

WDAT Queue Cluster 16

An Introduction to SCE's Cluster Study Process

Purpose of Presentation

- This self-guided presentation is to help provide an understanding of SCE's Cluster Study Process under the Wholesale Distribution Access Tariff (WDAT) Resource Interconnection Procedures (RIP); specifically how to properly submit an Interconnection Request.
- Should there be discrepancies between this presentation and SCE's tariffs, SCE's tariffs and interconnection documents prevail.

Overview

- **QC 16 Updates**
- **Agreement Types**
- **Interconnection Request Information**
 - IR Checklist
 - Submittal of Interconnection Requests and Deposits
 - Interconnection Request Forms
 - Required Technical Documents
- **Smart Inverter Requirements**
- **Demonstrating Site Control**
 - **Sizing Your Generating Facility**
 - Distribution Circuits
 - Grid Voltages
- **Deliverability**
- **Charging Distribution Service for Storage projects**
 - WDAT Amendment Energy Storage
- **Wrap-Up**
 - Quick Tips
 - Important Dates & Links
 - Questions - Via Email
- **Appendix**
 - Acronym List
 - Resources

What's new for QC16?

Here are some of the changes and updates for QC16:

- WDAT amendment filed 7/10/2026 in ER26-3134, with a requested effective date of 9/9/2026. The amendment proposes to align with Interconnection Process Enhancement (IPE)-related filings submitted by CAISO with FERC since 2024, including IPE 5.0 filing accepted by FERC on 8/4/2026 with an effective date of 8/5/2026. The changes to the WDAT Include:
- The annual Cluster Request Window will move to **9/11-9/25** from 10/1-10/15, to align with PG&E and SDG&E and accommodate the CAISO's deliverability application process.
- All Cluster Interconnection Customers seeking deliverability in a Deliverable Zone **must complete an application to CAISO** during its annual Cluster Application Window, which remains 10/1-10/15. The deliverability application must be completed via CAISO's online application tool, Grid Resource Interconnection Portal (GRIP).
- WDAT Interconnection Customers are not eligible for the Merchant Zone option under CAISO's new deliverability process and those customers seeking Energy Only deliverability status are not required to apply to CAISO.
- Once a Deliverability option is selected, an Interconnection Customer may not change that selection. An opportunity to make a permitted modification regarding deliverability prior to the Cluster Study has been removed from the WDAT Resource Interconnection Process (RIP) and the timeline to discuss an alternate POI has been modified.
- CAISO will conduct its scoring process for deliverability during the first part of the 90-day Customer Engagement Window, which opens 10/16/2026. Only those WDAT Interconnection Requests (IRs) that satisfy this process will proceed to the Cluster Study; all others will be deemed withdrawn by SCE.
- The initial Commercial Readiness Deposit (CRD) will now be due before the end of the Customer Engagement Window, i.e., after IR validation.
- SCE has added a requirement that Interconnection Customers seeking to extend the Commercial Operation Date (COD) beyond 7 years must comply with CAISO's Commercial Viability Criteria (RIP Section 3.9), along with Shared Network Upgrades requirements that align with CAISO (RIP Section 9.4)

What's new for QC16? contd.

- Additional non-IPE-related changes include:
- All WDAT IRs must be submitted via SCE's online application tool, [Grid Interconnection Processing Tool \(GIPT\)](#).
- The study deposit for a modification request will increase from \$10K to \$25K; this increased deposit can also be used to pay for SCE's cost amending an agreement pursuant to a completed Interconnection Customer-driven modification assessment study report.
- After submittal of the initial CRD, any increases in the CRD will be based on Distribution Upgrades (DU) costs rather than Network Upgrade costs. The GIA Deposit will also be based on DU costs.
- Withdrawal Penalty calculations have been modified to reflect DU costs rather than Network Upgrades costs. In addition, any remaining Withdrawal Penalty funds, after being allocated towards study costs and increased DU costs in the same Cluster, will be returned to withdrawn Interconnection Customers in that Cluster.
- A project's maximum cost responsibility will include Other Potential Network Upgrades scope and cost, i.e., triggered by an earlier-queued project and not included in an executed GIA. [RIP 4.10.7.3]
- A new RIP Section 3.17 regarding transfers from Rule 21 to WDAT.
- Added specifications regarding the withdrawal timeline for Fast Track IRs.
- Revised the Wholesale Load application and study process requirements in WDAT Sections 15 and 16.

Agreement Types

Wholesale Distribution Access Tariff (WDAT) Interconnection Agreement (IA)	Allows Developers to interconnect their project to SCE's distribution system
Wholesale Distribution Service Agreement (DSA)	Allows Developers to transmit electrons through SCE's distribution system
Power Procurement Agreement (PPA)	- Selling your power to a buyer (SCE, PG&E, SDG&E, etc.) - Not included as part of this presentation

WDAT Interconnection Request Checklist

- ☑ Completed Interconnection Request (Appendix 1 to GIP) via GIPT, with all requested technical data
 - ☑ Single-Line Electrical Diagram
 - ☑ Site/Plot Plan Diagram
 - ☑ Proof of Site Exclusivity, or In-Lieu Deposit (\$10,000 per MW, subject to a minimum of \$500,000 and a maximum of \$2,000,000) including Affidavit from an officer of the company indicating that Site Control is unobtainable due to regulatory limitations, and any documentation sufficiently describing the limitations, including a description of any conditions that must be met to satisfy the regulatory limitations, including the timing to satisfy the requirements.
 - ☑ Diagrams, manufacturer's data, and written descriptions of the generating facilities
 - ☑ Distribution Service information (Interconnection Request Section 10)
 - ☑ Storage System information required for storage systems (Interconnection Request Section 11 in Attachment A)
- ☑ Study Deposit: \$35,000 plus \$1,000/MW for IRs up to 80 MW; \$150,000 for IRs 80-199 MW; \$250,000 for IRs 200 MW and greater. An additional \$20,000 study deposit is required for projects that include a request for Firm Charging Distribution Service. Projects with a combination of Firm Charging Distribution Service and As-Available Charging Distribution service require an additional \$20,000.
 - Submit your Study Deposits separately by following the payment instructions

Submitting Deposits

- Cluster Study Process Deposit
 - \$35,000 plus \$1,000/MW for IRs up to 80 MW; \$150,000 for IRs 80-199 MW; \$250,000 for IRs 200 MW and greater, and
 - \$20,000 for projects that include a request for Firm Charging Distribution Service.
 - Projects with a combination of Firm Charging Distribution Service and As-Available Charging Distribution service require an additional \$20,000.
- Site Control Deposit - In lieu of providing proof of Site Control, due to a regulatory limitation, a Deposit of \$10,000/MW, subject to a minimum of \$500,000 and a maximum of \$2,000,000 may be submitted:
 - Please **don't** send checks with your application documents. Checks need to go directly to the SCE Accounts Receivable department. Instructions will be provided via GIPT invoices or if you send a Request for Payment Instructions.
 - GIPT will **generate application invoices real-time** based on the Facility size listed in the "Facility Information" section, it will also provide invoices based on your firm charging selection (as applicable for energy storage) and your Site Exclusivity selection. Please select "other" for the payor information, and after you click "Generate Invoice" please click "Save". The generated invoices will include mailing or wiring/ACH instructions.
 - The instructions will indicate how to send the payment to SCE's Accounts Receivable separately from the documents. [Click for online link to: Request for Payment Instructions](#)
 - Due to SCE's current teleworking environment, it is preferred to wire the money as there are limited persons physically working in the office to accept and track payment.
 - **After submitting payment, send us an email providing wire confirmation or check tracking number to: Grid.Interconnections@sce.com**

Interconnection Request (IR) Forms

WDAT Distribution Interconnections

- WDAT IR form (Appendix 1 to GIP), Payment Instructions can be found on the SCE portal:
 - [www.SCE.com > Your Business > Generating Your Own Power > Grid Interconnections > Wholesale Distribution Access Tariff \(WDAT\) > Initiating a Request for Interconnection Under The GIP > Appendix 1 – Interconnection Request for a Generating Facility](#)
 - Online Portal Link: [Grid Interconnection Processing Tool](#) (this will generate a PDF upon submittal which is Revised for QC 16 applications)
 - A [WDAT User Guide](#) and [Training videos](#) are available to help new users
 - Please register in advance of the opening of the window so that we can address any issues early on.,

(Note: SCE does not accept CAISO Interconnection Requests)

CAISO Transmission Interconnections

- CAISO Interconnection Request details:
 - Online Link: [CAISO Interconnection Request details](#)

Required Technical Documents

- **Single Line Diagram**

- Generators (number of units, size, manufacturer, voltage)
- Transformers (kVA rating, winding configuration, impedance, kVA base)
- Switches/disconnects of the proposed interconnection
- Protection Devices and Circuit Breakers
- Meters

- **Plot Plan**

- Shows the buildings, utility runs, equipment layout, the position of roads, and other constructions of an existing or proposed project site at a defined scale
- [Sample SLDs & Plot Plans](#)

- **Site Drawing**

- Shows generator project location and gen tie (if applicable)
- Point of Interconnection with the SCE's Distribution System, including GPS coordinates
- GPS coordinates of the Customer's protective device
- To be provided in (.kmz) file

- **Detailed technical data for equipment**

- Manufacturer specifications and diagrams on:
 - Transformers
 - Inverters
 - UL1741 & UL 1741 SA Certification
 - Short Circuit Duty Contribution Information
 - Power system controls

Smart Inverter Requirements

- Pursuant to the CPUC resolutions E-4920, E-4898 and E-5000 new interconnection requests utilizing smart inverters will require the following:
 - UL1741 Supplement B
 - Reactive Power Priority (RPP) – Effective July 25, 2018
 - Function 5 & 6 (Frequency/Watt & Volt/Watt) –Effective February 22, 2019
 - Function SA17 and SA18 (Disconnect and Reconnect Command & Limit Maximum Active Power) – Effective June 22, 2020
- It is the responsibility of the customer/developer to purchase equipment which meets all requirements adopted in Resolutions [E-4920](#), [E-4898](#) and [E-5000](#).
- The California Energy Commission (CEC) manages the [list of eligible inverter equipment](#). For more information, visit the CPUC dedicated [Rule 21 Smart Inverter Working Group](#) website or an email may be sent to InterconnectionQA@sce.com

Smart Inverter Requirements

- IEEE Std.1547 is relevant only to distribution connected resources
 - Does not apply to resources connected to the transmission or subtransmission system
 - Numerous changes to the original 2003 standard
- While inverter manufactures may need to meet the requirements of IEEE 1547, BES resources are still subject to NERC Reliability Standards
- Existing inverters have been historically designed with distribution requirements in mind
 - While appropriate for distribution resources, this can lead to momentary cessation on the BPS which is not the intent
 - Investigations such as those into the Blue Cut Fire suggest that one root cause may have been the misapplication of IEEE 1547
- Further information regarding IEEE Std.1547 and NERC Guidelines related to inverter based resources can be found at:
 - <https://standards.ieee.org/standard/1547-2018.html>
 - https://www.nerc.com/comm/OC_Reliability_Guidelines_DL/Inverter-Based_Resource_Performance_Guideline.pdf

Demonstrating Site Control

- Read and follow SCE's Guidelines for Demonstration of Site Exclusivity: [Site Control Guidelines](#)
- Reminders:
 - The Assessor's Parcel Number (APN) should be listed on both the Site Exclusivity Documentation and the IR form. Please include the project's GPS coordinates and acreage.
 - Site Control Deposit - (1) a signed affidavit from an officer of the company indicating that Site Control is unobtainable due to regulatory limitations as such term is defined by Distribution Provider; (2) documentation sufficiently describing and explaining the source and effects of such regulatory limitations, including a description of any conditions that must be met to satisfy the regulatory limitations and the anticipated time by which the Interconnection Customer expects to satisfy the regulatory requirements; a Deposit of \$10,000/MW, subject to a minimum of \$500,000 and a maximum of \$2,000,000 may be submitted. In addition

APN Needs to Appear on Both Documents

Sample Site Control Document

Recording Requested by:
Jane Doe

And when recorded, mail the instrument and tax statements to:

Jane Doe
123 Street
Edisonville, CA

Deed/Lease/Option Document label

APN: 123-456-78910

For a valuable consideration, receipt of which is hereby acknowledged,
Jane Doe, a single woman

Hereby (grants/leases/provides option to lease or purchase) to: Jane Doe and John Doe
As joint tenants

The following real property in the City of Edisonville, County of Los Angeles, California:
Lot 00 of XYZ Addition to the City of Edisonville, as delineated on the map of said addition, recorded
01/01/2001, in Book 62, Page 013065

If Lease/Deed/Option, add terms here which should be through a specific DATE (which may include an
expiration date) such as 3/15/2020

Name of Legal Entity: Jane and John Doe

Date _____ Signature: _____ *signature*
Date _____ Signature: _____ *signature*

State of California
County of _____
On _____

Interconnection Request Form

Account & Site Location

Please fill out the address associated with the Generating Facility.

Street Address City State Zip Code

County GPS Latitude GPS Longitude

Please fill out the numbers below if applicable.

Contract Number Device Location Number Assessor's Parcel Number(s)

Please put the Assessor's Parcel Number (APN) on the Interconnection Request form in the GIPT Section Project and Contact Information

Lease/Option Date Must be Through COD

Sample Site Control Document

Recording Requested by:
Jane Doe

And when recorded, mail the instrument and tax statements to:

Jane Doe
123 Street
Edisonville, CA

Deed/Lease/Option Document label

APN: 123-456-78910

For a valuable consideration, receipt of which is hereby acknowledged,
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The following real property in the City of Edisonville, County of Los Angeles, California
Lot 00 of XYZ Addition to the City of Edisonville, as delineated on the map of said addition, recorded
01/01/2001, in Book 62, Page 013065

If Lease/Deed/Option, add terms here which should be through a specific DATE (which may include
expiration date) such as 3/15/2020

Name of Legal Entity: Jane and John Doe

Date _____ Signature: _____ *signature*
Date _____ Signature: _____ *signature*

State of California
County of _____
On _____

Interconnection Request Form

Proposed Key Dates

Proposed In-service Date
Proposed Trial Operation Date
Proposed Commercial Operation Date
Proposed Term of Service (Years)

The term of the site exclusivity document should be, at a minimum,
through the Commercial Operation Date, GIPT section Facility
Information

Interconnection Request Form

[Comment](#)

Interconnection Request Form

The Interconnection Request is submitted by:

Name of Signer

Title of Signer

Type of Entity

State of Registration of Entity

Name of Legal Entity

Email (for Docusign)

The legal name of the Interconnection Customer on GIPT section
Signatories

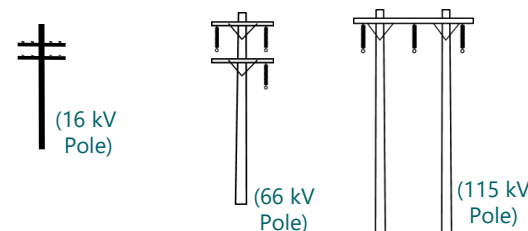
Guidelines for Sizing Your Generating Facility

- Please refer to acreage requirements in the Site Control Guidelines.
- During the Scoping Meeting, Distribution Engineering will provide system conditions and any known limitations that can assist customers to appropriately size their project.
- Allowable maximum Generation is subject to change based on queue generation and reliability constraints
- Sizes may differ based on adding energy storage due to Circuit/Substation loading

Grid Voltages – WDAT vs. TOT

SCE's distribution system = SCE controlled = WDAT

- 4 kV – 16 kV: **residential** circuits
- 16 kV – 33 kV: city/industrial circuits
- 55 kV – 115 kV: sub-transmission



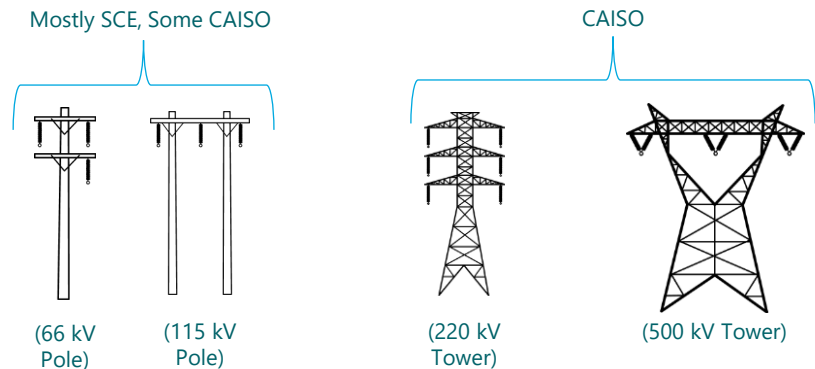
CAISO Controlled Line	kV
Control-Silver Peak "A"	55
Control-Silver Peak "C"	55
Antelope - Neenach	66
Bailey - Neenach	66
Control-Haiwee-Inyokern	115
Control-Coso-Haiwee-Inyokern	115
Inyokern-Kramer-Randsburg No.1	115
Inyokern-Kramer-Randsburg No.3	115
Ivanpah-Baker-Coolwater-Dunn Siding-Mountain Pass	115
Kramer-Roadway	115
Kramer-Victor	115
Roadway-Victor	115

CAISO Controlled Bus	kV
Control	55
Antelope	66
Bailey	66
Neenach	66
Coolwater	115
Control	115
Inyokern	115
Ivanpah	115
Kramer	115
Roadway	115
Tortilla	115
Victor	115

Grid Voltages – WDAT vs. TOT

SCE's transmission system = CAISO & SCE controlled

- 220 kV & 500 kV jurisdiction fall under applicability of the CAISO Tariff
 - Interconnection Requests must be sent to the CAISO
- Majority of the 66 kV and 115 kV system is under SCE control
 - Some exceptions do apply
 - If Interconnection Request is to the CAISO controlled grid, the project must apply to the CAISO and **not** SCE



CAISO/WDAT Deliverability Options

All Cluster Interconnection Customers seeking deliverability in a Deliverable Zone **must complete an application to CAISO** during its annual Cluster Application Window, which remains 10/1-10/15. The deliverability application must be completed via CAISO's online application tool, Grid Resource Interconnection Portal (GRIP). WDAT Interconnection Customers are not eligible for the Merchant Zone option under CAISO's new deliverability process and those customers seeking Energy Only deliverability status are not required to apply to CAISO.

Deliverability: Defined as the annual Net Qualifying Capacity of a Generating Facility, as verified through a Deliverability Assessment and measured in MW, which specifies the amount of resource adequacy capacity the Generating Facility is eligible to provide.

You must select one:

- **Energy Only Deliverability Status**
 - Avoids cost of delivery network upgrades
 - Cannot qualify as a Resource Adequacy resource in PPA
- **Full Capacity Deliverability Status**
 - Allocated delivery network upgrades in interconnection studies
 - Can qualify as a Resource Adequacy resource in PPA
- **Partial Capacity Deliverability Status**
 - Allocated delivery network upgrades in interconnection studies
 - Can qualify as a Resource Adequacy resource in PPA

All options/selections/choices are subject to curtailment

Deliverability evaluations are performed by the California Independent System Operator. Any charges incurred for these evaluations will be applied to your study deposit.

Charging Distribution Service for Storage projects

- An Interconnection Customer ("IC") can choose one of the following: 1) As-Available Charging Distribution Service only; 2) Firm Charging Distribution Service only; 3) a combination of As-Available Charging Distribution Service and Firm Charging Distribution Service; 4) "None" (if the storage component will not charge from the grid, i.e., from onsite generation).
- As-Available customers will pay a new Energy Charge Rate and a new monthly Customer Charge, unless exempted. For further information, please see Attachment K to the WDAT.
- As-Available Charging Distribution Service is based on availability on the existing Distribution System and is subject to curtailment before retail load, Wholesale Distribution Load, and Firm Charging Capacity.
- Firm Charging Distribution Service has the same curtailment priority as retail load and Wholesale Distribution Load, except during abnormal or emergency events.
- Firm Charging Distribution Service customers will pay "Higher-of-Facilities" costs or a Demand Charge Rate based on average embedded cost of distribution grid (only one, not both).
- A Firm Charging Distribution Service customer paying the Demand Charge Rate (i.e., not subject to funding Higher-of-Facilities) will up-front finance the costs of Distribution Upgrades and those costs will then be returned to the customer upon COD, over a five-year period with levelized quarterly payments plus interest.

Quick Tips

- Review our FAQ → [WDAT Processes](#)
- If a deficiency notice is received for the IR, please respond quickly, and only revise applicable sections as requested by SCE.
- **Apply Early!**
 - **The sooner an application is submitted, the sooner a response can be provided with correction requests, if necessary.**
- **Deposit must be submitted to SCE Accounts Receivable by the close of the window.**
- **The completed Interconnection Request** (Appendix 1 to RIP) must be received by the processing team by the close of the window with all requested technical data to be considered a complete package.
- **FINAL SUBMITTAL DATE/Close of the WDAT Cluster window = Friday, September 25th, 2026.**

Important Dates/Milestones

*Due Dates	Milestones
Friday, September 25, 2026	Last day to submit QC16 WDAT Cluster Applications. PLEASE do not wait until the last day!
Friday, September 25, 2026	Latest/last day for the IC to <u>submit</u> information which constitutes a valid request [See RIP Attachment M Section 4.3.3 and 4.3.3.2]*.
Thursday, October 15, 2026	Last day to submit CAISO Deliverability Application for WDAT Projects in a Deliverable Zone seeking Deliverability. PLEASE do not wait until the last day! **
October 16, 2026 – January 13, 2027	Customer Engagement Window [90 Calendar Day period, See RIP Attachment M Section 4.4]
Prior to January 13, 2027	Scoping Meeting to be held during the Customer Engagement Window
January 13, 2027	Execute Cluster Study Agreement (no later than the close of the Customer Engagement Window)
January 14, 2027	Start Cluster Study
~June 2027	Publish Cluster Study Report (150 CD after close of the Customer Engagement Window)***
~June/July 2027	Hold Cluster Study Results Meetings
~July 2027	Start Cluster Restudy

- If Interconnection Customer fails to satisfy the requirements in RIP Section 4.3.3.2, the application will be withdrawn.

** SCE will validate accuracy of Deliverability Application. It is encouraged to submit early to allow time to cure any identified deficiency(ies).

*** Dates shown above will shift accordingly for storage projects that choose Firm Charging Distribution Service.

Submittal of WDAT QC16 Interconnection Requests

An Interconnection Customer shall submit to Distribution Provider an Interconnection Request in the form of Appendix 1 for processing under the Cluster Study Process. Interconnection Request and required fee and deposits shall be submitted via Distribution Provider's online application via the following:

☑ **GIPT – Online via GIPT:** <https://gridinterconnection.sce.com>

NOTE: Interconnection Requests submitted via any other means **will not** be accepted.

Important Links

Website

- [SCE's WDAT](#)
- [SCE's Energy Procurement](#)

Forms

- [WDAT Interconnection Request \(Appendix 1, Attachment A, & request for payment instructions\)](#)
- [CAISO Interconnection Request Details](#)

Guidelines / Examples / Questions

- [Site Exclusivity Guidelines](#)
- [Distribution Resources Plan External Portal \(DRPEP\)](#)
- For questions on WDAT Interconnection Issues: InterconnectionQA@sce.com
- For questions on TOT Interconnection issues: IRinfo@caiso.com
- [CAISO Interconnection Requests \(Including Prohibited Project Names\)](#)

Have additional Questions?



Please submit questions via email
to:

InterconnectionQA@sce.com

Acronym List For Presentation

APN	Assessor's Parcel Number	IA	Interconnection Agreement
BES	Bulk Electric System	IC	Interconnection Customer
BPS	Bulk Power System	IEEE	Institute of Electrical and Electronics Engineers
BESS	Battery Energy Storage System	IR	Interconnection Request
CAISO	The California Independent System Operator Corporation	MW	Megawatt
CEC	California Energy Commission	NERC	The North American Electric Reliability Corporation
COD	Commercial Operation Date	PPA	Power Procurement Agreement
CPUC	California Public Utilities Commission	QC	Queue Cluster
DRPEP	Distribution Resources Plan External Portal	RPP	Reactive Power Priority
DSA	Distribution Service Agreement	SCE	Southern California Edison
FAQ	Frequently Asked Questions	SLD	Single Line Diagram
GIA	Generator Interconnection Agreement	TOT	Transmission Owner Tariff
GIP	Generator Interconnection Procedures	UL	Underwriters Laboratories
GPS	Global Positioning System	WDAT	Wholesale Distribution Access Tariff

In lieu of the previously provided PDF sample, we are providing additional resources to help complete the online form.

- WDAT Applications must be submitted via our online tool, Grid Interconnection Processing Tool:
<https://gridinterconnection.sce.com/prweb?AppName=GIPT>
- A **WDAT User Guide** contains information about the application, and **Training videos** are available to help new users.
- This is a new tool so please see our Frequently Asked Questions for more information:
<https://edisonintl.sharepoint.com/:b:/t/Public/Misc/ESenxULxRvdBpqq5yzzf5YREBBFuQdBWo6i7YVMdMGPIIfQ?e=n7rHN5>