Energy Storage Systems Decision Tree[1]

An opportunity for solar ("PV") applicants to propose the addition of an energy storage system ("ESS") paired with an original PV application. This interim guidance shall be in effect until further resolution is found through this investigation, or otherwise directed by the Department of Public Utilities.

Storage Coupling	Type of Change Requested	To Request a Change:	Implications	Timeline[2]
A. Direct Current ("DC")-Coupled: Requires EDC review of applicant documents to confirm that proposed changes conform to that listed in *Type of Change Requested* column.	**A.1.** No changes to site diagram, line diagram, or equipment, except adding ESS on DC side of inverter to maximize solar production in shoulder hours. Project may export across the point of common coupling ("PCC") for the hours of operation previously studied. The applicant shall provide an operating schedule showing the max requested export across the PCC.	Submit completed ESS Questionnaire and updated line diagram, data and manufacturer's cutsheet for new ESS equipment.	• No re-study required; • Queue position not impacted; • EDCs may require in the interconnection service agreement ("ISA") that any export across the PCC not exceed the amount found in the operating schedule.	10 business days.
	A.2. In-kind equipment changes, such as inverter manufacturer change are allowed. Minor site diagram or line diagram changes that do not modify the original studies electrical operating characteristics are allowed. Project may export across the PCC for the hours of operation previously studied. The applicant shall provide an operating schedule showing max requested export across the PCC.	Submit completed ESS Questionnaire and resubmit all technical details required for application including ESS modifications.		10 business days.
	A.3. Any other DC-coupled changes (e.g. power output timing, transformer, or grounding methodology) and the project may export across the PCC at any hour. In addition, if the operation of the ESS in order to participate in the wholesale market at the ISO will cause the ESS to operate differently than simply to maximize solar production in shoulder hours. The applicant shall provide an operating schedule showing the maximum requested export. Applicants may provide an operating schedule showing full export across the PCC at all hours.	Submit completed ESS Questionnaire and resubmit all technical details required for application including ESS modifications.	• Re-study required, which will identify necessary system modifications; • Queue position not impacted; • EDCs may require in the ISA that any export across the PCC not exceed the amount found in the operating schedule.	40 business days.

[1] In accordance with the Standards for Interconnection of Distributed Generation tariff ("tariff"), upon submission of an application to add ESS, the electric distribution company ("EDC") will acknowledge receipt of the application within 3 business days. The EDC will then have 10 business days after receipt of the application to notify the applicant in writing that the application is complete or incomplete.

[2] Upon a completed application, the timeline reflects the amount of time that the EDC review or study must be completed and communicated to the applicant. Timeline does not include the time to issue or amend an ISA.

B. Alternating Current ("AC")-Coupled: Automatically requires a limited or full re-study due to the impact of AC-coupled system on the engineering analysis & impact on others in the queue.	**B.1.** Existing PV inverter and transformer remain unchanged; in-kind equipment changes are allowed. The maximum export capacity across the PCC shall not exceed the originally studied site capacity of the PV system. Project may export across the PCC for the hours of operation previously studied. If the project seeks to export for additional hours, a full restudy may be required. The applicant shall provide an operating schedule showing the maximum requested export across the PCC.	Submit completed ESS Questionnaire and resubmit all technical details required for application submission including ESS modifications.	• EDC may perform a limited re-study; • Queue position not impacted; • EDCs may require in the ISA that any export across the PCC not exceed the amount found in the operating schedule.	40 business days (for limited restudy).
	B.2. Existing PV inverter and transformer remain unchanged; in-kind equipment changes are allowed or where the applicant seeks to have the AC-coupled storage and the PV system studied separately.	Maintain existing PV application. Submit a new interconnection application for ESS addition.	• PV queue position not impacted (if it progresses as per tariff & ISA timelines); • ESS application to be processed separately, with new queue position. New system impact study required for ESS evaluation.	Tariff study process timelines apply.
	B.3. Any addition of AC-Coupled storage where PV site and/or electrical designs *change*.	Withdraw existing PV application & submit a new interconnection application for paired PV & ESS.	• PV & ESS start from the beginning of the normal application process under the tariff; • PV application loses initial queue position.	Tariff study process timelines apply.

Note: All re-studies will be based on current EPS configuration and applications in the queue (even if queue position is maintained).