Distributed Energy Resources (DER) Interconnection Handbook Webinar

Thursday, December 11, 2025 | 10 – 11:30 AM PT

Seattle City Light

WE POWER SEATTLE

Today's Objectives

At the end of the webinar, you will be able to:

- Describe the purpose of the DER Interconnection Handbook and key changes
- Identify the phases of the DER interconnection process and describe requirements for applicants in each phase
- Support DER customers with compliance with SCL requirements, including DER inverter settings and attestations
- Locate new DER resources, including the new DER Interconnection Handbook and supporting materials

Agenda

DER Interconnection Overview

Five Phases of the Interconnection Process (L1-L3)

L4 Interconnection

Resources & Next Steps

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Live Poll

Respond to the poll on the screen.

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Please rate your level of comfort with the **City Light DER Interconnection Process** based on what you know today.

DER Interconnection Overview

DER Background
Summary of Key Changes

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Distributed Energy Resources (DER) Background

Many utilities face interconnection challenges, including:

- Unclear process steps and turnaround times,
- Lack of standardization across the process, and
- Need to improve screens to industry standards

To help address these goals, Seattle City Light is launching the Distributed Energy Resources (DER) Interconnection Handbook on **January 02, 2026**.

Summary of Key Changes

Highlights

1. Introduction of the **Distributed Energy Resources (DER) Interconnection Handbook**
2. Updated **interconnection review levels** and **technical screens**
3. Standardized **process** and **accompanying resources**
4. Required **attestation form** prior to commissioning & testing
5. Updated **Interconnection Agreements** and **countersignature process**

What's Staying?

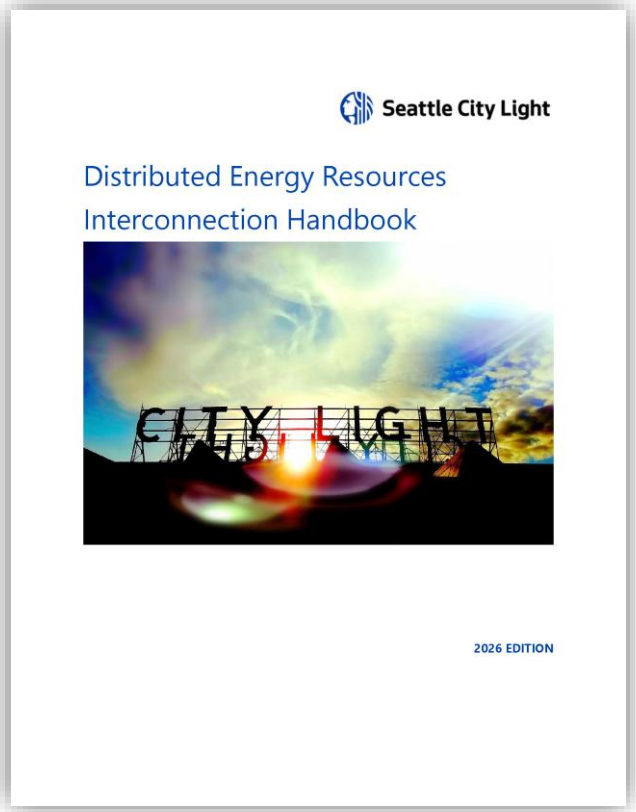
- ✓ Applicants will continue to use the application portal for DER applications
- ✓ Applicants will work with an ESR or ESE throughout the application cycle
- ✓ Applicants will abide by all relevant Requirements and Standards (RESC, SES)

New DER Interconnection Handbook

To enhance the Applicant experience and provide detailed guidance on DER, City Light has created the Distributed Energy Resources (DER) Interconnection Handbook.

The Handbook contains:

- All content previously housed in section 5 of the *Requirements for Electric Service Connection (RESC)*
- Applicable standards and codes
- Application process details
- Interconnection process details
- Operations and maintenance requirements
- Dispute resolution mechanisms
- DER equipment requirements



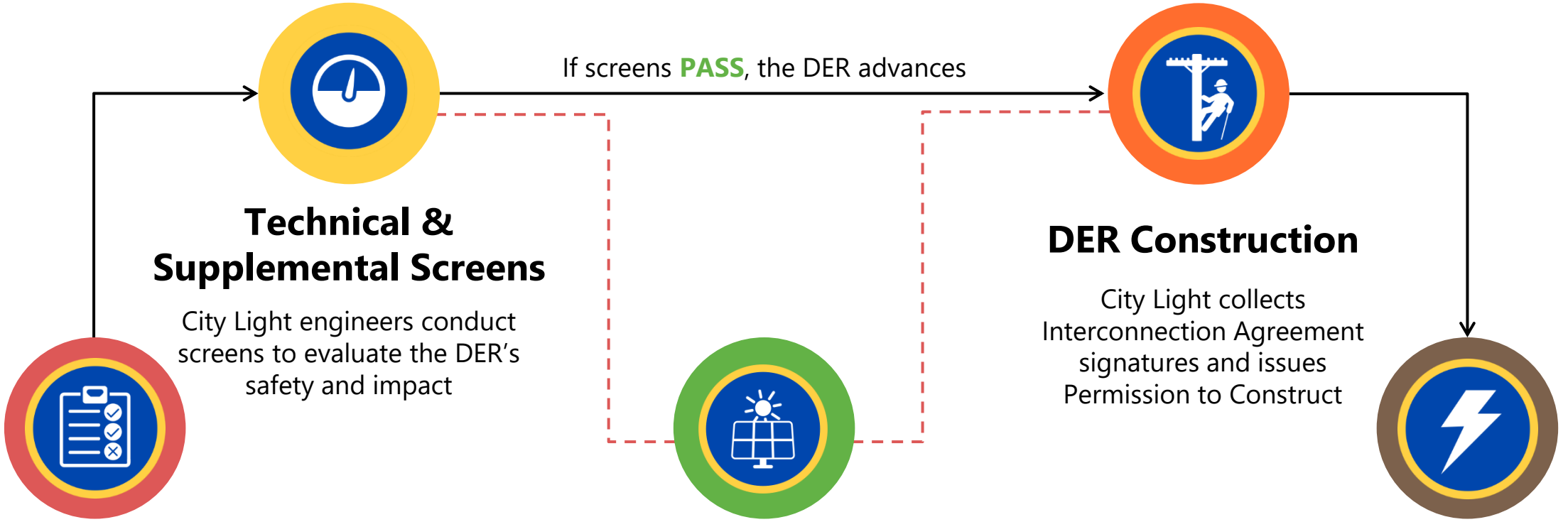
Updated Interconnection Review Levels

- **Level 1:** Standalone photovoltaic (PV) with a Nameplate Capacity less than 12 kW AC seeking to interconnect to the Looped Radial System.
- **Level 2:** Proposed DER shall meet any of these three requirements:
  - Standalone PV with a Nameplate Capacity between 12 kW AC and 100 kW AC seeking to interconnect to the Looped Radial System;
  - Inverter-Based Resource (IBR) other than Standalone PV with a Nameplate Capacity of 100 kW AC or less.
- **Level 3:** IBR with a Nameplate Capacity above 100 kW AC but equal to or below 500 kW AC.
- **Level 4:** Machine-Based Resources with any Nameplate Capacity, IBRs with a Nameplate Capacity above 500 kW AC, and any other IBRs that do not pass Supplemental Screens.

NETWORK

Network DER requests are routed to Network Engineers regardless of size. Proposed DER cannot export power to the Network System at any time.

DER Interconnection Process



If screens **PASS**, the DER advances

Intake & Application Review

City Light reviews DER application for completeness and conducts initial screens

Technical & Supplemental Screens

City Light engineers conduct screens to evaluate the DER's safety and impact

Engineering Studies

If screens **FAIL**, City Light engineers conduct additional studies, which could result in upgrade costs for the Applicant

DER Construction

City Light collects Interconnection Agreement signatures and issues Permission to Construct

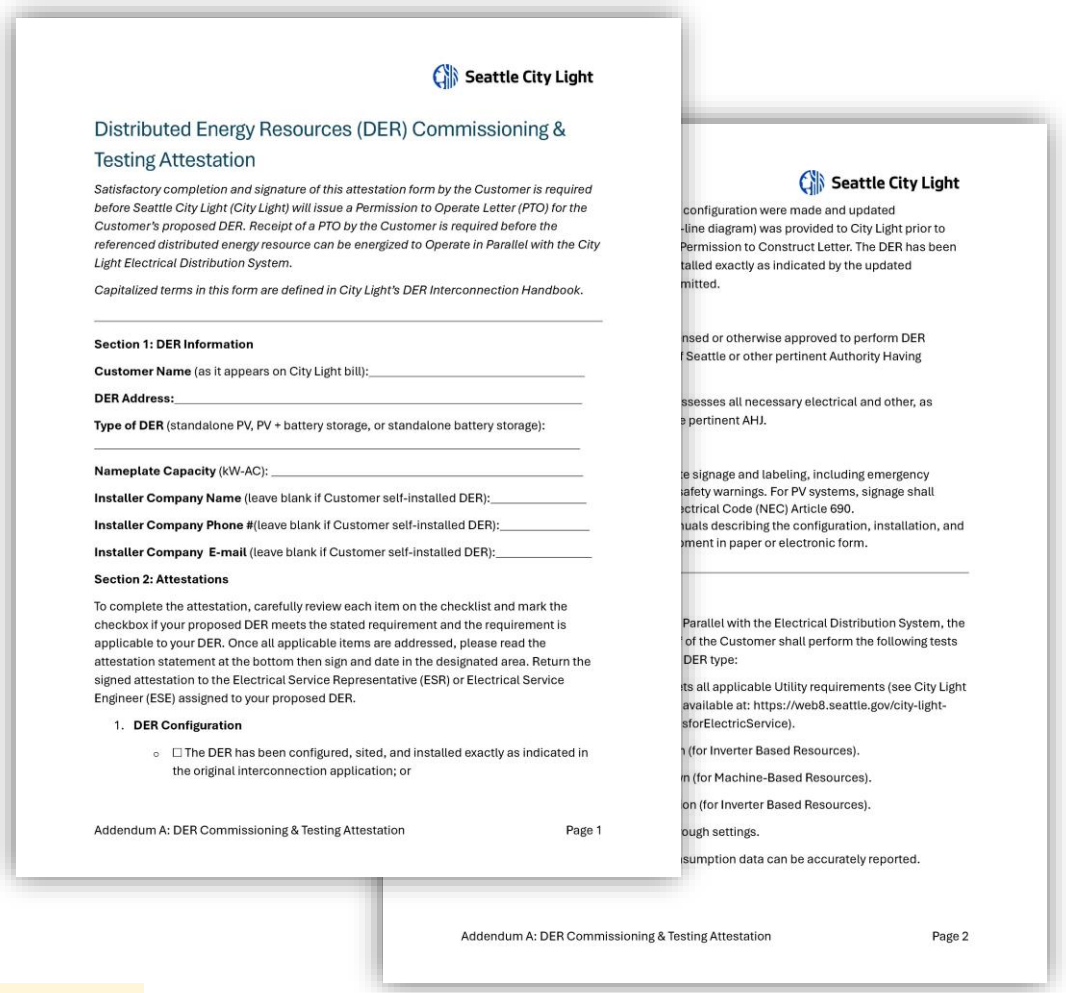
DER Project Closeout

City Light inspects DER, reviews attestations, provides Permission to Operate, and enrolls Applicant in net meter billing

New Attestation Prior to Energizing

By signing the new Commissioning & Attestation Form, the Applicant attests that it has obtained all pertinent AHJ permits and authorizations for the proposed DER.

The attestations affirms that the DER was constructed according to the submitted application materials, and that the new DER is safe, compliant, and ready to energize once City Light issues a Permission to Operate (PTO).



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Distributed Energy Resources (DER) Commissioning & Testing Attestation

Satisfactory completion and signature of this attestation form by the Customer is required before Seattle City Light (City Light) will issue a Permission to Operate Letter (PTO) for the Customer's proposed DER. Receipt of a PTO by the Customer is required before the referenced distributed energy resource can be energized to Operate in Parallel with the City Light Electrical Distribution System.

Capitalized terms in this form are defined in City Light's DER Interconnection Handbook.

Section 1: DER Information

Customer Name (as it appears on City Light bill):_____

DER Address:_____

Type of DER (standalone PV, PV + battery storage, or standalone battery storage):

_____

Nameplate Capacity (kW-AC): _____

Installer Company Name (leave blank if Customer self-installed DER):_____

Installer Company Phone #(leave blank if Customer self-installed DER):_____

Installer Company E-mail (leave blank if Customer self-installed DER):_____

Section 2: Attestations

To complete the attestation, carefully review each item on the checklist and mark the checkbox if your proposed DER meets the stated requirement and the requirement is applicable to your DER. Once all applicable items are addressed, please read the attestation statement at the bottom then sign and date in the designated area. Return the signed attestation to the Electrical Service Representative (ESR) or Electrical Service Engineer (ESE) assigned to your proposed DER.

1. **DER Configuration**
   - ☐ The DER has been configured, sited, and installed exactly as indicated in the original interconnection application; or

Addendum A: DER Commissioning & Testing Attestation Page 1

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configuration were made and updated
-line diagram) was provided to City Light prior to
Permission to Construct Letter. The DER has been
talled exactly as indicated by the updated
mitted.

nsed or otherwise approved to perform DER
Seattle or other pertinent Authority Having

ssesses all necessary electrical and other, as
pertinent AHJ.

signage and labeling, including emergency
afety warnings. For PV systems, signage shall
ctrical Code (NEC) Article 690.
uals describing the configuration, installation, and
ment in paper or electronic form.

Parallel with the Electrical Distribution System, the
of the Customer shall perform the following tests
DER type:

ts all applicable Utility requirements (see City Light
available at: https://web8.seattle.gov/city-light-
sforElectricService).

(for Inverter Based Resources).

n (for Machine-Based Resources).

on (for Inverter Based Resources).

ough settings.

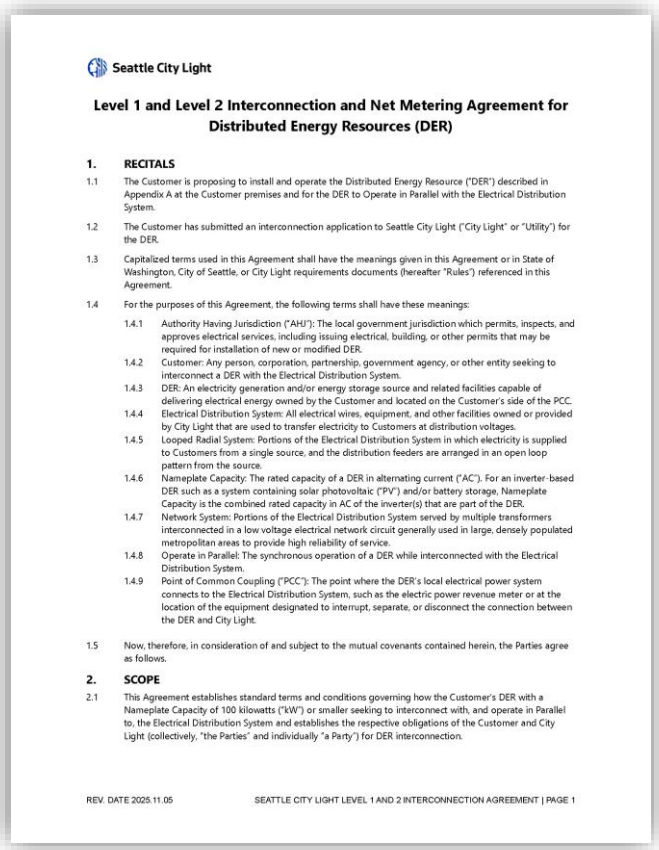
sumption data can be accurately reported.

Addendum A: DER Commissioning & Testing Attestation Page 2

Copies of the permits and authorizations may be requested by City Light.

New Interconnection Agreements

To align with the updated interconnection review levels and related requirements, City Light will now use unique **Interconnection Agreements** based on the review level. City Light will also countersign the Interconnection Agreement.



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Level 1 and Level 2 Interconnection and Net Metering Agreement for Distributed Energy Resources (DER)

1. RECITALS

1.1 The Customer is proposing to install and operate the Distributed Energy Resource ("DER") described in Appendix A at the Customer premises and for the DER to Operate in Parallel with the Electrical Distribution System.

1.2 The Customer has submitted an interconnection application to Seattle City Light ("City Light" or "Utility") for the DER.

1.3 Capitalized terms used in this Agreement shall have the meanings given in this Agreement or in State of Washington, City of Seattle, or City Light requirements documents (hereafter "Rules") referenced in this Agreement.

1.4 For the purposes of this Agreement, the following terms shall have these meanings:

1.4.1 Authority Having Jurisdiction ("AHJ"): The local government jurisdiction which permits, inspects, and approves electrical services, including issuing electrical, building, or other permits that may be required for installation of new or modified DER.

1.4.2 Customer: Any person, corporation, partnership, government agency, or other entity seeking to interconnect a DER with the Electrical Distribution System.

1.4.3 DER: An electricity generation and/or energy storage source and related facilities capable of delivering electrical energy owned by the Customer and located on the Customer's side of the PCC.

1.4.4 Electrical Distribution System: All electrical wires, equipment, and other facilities owned or provided by City Light that are used to transfer electricity to Customers at distribution voltages.

1.4.5 Looped Radial System: Portions of the Electrical Distribution System in which electricity is supplied to Customers from a single source, and the distribution feeders are arranged in an open loop pattern from the source.

1.4.6 Nameplate Capacity: The rated capacity of a DER in alternating current ("AC"). For an inverter-based DER such as a system containing solar photovoltaic ("PV") and/or battery storage, Nameplate Capacity is the combined rated capacity in AC of the inverter(s) that are part of the DER.

1.4.7 Network System: Portions of the Electrical Distribution System served by multiple transformers interconnected in a low voltage electrical network circuit generally used in large, densely populated metropolitan areas to provide high reliability of service.

1.4.8 Operate in Parallel: The synchronous operation of a DER while interconnected with the Electrical Distribution System.

1.4.9 Point of Common Coupling ("PCC"): The point where the DER's local electrical power system connects to the Electrical Distribution System, such as the electric power revenue meter or at the location of the equipment designated to interrupt, separate, or disconnect the connection between the DER and City Light.

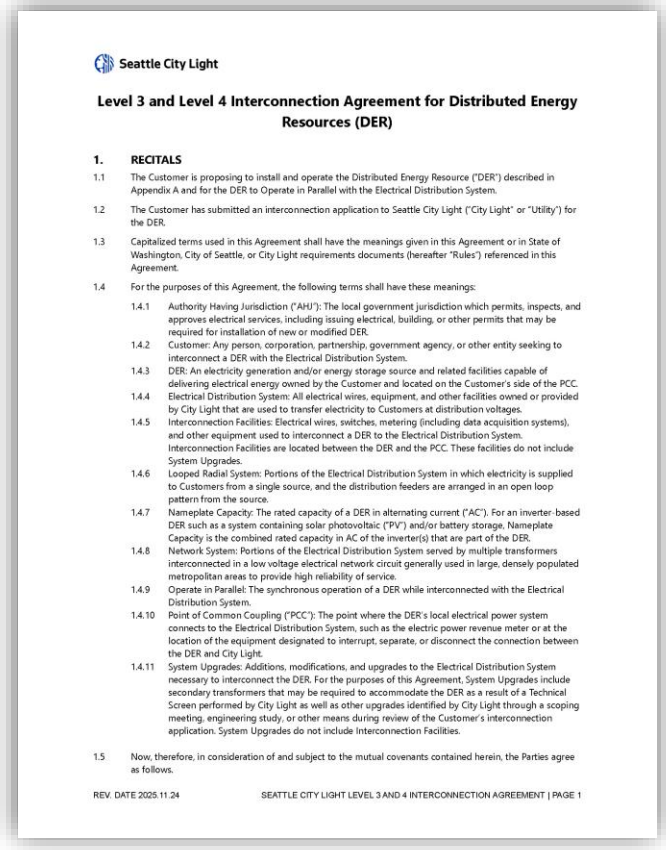
1.5 Now, therefore, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows.

2. SCOPE

2.1 This Agreement establishes standard terms and conditions governing how the Customer's DER with a Nameplate Capacity of 100 kilowatts ("kW") or smaller seeking to interconnect with, and operate in Parallel to, the Electrical Distribution System and establishes the respective obligations of the Customer and City Light (collectively, "the Parties" and individually "a Party") for DER interconnection.

REV. DATE 2025.11.05 SEATTLE CITY LIGHT LEVEL 1 AND 2 INTERCONNECTION AGREEMENT | PAGE 1

Interconnection Agreement: L1 and L2



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Level 3 and Level 4 Interconnection Agreement for Distributed Energy Resources (DER)

1. RECITALS

1.1 The Customer is proposing to install and operate the Distributed Energy Resource ("DER") described in Appendix A and for the DER to Operate in Parallel with the Electrical Distribution System.

1.2 The Customer has submitted an interconnection application to Seattle City Light ("City Light" or "Utility") for the DER.

1.3 Capitalized terms used in this Agreement shall have the meanings given in this Agreement or in State of Washington, City of Seattle, or City Light requirements documents (hereafter "Rules") referenced in this Agreement.

1.4 For the purposes of this Agreement, the following terms shall have these meanings:

1.4.1 Authority Having Jurisdiction ("AHJ"): The local government jurisdiction which permits, inspects, and approves electrical services, including issuing electrical, building, or other permits that may be required for installation of new or modified DER.

1.4.2 Customer: Any person, corporation, partnership, government agency, or other entity seeking to interconnect a DER with the Electrical Distribution System.

1.4.3 DER: An electricity generation and/or energy storage source and related facilities capable of delivering electrical energy owned by the Customer and located on the Customer's side of the PCC.

1.4.4 Electrical Distribution System: All electrical wires, equipment, and other facilities owned or provided by City Light that are used to transfer electricity to Customers at distribution voltages.

1.4.5 Interconnection Facilities: Electrical wires, switches, metering (including data acquisition systems), and other equipment used to interconnect a DER to the Electrical Distribution System. Interconnection Facilities are located between the DER and the PCC. These facilities do not include System Upgrades.

1.4.6 Looped Radial System: Portions of the Electrical Distribution System in which electricity is supplied to Customers from a single source, and the distribution feeders are arranged in an open loop pattern from the source.

1.4.7 Nameplate Capacity: The rated capacity of a DER in alternating current ("AC"). For an inverter-based DER such as a system containing solar photovoltaic ("PV") and/or battery storage, Nameplate Capacity is the combined rated capacity in AC of the inverter(s) that are part of the DER.

1.4.8 Network System: Portions of the Electrical Distribution System served by multiple transformers interconnected in a low voltage electrical network circuit generally used in large, densely populated metropolitan areas to provide high reliability of service.

1.4.9 Operate in Parallel: The synchronous operation of a DER while interconnected with the Electrical Distribution System.

1.4.10 Point of Common Coupling ("PCC"): The point where the DER's local electrical power system connects to the Electrical Distribution System, such as the electric power revenue meter or at the location of the equipment designated to interrupt, separate, or disconnect the connection between the DER and City Light.

1.4.11 System Upgrades: Additions, modifications, and upgrades to the Electrical Distribution System necessary to interconnect the DER. For the purposes of this Agreement, System Upgrades include secondary transformers that may be required to accommodate the DER as a result of a Technical Screen performed by City Light as well as other upgrades identified by City Light through a scoping meeting, engineering study, or other means during review of the Customer's interconnection application. System Upgrades do not include Interconnection Facilities.

1.5 Now, therefore, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows.

REV. DATE 2025.11.24 SEATTLE CITY LIGHT LEVEL 3 AND 4 INTERCONNECTION AGREEMENT | PAGE 1

Interconnection Agreement: L3 and L4

Questions?

Use the Question tab at the top of your screen.

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Intake & Application Review

- Understanding Types of Requests
- Navigating Pathways for Solar Requests
- Preparing for and Submitting Application
- Planning for Application Review

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DER Handbook Section 8
Application Process

DER Interconnection Process

We are here!

Intake & Application Review

City Light reviews DER application for completeness and conducts initial screens

Technical & Supplemental Screens

City Light engineers conduct screens to evaluate the DER's safety and impact

If screens **PASS**, the DER advances

Engineering Studies

If screens **FAIL**, City Light engineers conduct additional studies, which could result in upgrade costs for the Applicant

DER Construction

City Light collects Interconnection Agreement signatures and issues Permission to Construct

DER Project Closeout

City Light inspects DER, reviews attestations, provides Permission to Operate, and enrolls Applicant in net meter billing

Types of Requests

An electric service application is required for:

- Existing service alteration or removal
- New permanent services
- Temporary service for construction sites
- Construction clearance
- New streetlight service
- **Solar interconnection**

Today's webinar will focus on the application process for solar interconnections.

Types of Requests

There are several resources available to help guide an Applicant through a **DER interconnection** application and installation.

Standards for Electric Service

Collection of all standards and specifications referenced in the RESC, including:

- *Section 1554.33 Meter Mounting Configurations, Heights, Working Space, and Clearances*

Comprehensive Engineering Standards Library

Specific construction and materials standards, work practices, stock catalog and more

Requirements for Electric Service Connection (RESC)

Guide to utility application steps and requirements, including:

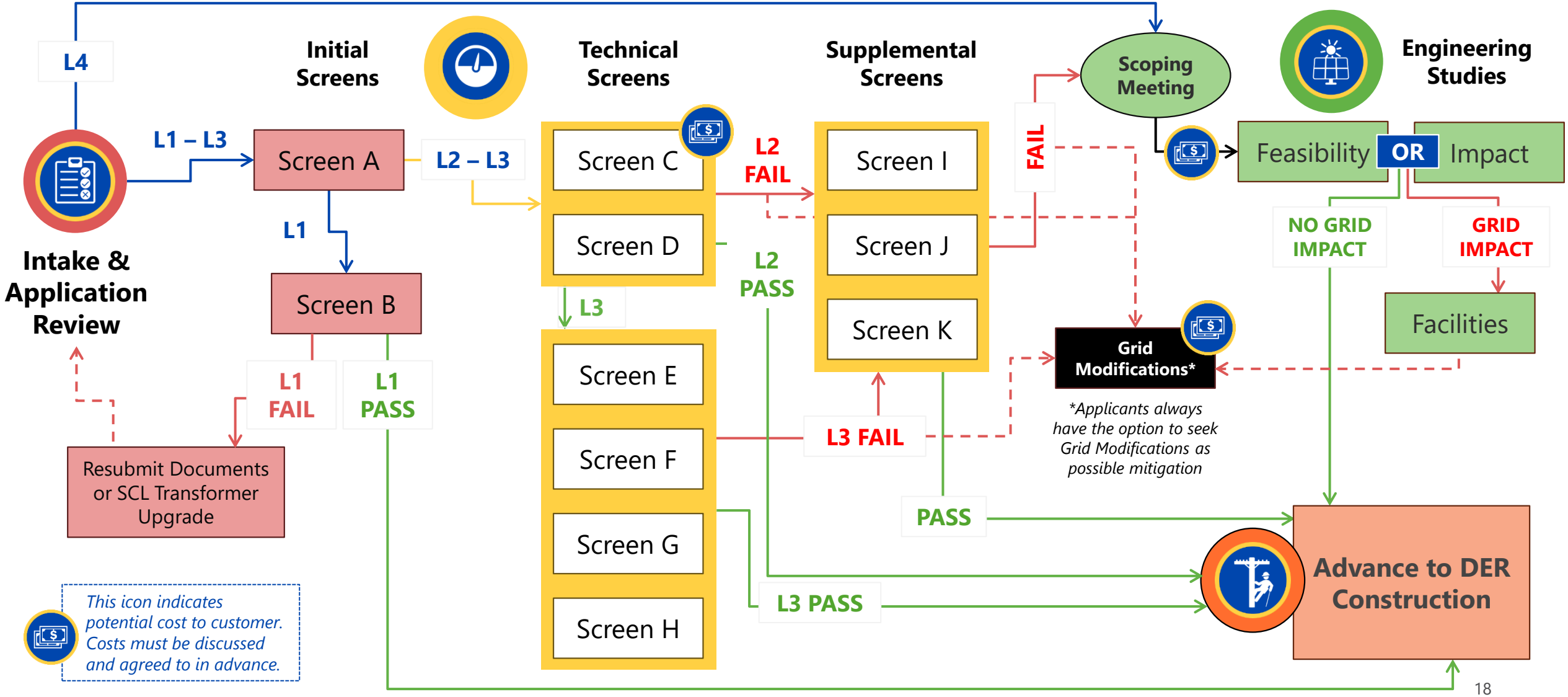
- *Section 6.8 – Metering Requirements for Multi-Unit Buildings*

DER Interconnection Handbook

Explains utility requirements for interconnection of customer solar, battery storage, and other power generation projects to the City Light electrical distribution grid

Section 5 of the RESC will now become the DER Interconnection Handbook.

Pathways for Solar Requests



Reviewing DER Application

The Solar Engineering Aide (EA) reviews the DER application and supporting documentation for accuracy and completeness. The EA will work with the Applicant to resolve any application submission issues.

DER Application Requirements

- Project address
- Property owner's name, mailing address, phone number, and email
- Electrician, developer, or contractor contact information
- Service type
- Date service connection is needed
- SCL service voltage
- Amperage of existing service
- System generation size (kW) AC
- Existing meter number

DER Supporting Documentation

- Data on equipment specifications (e.g., electrical generator(s), inverter(s) number of units, model numbers, and performance characteristics)
- Solar One-Line Riser Diagram
- Legal Site Plan

Full application requirements are listed on City Light's Apply for New or Upgraded Electric Service website

The Applicant can contact the Application Intake Team at scl_serviceapplications@seattle.gov for assistance.

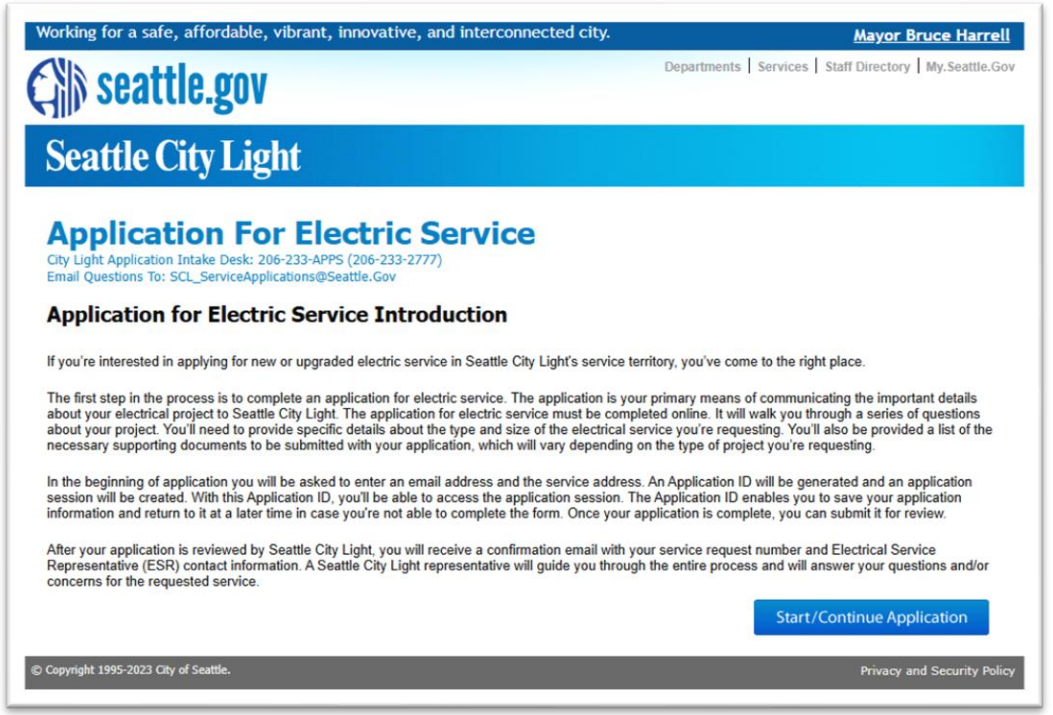
Resources

- Apply for New or Upgraded Electric Service - City Light | seattle.gov website includes step-by-step instructions on how to prepare for and submit an online Electric Service Application
- Service Application Checklist outlines all requirements and documents necessary for a successful application submission

Submitting Application

When they are ready to submit their DER application, the Applicant will complete the online **Application for Electric Service** via the City Light portal.

In addition to submitting the DER application via the portal, the Applicant will also need to email their supporting materials to SCL_serviceapplications@seattle.gov.



Planning for Application Review: Timelines

Per the new DER Interconnection Handbook, City Light anticipates the following timelines per each application review activity:

Activity	Lead	Estimated Timing
Application Completeness Review	City Light	Within 10 business days of receiving application
Submit Corrected/Additional Materials	*Applicant*	*30 business days*

Technical & Supplemental Screens

- Importance of Screens
- Screens Overview
- Reviewing Results with Applicant
- Improving DER to Meet Standards

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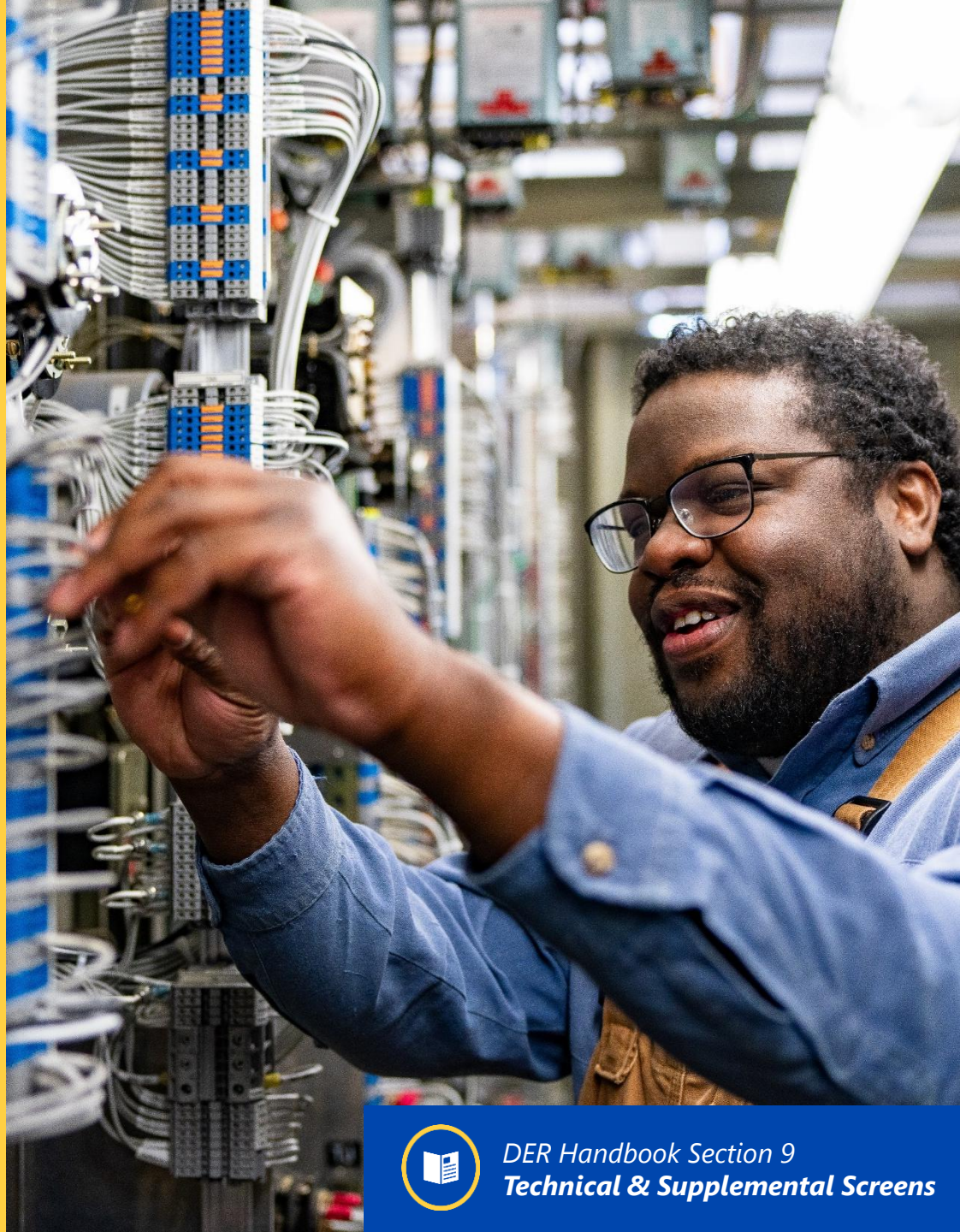
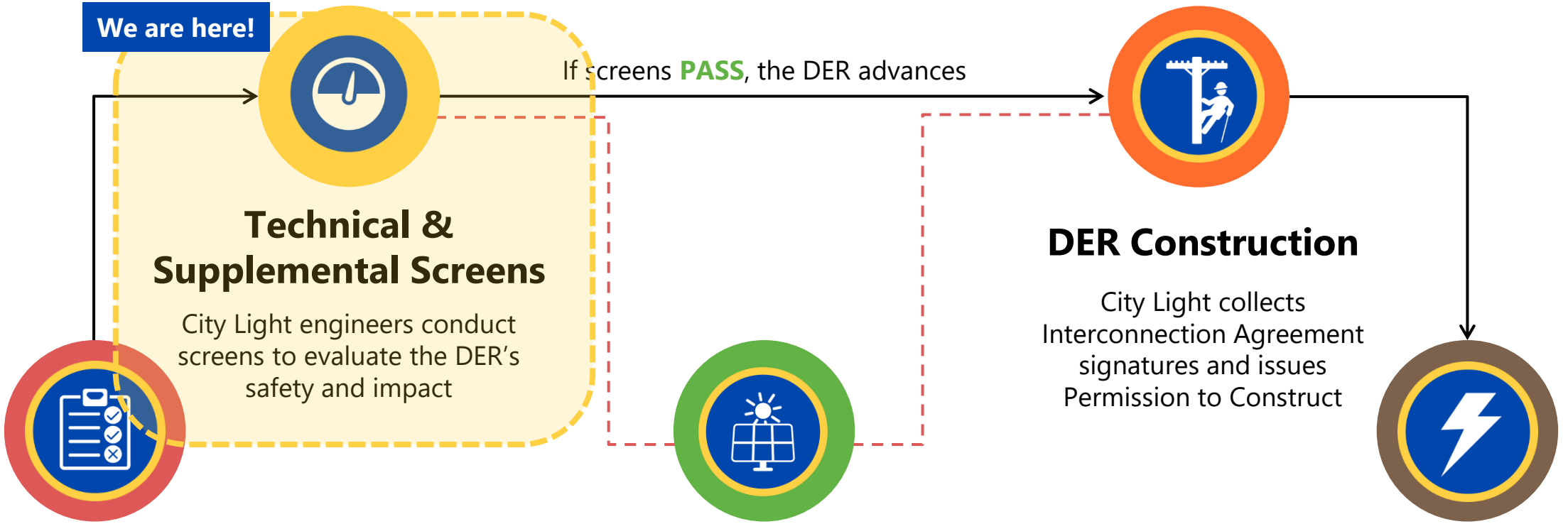


DER Interconnection Process



Intake & Application Review

City Light reviews DER application for completeness and conducts initial screens

Technical & Supplemental Screens

City Light engineers conduct screens to evaluate the DER's safety and impact

Engineering Studies

If screens **FAIL**, City Light engineers conduct additional studies, which could result in upgrade costs for the Applicant

DER Construction

City Light collects Interconnection Agreement signatures and issues Permission to Construct

DER Project Closeout

City Light inspects DER, reviews attestations, provides Permission to Operate, and enrolls Applicant in net meter billing

Importance of Technical Screens

Grid Protection

Evaluates whether a proposed DER could destabilize the grid

Safety

Ensures safety of utility workers and equipment

Compliance

Ensures that each DER project meets technical and regulatory requirements (e.g., IEEE, SDCI)

Consistency

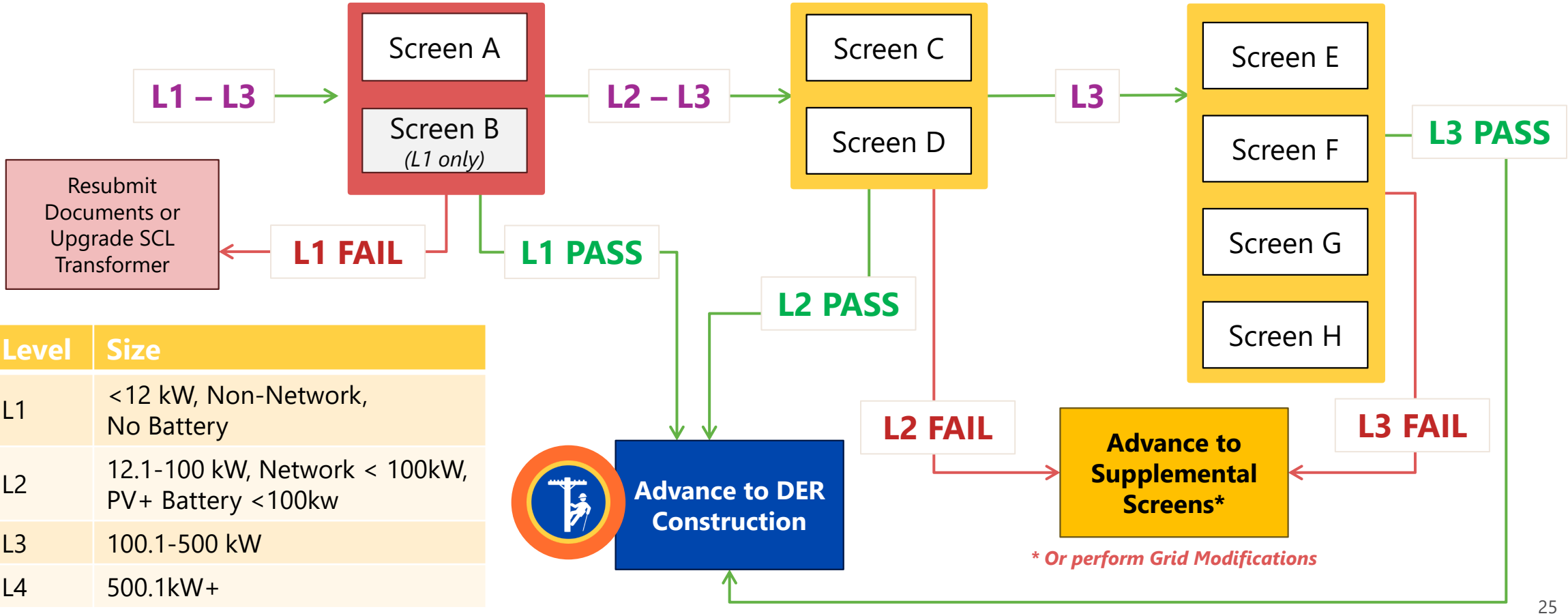
Creates a consistent process for evaluating DER projects, supporting fair access for Applicants

Customer Service

Identifies when engineering studies are needed which may impact cost and/or timeline

Technical Screens Overview

City Light determines which technical screens to conduct based on the size and scope of the proposed DER.



Level	Size
L1	<12 kW, Non-Network, No Battery
L2	12.1-100 kW, Network < 100kW, PV+ Battery <100kw
L3	100.1-500 kW
L4	500.1kW+

Technical Screens Overview

Below is a summary of the technical screens conducted by City Light:

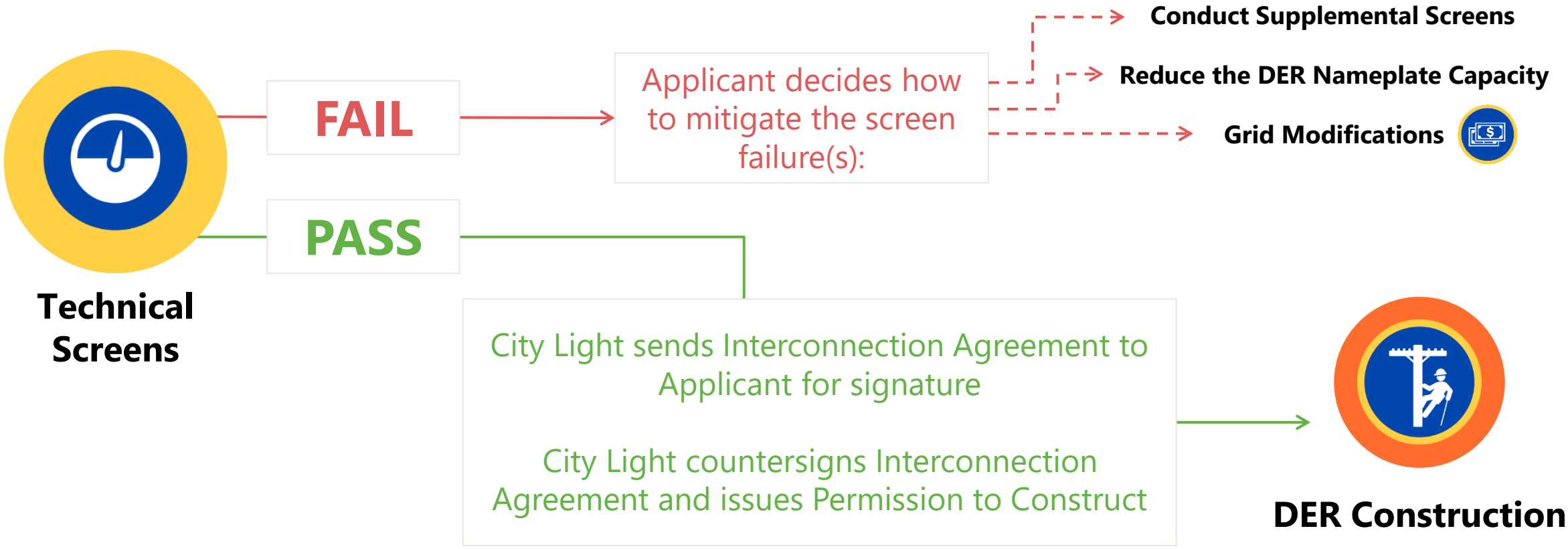
Level	Screen	Title
L1, L2, L3	A	Confirm Inverter Compliance
L1 only	B	Confirm Aggregate DER Nameplate Capacity

Level	Screen	Title
L2, L3	C	Evaluate Voltage Rise
	D	Evaluate Nameplate Capacity vs. Minimum Load of Feeder

Level	Screen	Title
L3	E	Confirm Compatibility with Primary Distribution Line Type Configuration
	F	Evaluate the Short Circuit Interrupting Capability
	G	Review Short Circuit Contribution Ratios
	H	Evaluate Aggregate DER Nameplate Capacity

Reviewing Results with Applicant

Once Technical Screens are complete, City Light will complete a Solar Engineering Review form to share with Applicants.



Improving DER to Meet Standards

If any of the technical screens fail, the ESR/ESE will work with the Applicant to resolve the issue(s). Below are potential solutions for each screen failure.

Screen A	Screen B	Screen C	Screen D	Screen E	Screen F	Screen G	Screen H
Resubmit documents to show UL 1741 SB compliance	Replace secondary transformer or reduce DER Nameplate Capacity size	Replace secondary transformer or secondary wire, or reduce DER nameplate capacity	Reduce DER Nameplate capacity to appropriate levels	Align Circuit compatibility with primary distribution line type.	Replace protective equipment device with higher interrupting fault current or reduce DER Nameplate Capacity so maximum fault current on the feeder does not exceed 87.5%.	Reduce DER Nameplate Capacity so that short circuit contribution ratio is less than or equal to 0.1.	Reduce DER Nameplate capacity so aggregate DER on feeder is below 10MW per stability limitations on nearby Circuits

Supplemental Screens I – K Overview

If technical screens fail, cannot be resolved by the Applicant, and the Applicant still wants to proceed with their proposed DER, City Light can conduct supplemental screens I-K.

Screen	Summary
I	Ensures voltage variation as measured at the PCC are within acceptable levels based on City Light's modeling.
J	Confirms that the proposed DER's contributions to harmonics and flicker are within acceptable levels based on City Light's modeling.
K	Confirms that the proposed DER impacts to safety and reliability that need to be addressed through engineering studies.

More information about the importance of each screen and how it is completed is described in the DER Interconnection Handbook.

Reviewing Results with Applicant

Once Supplemental Screens are complete, City Light will update the Solar Engineering Review form to share with Applicants.

Supplemental Screens

FAIL

Applicant decides if they would like to proceed with a scoping meeting to discuss engineering studies.

Scoping Meeting

PASS

City Light sends Interconnection Agreement to Applicant for signature

City Light countersigns Interconnection Agreement and issues Permission to Construct

DER Construction

Planning for Screens: Timelines

Per the new DER Interconnection Handbook, City Light anticipates the following timelines per each screen-related activity:

	Activity	Lead	Estimated Timing
	Notification of Technical Screen Status L1: Screen A and B L2: Screen A, C, and D L3: Screen A, C, D, E, F, G, H	City Light	Within 20* business days of the DER application being Deemed Complete **15 business days for L1*
For Screen Resolution Only	Resolve Screen Failures or Proceed to Supplemental Screens	Applicant	Within 30 business days Notification of Technical Screen Status
For Screen Resolution Only	Notification of Supplemental Screen Status	City Light	Within 15 business days of receipt of Applicant's decision to proceed with Supplemental Screens

Engineering Studies

- Participating in Scoping Meeting
- Consenting to Engineering Studies

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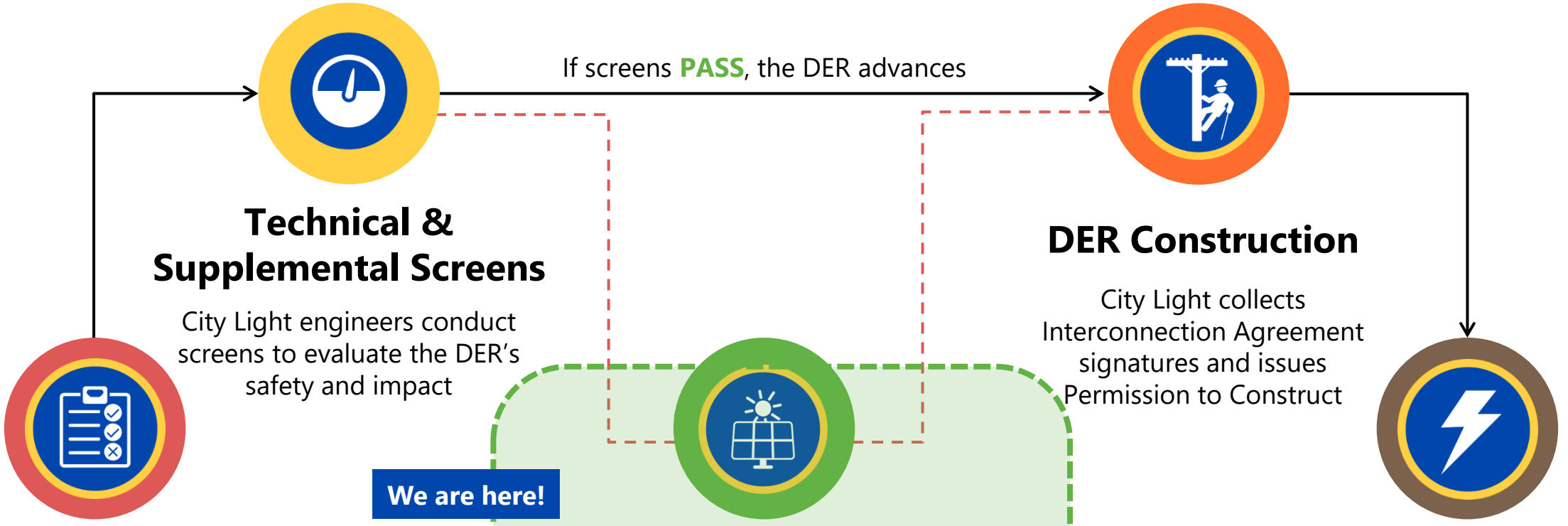
DER Handbook Section 10
Engineering Studies

DER Interconnection Process



Participating in Scoping Meeting

To identify if engineering studies will be needed, City Light will facilitate a scoping meeting with the Applicant.

Scoping Meeting Details:

- **Location:** In-person at City Light facilities or virtual
- **Cost to Applicant:** N/A
- **Facilitator:** City Light
- **Attendees:**
  - ESE or ESR
  - Planning Engineers
  - Distribution Services Engineer or Distribution Systems Engineer
  - Applicant's DER Designer
  - Applicant

Agenda:

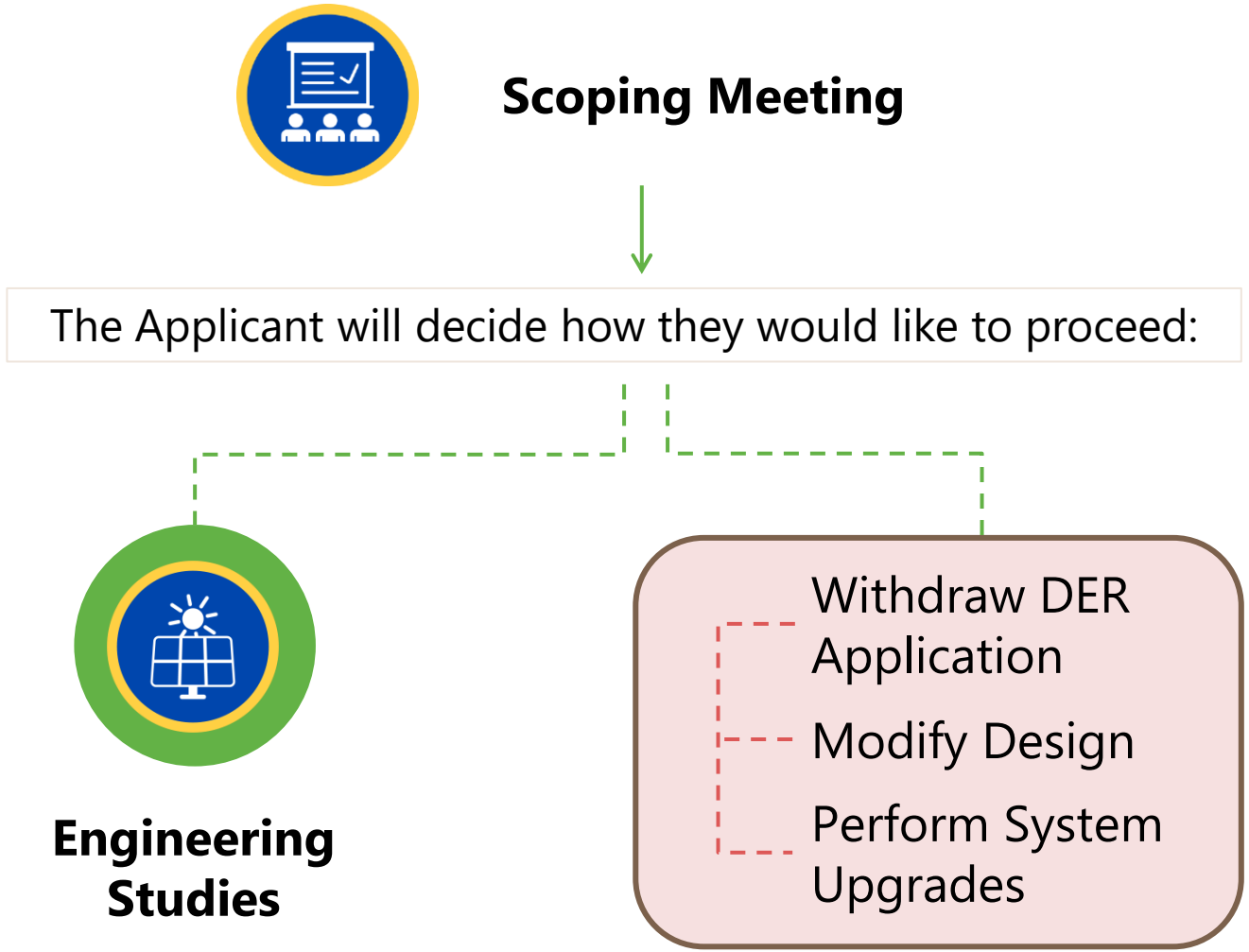
- General overview of the project
- Concerns or required changes needed to proceed
- Engineering studies needed to identify upgrades and nameplate capacity

Scoping meetings are rare!
If the proposed DER passes all screens and is below L4, this step is not required.

Consenting to Engineering Studies

After the scoping meeting, City Light will capture what was discussed in a Solar Engineering – Scoping Meeting form. This outlines what engineering studies are recommend and why.

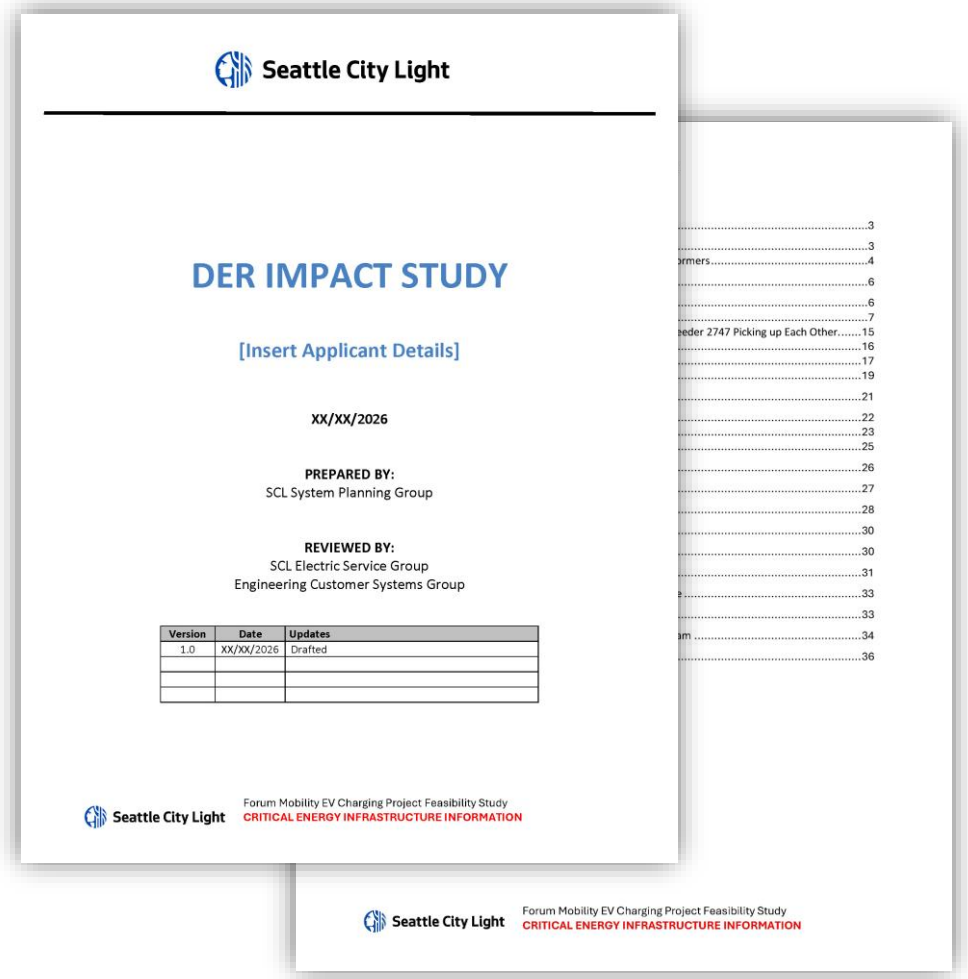
City Light will inform the Applicant of any associated costs for the engineering studies.



Consenting to Engineering Studies

If the Applicant wants to proceed with the recommended engineering studies, City Light will coordinate time and materials billing with the Applicant.

Once the engineering studies are complete, City Light will produce an Impact Study Report that summarizes its findings.



Engineering Studies: Timelines

The estimated timelines for DER application review will expand if scoping meetings or engineering studies occur. These are rare, but it is important to be aware of how these activities can impact timing expectations.

Below are the estimated timelines for each activity:

Activity	Lead	Estimated Timing
Resolve Screen Failures or Proceed to Supplemental Screens	Applicant	Within 30 business days
Notification of Supplemental Screen Status	City Light	Within 15 business days of receipt of Applicant's decision to proceed with Supplemental Screens
Request to Proceed with Scoping Meeting	Applicant	Within 30 business days of being informed of Supplemental Screen Status
Hold Scoping Meeting	City Light	Within 10 business days of Deemed Complete decision of Supplemental Screen completion
Send Engineering Study Agreement	City Light	Within 5 business days following Scoping Meeting
Provide Written Study Results	City Light	From receiving signed Study Agreement: • Feasibility Study: Within 20 business days • Impact Study: Within 40 business days • Facilities Study: Within 60 business days
Notification of Commissioning Deficiencies	City Light	Within 5 business days of review of commissioning information and tests

Questions?

Use the Question tab at the top of your screen.

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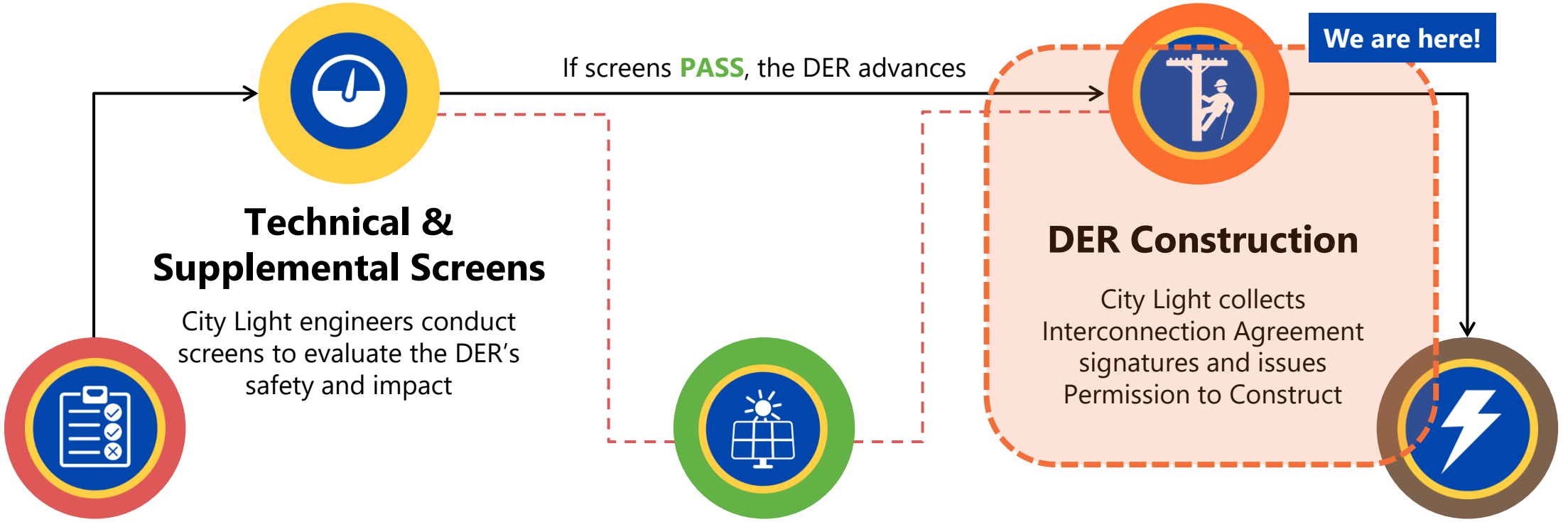
DER Construction

- Signing Interconnection Agreements
- Constructing DER

Seattle City Light

DER Handbook Sections 11, 12
Interconnection Agreement
Utility Design and Construction of New Interconnection Facilities and System Upgrades

DER Interconnection Process



Intake & Application Review

City Light reviews DER application for completeness and conducts initial screens

Technical & Supplemental Screens

City Light engineers conduct screens to evaluate the DER's safety and impact

Engineering Studies

If screens **FAIL**, City Light engineers conduct additional studies, which could result in upgrade costs for the Applicant

DER Construction

City Light collects Interconnection Agreement signatures and issues Permission to Construct

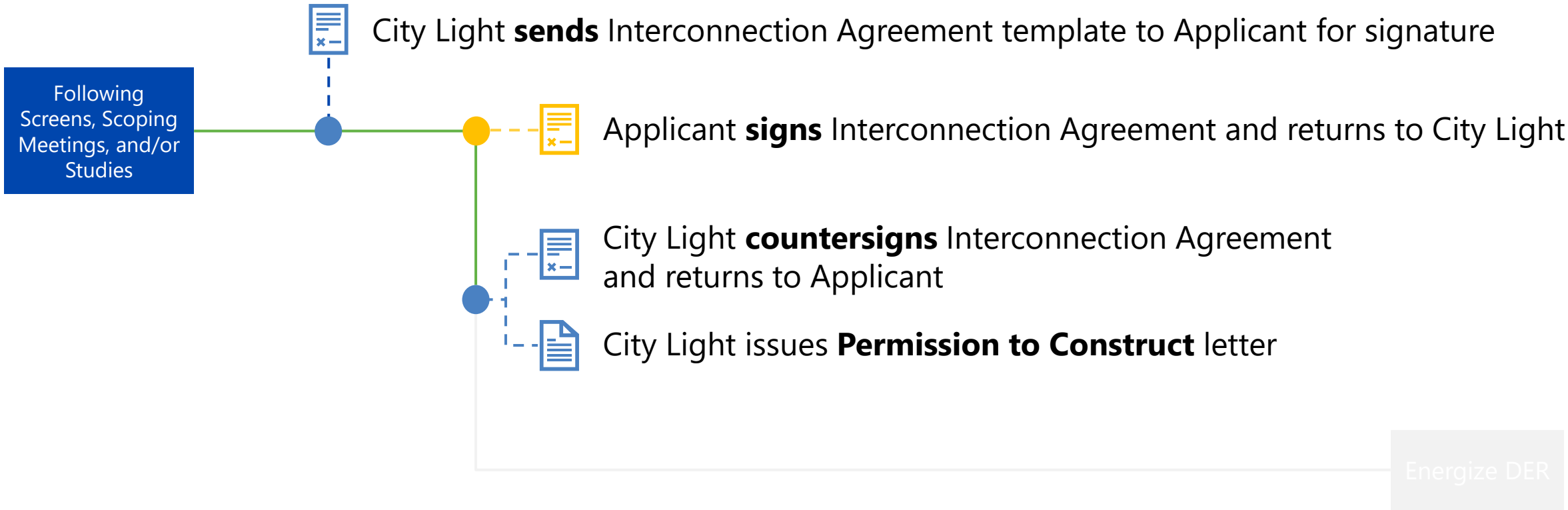
DER Project Closeout

City Light inspects DER, reviews attestations, provides Permission to Operate, and enrolls Applicant in net meter billing

Applicant Task
City Light Task

Signing Interconnection Agreements

An **Interconnection Agreement** (IA) outlines the terms and conditions governing the DER. Effective January 2, 2026, each IA must be signed by **both** the Applicant and City Light before a Permission to Construct letter is issued.



DER Construction: Timelines

Per the new DER Interconnection Handbook, City Light anticipates the following timelines per each activity relating to Interconnection Agreements:

Activity	Lead	Estimated Timing
Send Interconnection Agreement to Applicant	City Light	Within 5 business days of notifying Applicant of Technical Screen Status
Sign and Return Interconnection Agreement	Applicant	Within 10 business days of receiving Interconnection Agreement *40+ business days if Scoping Meeting or Engineering Study occurs*
Countersign Interconnection Agreement and Issue Permission to Construct (PTC)	City Light	Within 5 business days of receiving Applicant-signed Interconnection Agreement

Constructing DER

Once City Light issues the Permission to Construct, the Applicant may proceed with DER construction.

The Applicant is responsible for obtaining all permits necessary from the Authority Having Jurisdiction (AHJ).

These include electrical permits in all instances and, where applicable, building, civil, mechanical, environmental, wildlife/habitat protection, or other permits or authorizations.

In no circumstances will City Light mandate a group study of the proposed DER, since its standard practice is serial study.

10.8. Affected System Study

A DER proposed for interconnection with the Electrical Distribution System may also affect the operation of a third party's electrical distribution or transmission system ("affected system"). When City Light identifies such cases and notifies the Applicant of such, the third party (e.g., a utility other than City Light or a regional grid operator) may require its own study or other review (an "affected system study") of potential safety and reliability impacts of the proposed DER and payment of any costs necessary to mitigate such impacts. In such cases, the Applicant shall contract directly with the affected system for any affected system study. City Light will coordinate with the affected system and provide required, utility-specific information, but City Light is not otherwise responsible for any affected system study. Where an affected system study is conducted, City Light requires that the Applicant demonstrate that it has resolved all issues identified in the affected system study to the satisfaction of the affected system before City Light completes its own Technical Screens, Supplemental Screens, and/or engineering study(ies) of the DER.

11. Interconnection Agreement

An Interconnection Agreement (IA) shall be signed by both the Applicant and City Light before the Utility provides a PTC to the Applicant. A subsequent PTO from City Light is required for the Applicant to energize its DER on the Electrical Distribution System. The IA contains the terms and conditions governing the interconnection of the Applicant's DER with the Electrical Distribution System. The IA does not need to be renewed after it is signed. Applicant and City Light rights to terminate are described in the IA.

City Light currently maintains two IA forms. One IA form is for Level 1 and Level 2 interconnection applications if they require no Applicant payments for new Interconnection Facilities and System Upgrades. The other IA form is for all Level 3 and Level 4 interconnection applications as well as Level 1 and Level 2 applications if they require Applicant payment for new Interconnection Facilities and System Upgrades.

For the Level 3/Level 4 interconnection form, City Light will insert estimated interconnection costs along with an Applicant payment schedule as pertinent, following completion of the Technical Screens, Supplemental Screens, scoping meeting, or final required engineering study for the DER. To the extent that estimated interconnection costs are included in an IA, such costs shall be paid in full to City Light by the Applicant before a PTO is issued and the DER is energized. In such cases, City Light will include in the IA an estimated schedule to design and construct any new Interconnection Facilities and System Upgrades required to accommodate the DER.

City Light may periodically modify its IA forms, and Applicants shall use the IA editions presented by City Light during application processing.

12. Utility Design and Construction of New Interconnection Facilities and System Upgrades

rmines from an engineering study or otherwise during review of
w Interconnection Facilities and/or System Upgrades to the
l to safely and reliably interconnect a proposed DER, and (ii) the
e facilities and upgrades in its IA. The chapter provides an
tors that may affect City Light's schedule, and how costs will be
thing in this chapter contravenes the contents of an individual

terconnection Facilities or System Upgrades are required, City
sign, procurement, and construction process after the IA is
d the Applicant makes any required deposit or initial payment:
ne equipment; (iii) order (externally or from inventory) shorter
any necessary permits that are the Utility's responsibility; (v)
r System Upgrades; and (vi) test Interconnection Facilities and/or
ediate steps in this process. The process depends on the
n; coordinating promptly with City Light and potentially AHJs;
pecified in the IA; and constructing its DER in parallel.

ule in the IA if the design and construction of new
Upgrades are required. City Light shall notify the Applicant of any
n for those changes. The reasons for schedule changes can
btaining necessary equipment; delays in AHJ permitting;
er Queue Position than the Applicant's DER; Applicant delays in
n requests from City Light; and Applicant delays in making

on of Costs

connection Facilities and System Upgrades required for
P 500 P III-417: *Service Installations* available at:
at-we-do/public-policies. That DPP establishes the respective
arges or as time and materials charges for DER installations on
rk System.

nspecting, and Testing

r after (i) the Applicant receives a fully-signed IA and a PTC from
nstruction of its DER, and (iii) City Light completes construction
ities and System Upgrades and until City Light provides a PTO to
gization.

iction Permits and Authorizations

DER Handbook Sections 11, 12
Interconnection Agreement
Utility Design and Construction of New Interconnection Facilities and System Upgrades

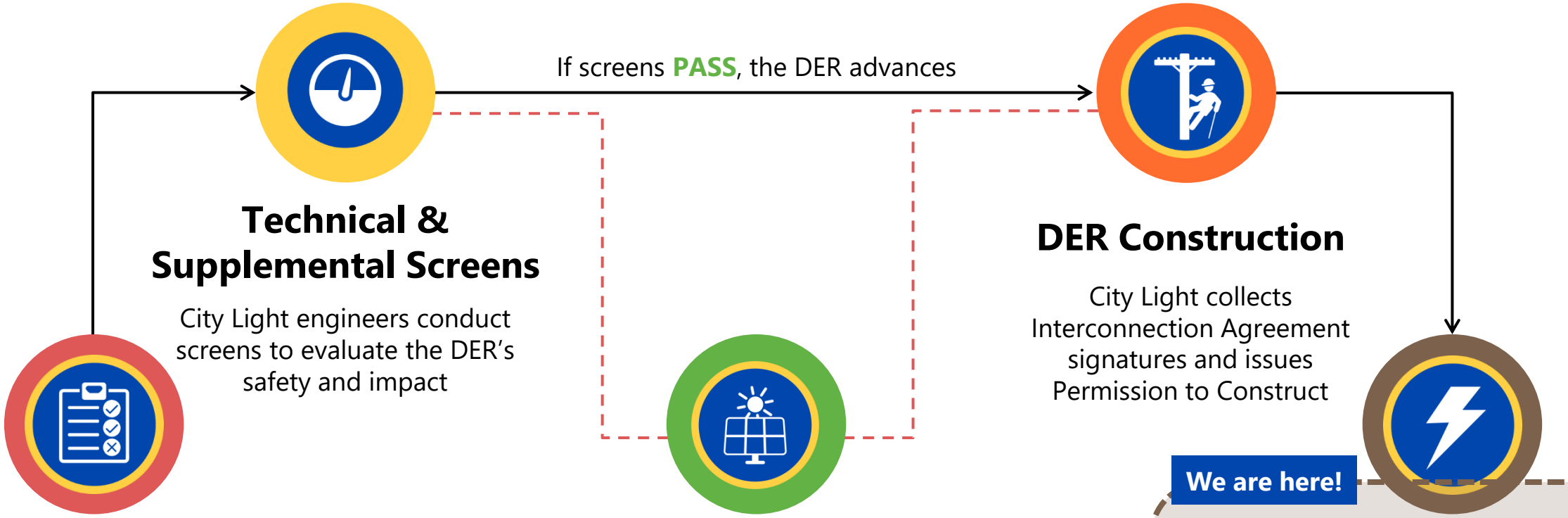
DER Project Closeout

- Completing Attestations
- Submitting Final Payments
- Energizing DER
- Operating & Maintaining DER

Seattle City Light

DER Handbook Sections 13, 14
Commissioning, Inspecting, and Testing
Operations and Maintenance Requirements

DER Interconnection Process

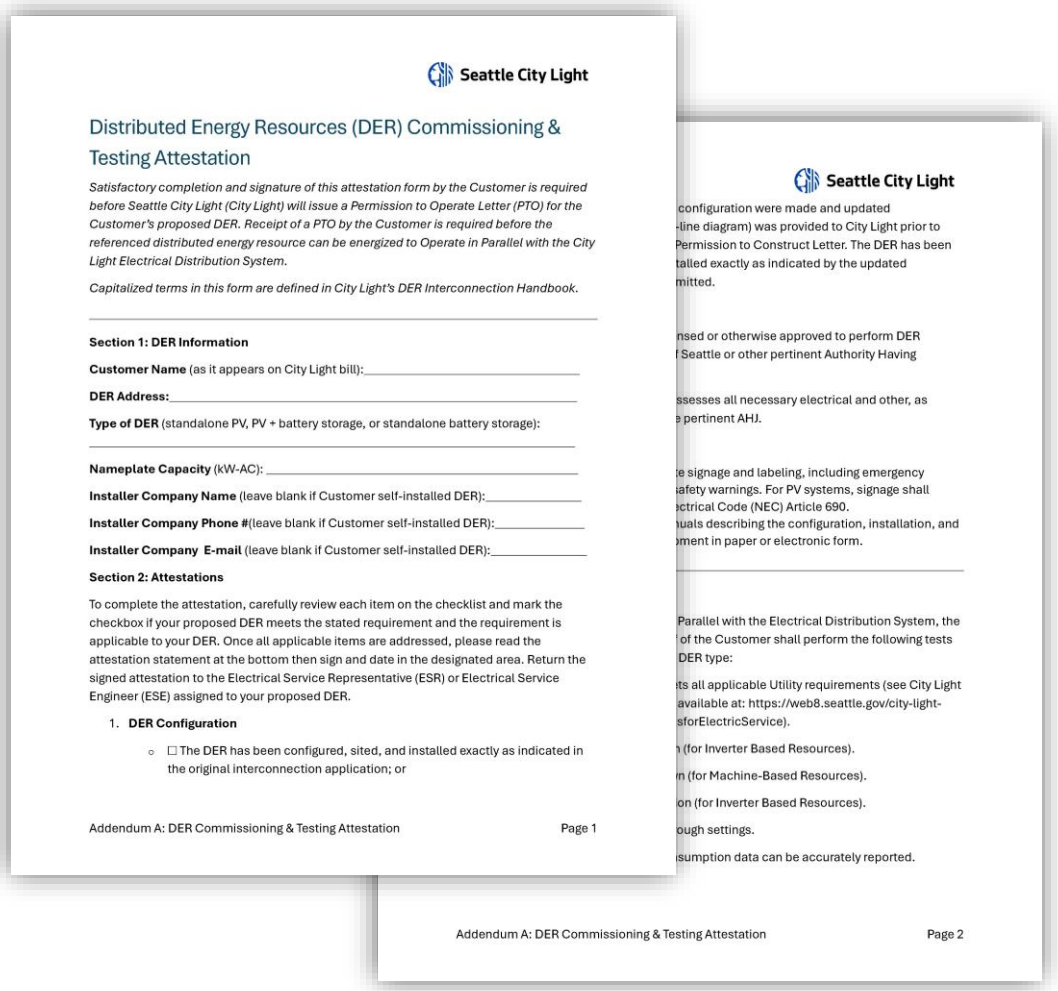


Completing Attestations

After the Applicant constructs the DER, the Applicant will sign and submit a new **Commissioning & Testing Attestation** that verifies that they have obtained all permits and their DER is compliant with all requirements.

This new attestation serves to:

- Confirm that the DER was constructed according to safety standards and manufacturer specifications
- Create a formal record that commissioning and testing were completed
- Clarify responsibilities for the DER's performance and safety



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Distributed Energy Resources (DER) Commissioning & Testing Attestation

Satisfactory completion and signature of this attestation form by the Customer is required before Seattle City Light (City Light) will issue a Permission to Operate Letter (PTO) for the Customer's proposed DER. Receipt of a PTO by the Customer is required before the referenced distributed energy resource can be energized to Operate in Parallel with the City Light Electrical Distribution System.

Capitalized terms in this form are defined in City Light's DER Interconnection Handbook.

Section 1: DER Information

Customer Name (as it appears on City Light bill):_____

DER Address:_____

Type of DER (standalone PV, PV + battery storage, or standalone battery storage):

_____

Nameplate Capacity (kW-AC): _____

Installer Company Name (leave blank if Customer self-installed DER):_____

Installer Company Phone #(leave blank if Customer self-installed DER):_____

Installer Company E-mail (leave blank if Customer self-installed DER):_____

Section 2: Attestations

To complete the attestation, carefully review each item on the checklist and mark the checkbox if your proposed DER meets the stated requirement and the requirement is applicable to your DER. Once all applicable items are addressed, please read the attestation statement at the bottom then sign and date in the designated area. Return the signed attestation to the Electrical Service Representative (ESR) or Electrical Service Engineer (ESE) assigned to your proposed DER.

1. **DER Configuration**
   - ☐ The DER has been configured, sited, and installed exactly as indicated in the original interconnection application; or

Addendum A: DER Commissioning & Testing Attestation Page 1

Seattle City Light

configuration were made and updated
-line diagram) was provided to City Light prior to
Permission to Construct Letter. The DER has been
talled exactly as indicated by the updated
mitted.

nsed or otherwise approved to perform DER
f Seattle or other pertinent Authority Having

ssesses all necessary electrical and other, as
e pertinent AHJ.

e signage and labeling, including emergency
afety warnings. For PV systems, signage shall
ctrical Code (NEC) Article 690.
uals describing the configuration, installation, and
oment in paper or electronic form.

Parallel with the Electrical Distribution System, the
of the Customer shall perform the following tests
DER type:

ts all applicable Utility requirements (see City Light
available at: https://web8.seattle.gov/city-light-
sforElectricService).

(for Inverter Based Resources).

n (for Machine-Based Resources).

on (for Inverter Based Resources).

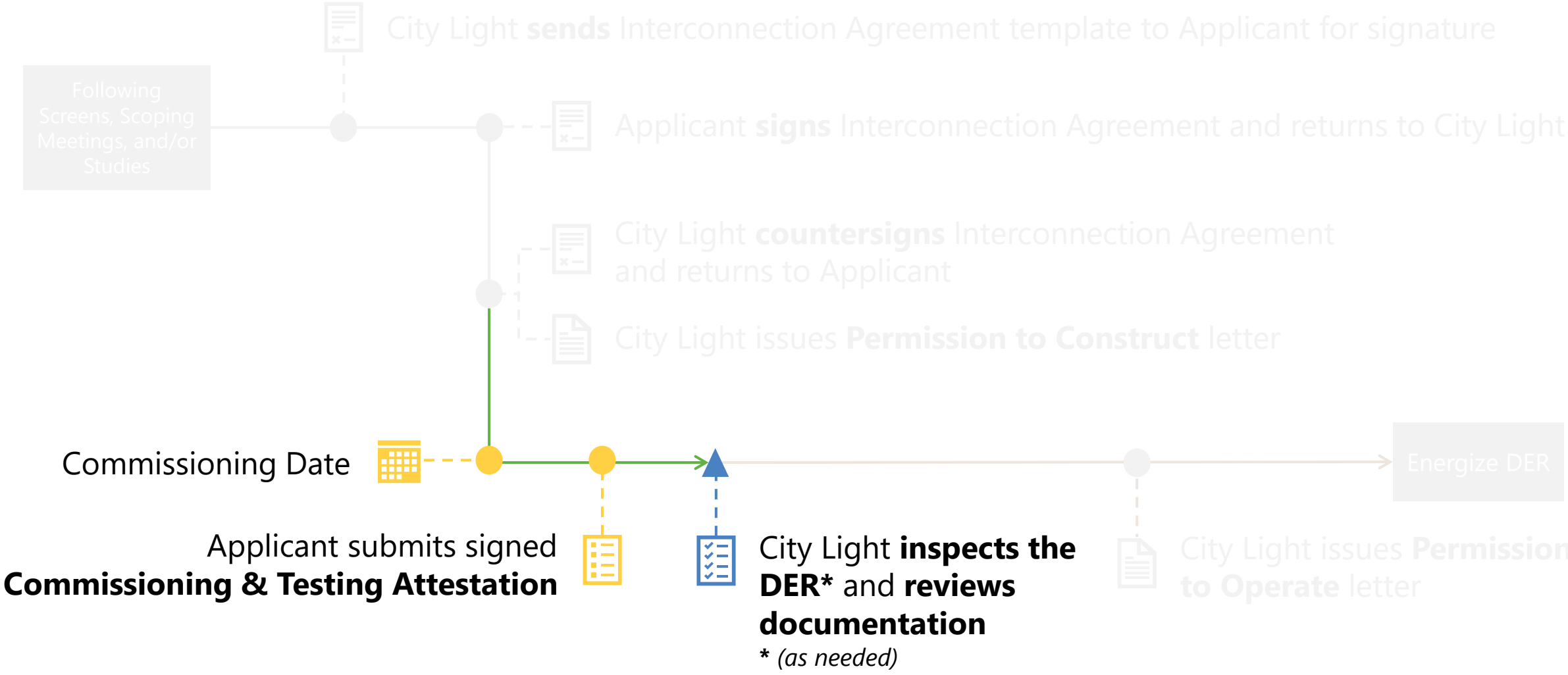
ough settings.

sumption data can be accurately reported.

Addendum A: DER Commissioning & Testing Attestation Page 2

Applicant Task
City Light Task

Completing Attestations



Submitting Final Payments

The Applicant is responsible for submitting payment for all fees and interconnection costs prior to energizing its DER. Fees are outlined in DPP 500 P III-417 *Service Installations*.

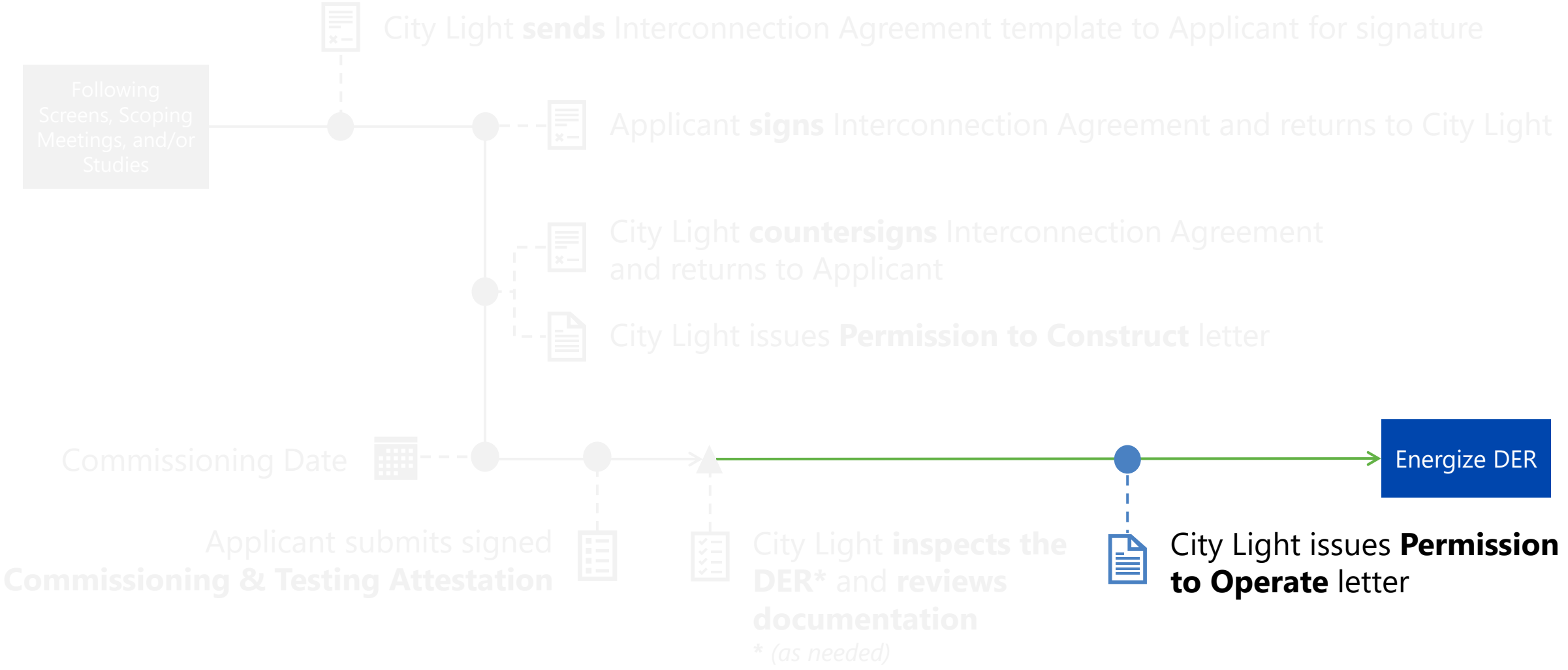
Potential charges may include:

- All labor and material costs for new, modified, or temporary electric service installations
- Amp fee
- Temporary service charges (overhead and underground)
- Easement charges
- Space check charges
- Meter enhancements
- Pole rates

Applicant Task

City Light Task

Energizing DER



DER Project Closeout: Timelines

Per the new DER Interconnection Handbook, City Light anticipates the following timelines per each activity relating to Attestations and Project Closeout:

Activity	Lead	Estimated Timing
Inform Utility of Intent to Commission	Applicant	Within 15 business days before the Applicant intends to commission the DER
Notification of Commissioning Date	City Light	At least 10 business days before the intended commissioning date – *mention if a Utility staff member or contractor will be present to witness commissioning tests*
Sign and Submit Commissioning & Testing Attestation	Applicant	*No timeline prescribed*
Issue Permission to Operate (PTO)	City Light	Within 5 business days of Applicant payment of all required fees and interconnections costs to City Light

Operating & Maintaining DER

The Applicant's interconnection responsibilities to City Light do not end when the DER is energized. Applicants must ensure their new DER meets all applicable regulations.

Some key operations and maintenance requirements include:

- Continuity in DER Configuration and Settings
- Ongoing DER Operations and Maintenance Requirements
- Ongoing Utility Access to the DER
- Insurance
- Record-Keeping
- Islanding Conditions

Refresher: DER Requirements

Although these sections are not changing because of the new DER Handbook, it is important to revisit DER requirements. The following requirements are captured in Sections 16 and 18 of the new DER Handbook:

Section 16: DER Equipment Requirements

- Adoption of IEEE 1547-2018 and City Light Inverter and Other Settings
- Safety Disconnect Switches
- Effective Grounding
- Protective Function and Equipment Requirements
- Overcurrent, Ground Fault, and Open-Phase Protection
- Under-Voltage and Over-Voltage Protection and Ride-Through Requirements
- Under-Frequency and Over-Frequency Protection and Ride-Through Requirements
- Non-Export Protection in the Looped Radial System
- Metering, Metering Labeling
- And more

Section 18: Additional Technology-Specific Requirements

- PV Panels
- Plug-In Inverter-Based Resources
- Energy Storage Systems
- Microgrids

DER Handbook Sections 16, 18
Distributed Energy Resources Equipment Requirements
Additional Technology-Specific Requirements

Level 4 Interconnection

- Review Updated Interconnection Levels
- L4 Process Overview

Seattle City Light

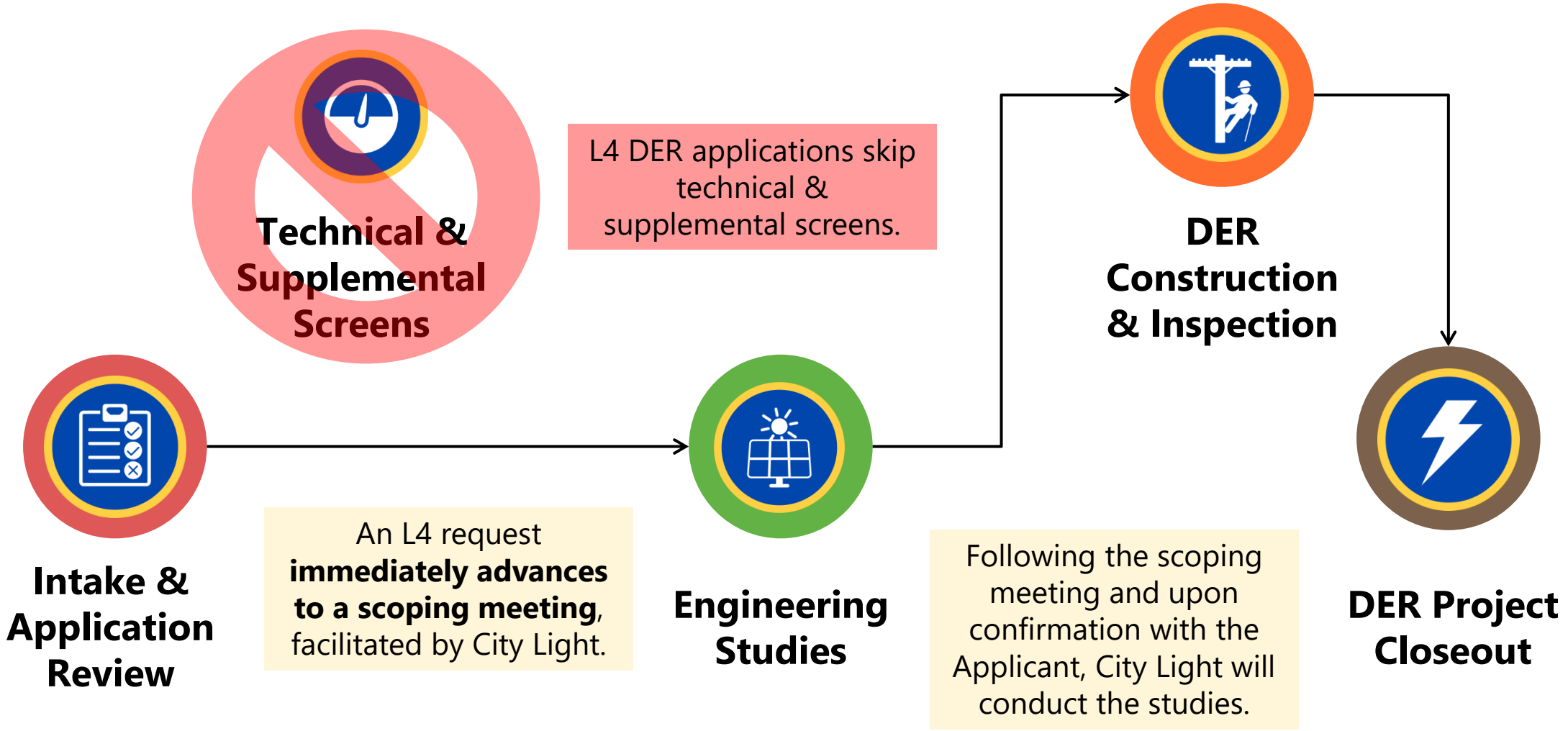
Updated Interconnection Review Levels

- **Level 1:** Standalone photovoltaic (PV) with a Nameplate Capacity less than 12 kW AC seeking to interconnect to the Looped Radial System.
- **Level 2:** Proposed DER shall meet any of these three requirements:
  - Standalone PV with a Nameplate Capacity between 12 kW AC and 100 kW AC seeking to interconnect to the Looped Radial System;
  - Inverter-Based Resource (IBR) other than Standalone PV with a Nameplate Capacity of 100 kW AC or less.
- **Level 3:** IBR with a Nameplate Capacity above 100 kW AC but equal to or below 500 kW AC.
- **Level 4:** Machine-Based Resources with any Nameplate Capacity, IBRs with a Nameplate Capacity above 500 kW AC, and any other IBRs that do not pass Supplemental Screens.

NETWORK

Network DER requests are routed to Network Engineers regardless of size. Proposed DER cannot export power to the Network System at any time.

L4 Process Overview



Resources & Next Steps

- Q&A
- Available Resources
- Next Steps

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Questions?

Use the Question tab at the top of your screen.

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Live Poll

Respond to the poll on the screen.

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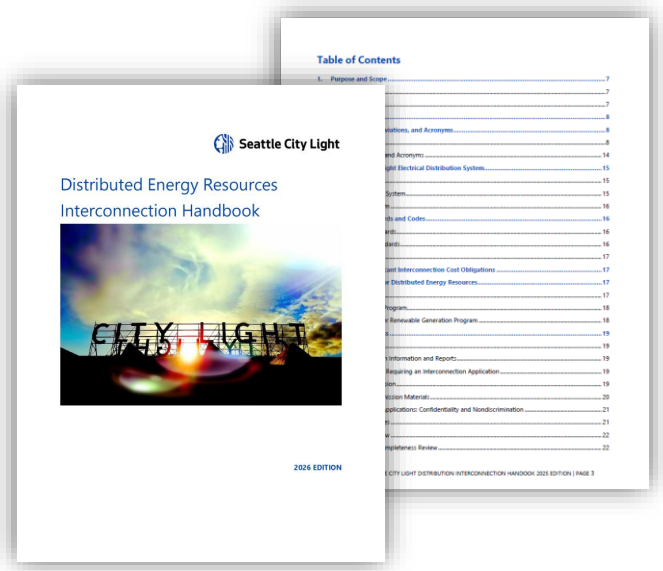
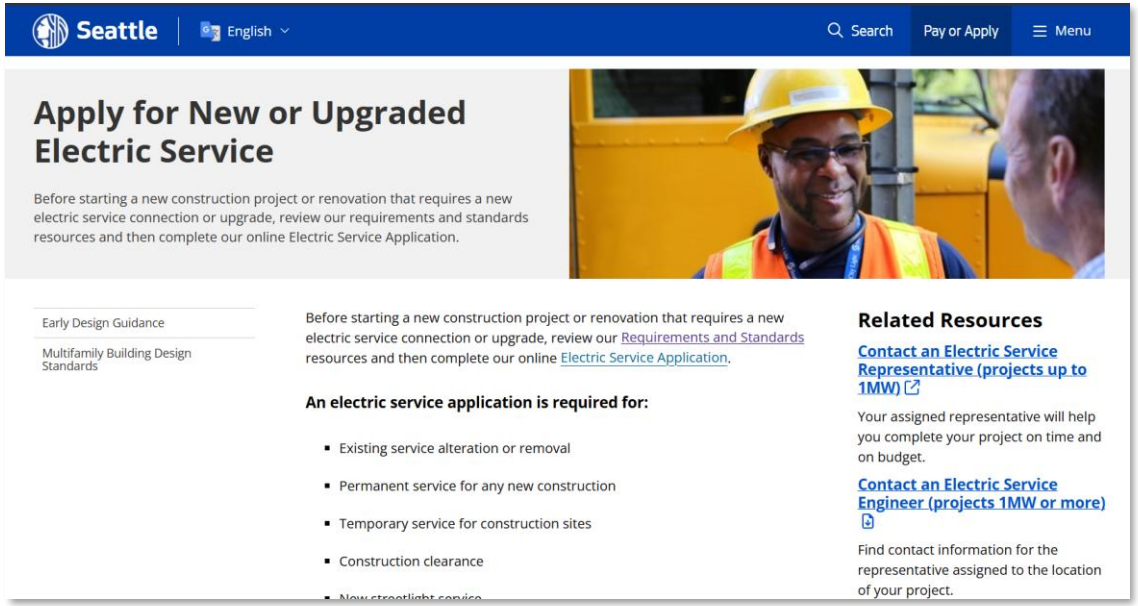
Please rate your level of comfort with the **City Light DER Interconnection Process** now that you've completed today's webinar.

Available Resources

DER Interconnection Handbook



City Light Website



Next Steps

- Review post-webinar materials and prepare for the DER Interconnection Handbook Go Live date of **January 2, 2026**
- Share webinar materials and DER Interconnection Handbook with colleagues
- Add the DER Interconnection Handbook to your browser favorites
- Reach out to Alex Porteshawver (Alex.Porteshawver@seattle.gov) with any questions

THANK YOU

Seattle City Light

Webinar Feedback

DER Interconnection Handbook
Webinar: Trade Allies