.

3. Commercial Operation Deadline

Project must be in Commercial Operation twelve (12) months after VPPA execution date, however at the sole discretion of LADWP, the Commercial Operation Deadline may be extended for up to twelve (12) months if there is a reasonable cause for the delay. Failure to achieve this milestone will result in liquidated damages of \$50/kW and termination of contract. Projects that are successfully commissioned and participate in VNEM through CAMR, and meet all VNEM and CAMR guidelines, are eligible to include the initial fees, including the Application Fee, Integration Study Fee, Interconnection Study Fee, and Stand-Alone Study Fee are eligible for CAMR reimbursement subject to the CAMR program guidelines.

Participants seeking extension of the Commercial Operation Deadline must submit a request for the extension to LADWP in writing to VNEM@ladwp.com, describing in reasonable detail the cause of the delay, at least 30 days prior to the Commercial Operation Deadline. Any decision to grant such extension shall be at the discretion of LADWP.

5.11 Project Construction and Commercial Operation

During the construction phase, the Applicant will be required to:

- Obtain Project permits
- Submit final interconnection payment within 6 months after VPPA execution, or within 20 business days after the A2B Letter is sent, whichever is later.
- File for CEC pre-certification
- Submit final drawings

It is the responsibility of the Participant to coordinate installation and allow access for LADWP staff to install required interconnection and metering equipment at least twenty (20) Business Days prior to the Commercial Operation date. Projects with a Capacity greater than 1 MW require at least sixty (60) business days.

The Participant shall provide accommodations for the LADWP, LADBS, and other City of Los Angeles agencies to perform inspections as necessary.

In all cases, PV systems shall be installed in accordance with the manufacturer's specifications and conform to all applicable electrical and other codes and standards. The installer shall be a properly licensed California contractor. An active "C-46", "C-10", or "A" license is required for all solar projects.

5.12 Inspection and Maintenance Report

In order to ensure the safety and reliability of the Facility, Participants shall provide an inspection and maintenance report to LADWP at least once every other year. The inspection and maintenance report shall be prepared at the Participant's expense by an independent California licensed contractor who is not the owner or operator of the Facility. A California licensed electrician shall perform the inspection of the electrical portion of Facility.

6.0 Payment Calculation

Monthly energy payments will be made based on the amount of energy delivered to LADWP as measured

through LADWP's metering equipment. Monthly payments shall be calculated as the sum of the energy delivered by the Project during the month multiplied by the Purchase Price of Energy. The payment will be divided amongst the Participant and tenants per the percentages identified in the VPPA. All applicable fees derived from changing allocations will be subtracted from the Participant's share.

Payments will be made payable to each customer with an active service agreement at the address on the last day of the calendar month in question. If there is no active service agreement on that date, the share for that address shall be reallocated proportionally to the other addresses according to the percentages in the allocation.

Undeliverable checks and checks not cashed after two years shall be voided, and such funds will be reallocated for the next available calendar month proportionally among the then current residential Customers.

There will be no charge for up to one adjustment per twelve-month period to the allocation appendix to the VPPA, listing participating customers. However, subsequent changes per twelve-month period will incur a cost of \$7.50 per modified customer.

Payments will be made within ninety (90) days from end of each month as stipulated in Section 9.2 of the VPPA.

LADWP will not purchase energy in excess of one-hundred fifteen (115) percent of each energy hour in the production profile submitted by the Applicant. LADWP retains the right to withhold full or partial payment from any customer for any amount due to LADWP from the customer under this VNEM pilot program or otherwise.

6.1 Purchase Price of Energy

The purchase price of energy offered for solely VNEM project is dependent on Project Capacity as follows:

Project Capacity	Purchase Price of Energy
30 kW – 500 kW	\$0.145/kWh
> 500 kW – 3 MW	\$0.140/kWh

The VNEM purchase price shall not exceed \$0.145/kWh, regardless of project size.

The purchase price of energy offered for **combined** VNEM/CAMR project is dependent on Project Capacity as follows:

Project Capacity	Purchase Price of Energy
10 kW – 500 kW	\$0.145/kWh
> 500 kW – 3 MW	\$0.140/kWh

The VNEM purchase price shall not exceed \$0.145/kWh, regardless of project size.

6.2 Clean Energy Adder Contribution Incentive

While there are funds available, newly installed VNEM projects within Disadvantaged Communities that do not receive CAMR incentives may receive a \$1/watt incentive through the CEA contributions. The table below indicates the maximum CEA incentive amounts available to individual VNEM projects.

Project Capacity (CEC-AC)	Max Incentive Payout (\$)
10 kW – 100 kW	50,000
>100 kW – 1000 kW	65,000
>1000 kW – 3000 kW	80,000

CEA incentives for VNEM projects may not exceed the cost to construct the facility receiving the incentive.

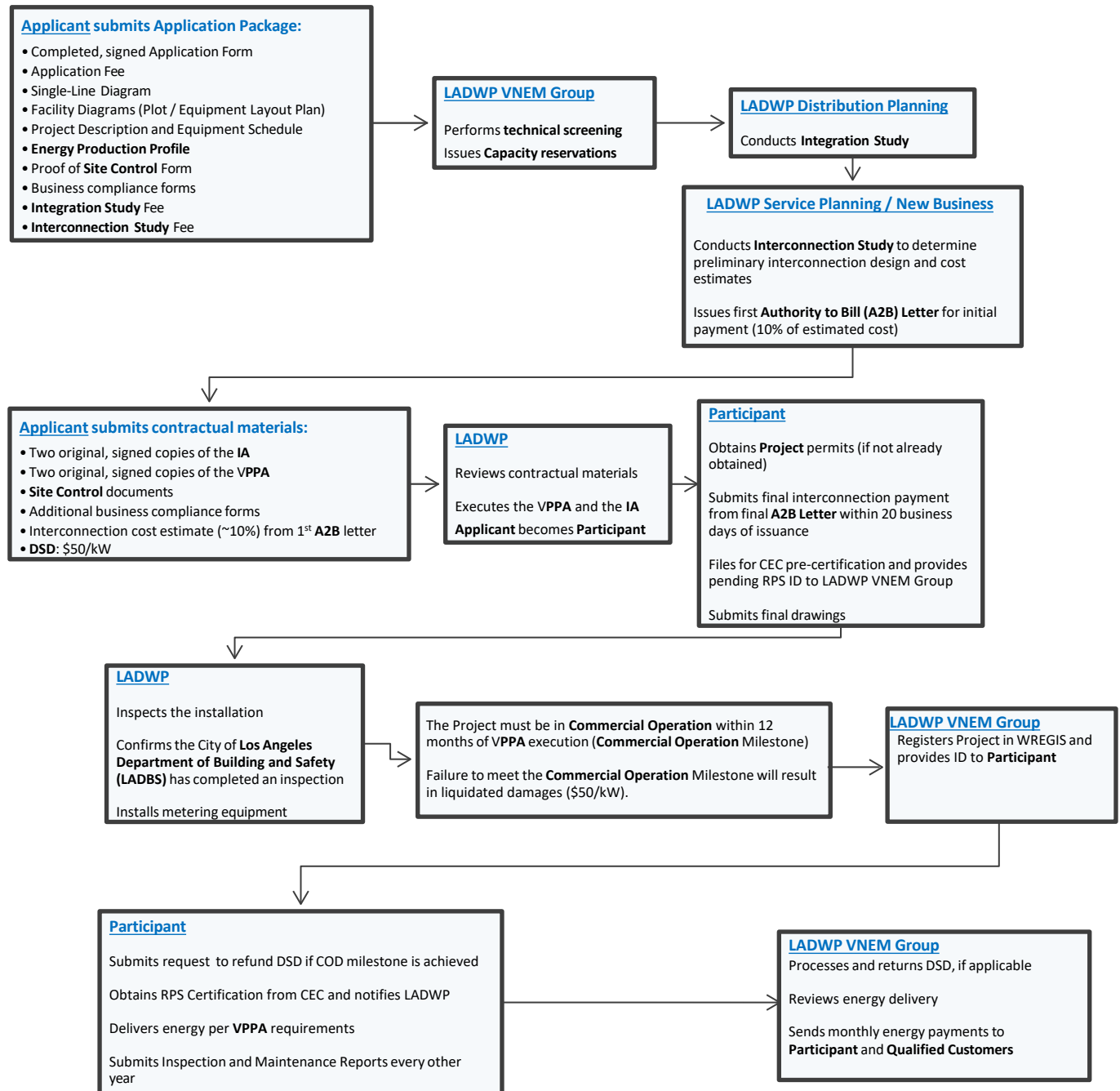
LADWP will pay the one-time incentive to the Participant after the achievement of Commercial Operation. The incentive payment will be based on the size of the system (CEC-AC) at the time of Commercial Operation as determined by LADWP. The incentive payment will be made within 60 days of the first monthly energy payment.

If the Facility receiving the incentive has discontinued operation or is removed within 10 years of Commercial Operation, the Seller must return the full amount of the incentive payment.

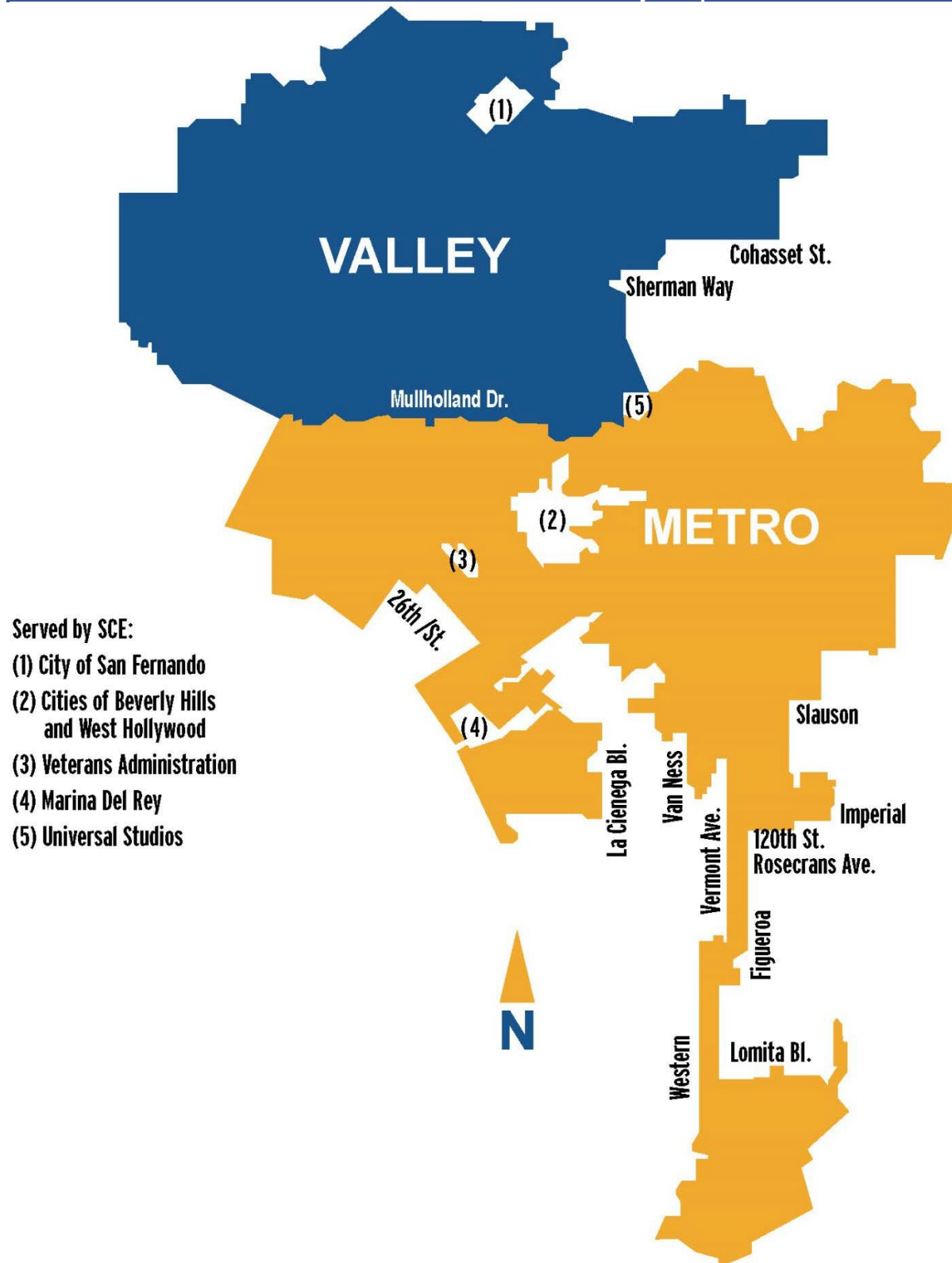
7.0 Indemnification

Except for the gross negligence or willful misconduct of LADWP, Participant undertakes and agrees to defend, indemnify and hold harmless LADWP, the City of Los Angeles, including but not limited to any of its boards, commissioners, officers, agents, employees, assigns and successors in interest (hereinafter, collectively, “Indemnities”) from and against any and all suits and causes of action (including proceedings before FERC), claims, losses, demands, penalties, judgments, costs, expenses, damages (including indirect, consequential, or incidental), disbursements of any kind or nature whatsoever, including but not limited to attorney’s fees (including allocated costs of internal counsel), other monetary remedies, and costs of litigation, damages, obligation or liability of any kind or nature whatsoever, in any manner arising by reason of, incident to, or connected in any manner with the performance, non-performance or breach of the VPPA, these guidelines or any ancillary document, or any other act, error or omission or willful misconduct by or of the Participant or Participant’s officers, employees, agents, contractors, sub-contractors of any tier, including but not limited to any such performance, non-performance, breach, act, error or omission or willful misconduct that results in intellectual property infringement or leads to death or injury to any person, including but not limited to Participants, Participant’s officers, employees, agents, contractors or sub-contractors of any tier, or damage or destruction to property of any kind or nature whatsoever, of either Party hereto, or of third Parties, or loss of use (hereinafter, collectively, “Indemnified Liabilities”). The provisions of this paragraph shall be in addition to, and not exclusive of, any other rights or remedies which Indemnities have at law, in equity, under the VPPA or otherwise. To the extent that the undertakings to defend, indemnify, pay and hold harmless set forth in this subsection may be unenforceable in whole or in part because they are volatile of any law or public policy, Participant shall contribute the maximum portion that it is permitted to pay and satisfy under applicable law to the payment and satisfaction of all Indemnified Liabilities incurred by Indemnities or any of them. The provisions of this paragraph shall survive the expiration or termination of the Guidelines, VPPA, and IA.

Attachment 1: VNEM Program Process Diagram



Attachment 2: LADWP In-Basin Service Territory Map



LADWP Service Territory Includes the Following Communities:

Atwater Village	Highland Park	Rancho Park
Arleta	Hollywood	San Pedro
Baldwin Hills	Hyde Park	Sawtelle
Bel Air Estates	Koreatown	Sherman Oaks
Beverly Glen	LA City Strip (parts of)	Silverlake
Boyle Heights	Lake View Terrace	South Pasadena (parts of)
Brentwood	Lincoln Heights	Studio City
Canoga Park	Little Tokyo	Sun Valley
Castellammare	Los Feliz	Sunland
Century City	Mar Vista	Sylmar
Chatsworth	Mid City	Tarzana
Cheviot Hills	Mission Hills	Toluca Lake (parts of)
Chinatown	Montecito Heights	Tujunga
Country Club Park	Monterey Hills	Valley Village
Crenshaw	Mt. Olympus	Van Nuys
Culver City (parts of)	Mt. Washington	Venice
Eagle Rock	North Hills	Warner Center
East San Pedro (Terminal Island)	North Hollywood	Watts
Echo Park	Northridge	West Hills
El Sereno	Olive View	West Hollywood (parts of)
Encino	Pacific Palisades	West Los Angeles
Glassell Park	Pacoima	Westchester
Granada Hills	Palisades Highlands	Westlake
Griffith Park	Palms	Westwood
Hancock Park	Panorama City	Wilmington
Harbor City	Park La Brea	Winnetka
Harbor Gateway	Playa del Rey	Woodland Hills
	Porter Ranch	

If you are unsure if you can be served by LADWP, you may request a service verification on a specific address from our Customer Contact Center by email at ccenter@ladwp.com or by calling 1-800-DIAL-DWP (1-800-342-5397), or 213-481-5411.

Attachment 3: Application Instructions and Submittal Documents

For all VNEM Applications, the following items must be submitted:

- ☐ VNEM Application Form
- ☐ Application fee payable to LADWP via certified or cashier's check
 - ☐ Project 30 kW – 500 kW: \$500
 - ☐ Project >500 kW – 3 MW: \$1,000
- ☐ Integration Study Fee payable to LADWP via certified or cashier's check
 - ☐ Project 30 kW – 500 kW: \$750
 - ☐ Project >500 kW – 3 MW: \$1,500
- ☐ Interconnection Study Fee payable to LADWP via certified or cashier's check: \$1,500
- ☐ Project Information
 - ☐ Facility Diagrams (Plot/Equipment Layout Plan)
 - ☐ Single Line Diagram
 - ☐ Project Description and Equipment Schedule
 - ☐ Proof of Site Control Form
 - ☐ Energy Production Profile (the first year 24 hour by 12 month generation matrix of the Facility)
- ☐ Business Policy Forms
 - ☐ Bidder Campaign Contribution and Fundraising Restrictions: City of Los Angeles Ethics Commission Form 55 (Los Angeles City Charter §§ 470(c)(12) *et. seq.*)
 - ☐ Contractor Responsibility Ordinance (CRO): Responsibility Questionnaire (Los Angeles Administrative Code 10.40 *et. seq.*)
 - ☐ Iran Contracting Act of 2010: Iran Contracting Act of 2010 Compliance Affidavit (Public Contract Code §§ 2200-2208)
 - ☐ Municipal Lobbying Ordinance: City of Los Angeles Ethics Commission Form 50 (Los Angeles Municipal Code §§ 48.01 *et. seq.*)

For all VNEM/CAMR Applications, the following items must be submitted:

- ☐ VNEM Application Form
- ☐ Application fee payable to LADWP via certified or cashier's check
 - ☐ Project 10 kW – 500 kW: \$500
 - ☐ Project >500 kW – 3 MW: \$1,000
- ☐ Integration Study Fee payable to LADWP via certified or cashier's check
 - ☐ Project 30 kW – 500 kW: \$750
 - ☐ Project >500 kW – 3 MW: \$1,500
- ☐ Interconnection Study Fee payable to LADWP via certified or cashier's check: \$1,500
- ☐ Project Information
 - ☐ Facility Diagrams (Plot/Equipment Layout Plan)
 - ☐ Single Line Diagram
 - ☐ Project Description and Equipment Schedule
 - ☐ Proof of Site Control Form
 - ☐ Energy Production Profile (the first year 24 hour by 12 month generation

matrix of the Facility)

☐ Business Policy Forms

- ☐ Bidder Campaign Contribution and Fundraising Restrictions: City of Los Angeles Ethics Commission Form 55 (Los Angeles City Charter §§ 470(c)(12) *et. seq.*)
- ☐ Contractor Responsibility Ordinance (CRO): Responsibility Questionnaire (Los Angeles Administrative Code 10.40 *et. seq.*)
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