



September 9th, 2020

Board of Governors
California Independent System Operator
250 Outcropping Way
Folsom, CA 95630

Dear CAISO board,

I write to draw your attention to an unfortunate situation involving a loss of deliverability to an operational energy storage project. I am requesting the CAISO Board of Governors consider how CAISO may be able to correct this situation. SEPV Sierra, is a solar plus battery storage project interconnected to the distribution grid in Lancaster, CA which **due to an unfortunate flaw in CAISO's communications regarding a deliverability transfer request within a given project from generation to storage, has effectively cost our project ~75% of the deliverability it had been awarded, which amounts to millions of dollars of losses** over the life of this project. This loss occurred although our project had taken numerous steps since 2018 to add storage to the solar generation component. We are seeking to correct this errant loss of deliverability, without which our project will likely not be able to expand due to undermined economic incentives. Without CAISO action in this regard, our project will be 'at the back of the line' for award of deliverability with extremely uncertain outcomes that materially harm the project.

I am the President of B2U Storage Solutions Inc., of which SEPV Sierra LLC is a wholly owned affiliate. This hybrid resource project is online and operational in CAISO market.¹ Our company and this project are indicative of an important market segment developing distributed energy resources (DERs). Encouragement of DER projects such as ours aligns with CAISO's most recently [published strategic plan](#) entitled, "Build a Sustainable Energy Future" which states strategic planning faces a **central challenge to "formulate a plan that not only encourages this innovation [including distributed hybrid energy resources], but enables it's success by ensuring a reliable and sustainable grid."**

Our problem: Earlier this year, we were informed that the SEPV Sierra project (CAISO resource ID: LNCSTR_6_SOLAR2 with ISO control # 20NGR11200) had lost the majority of deliverability that had been awarded to the resource in the Distributed Generation Deliverability (DGD) program through a CAISO deliverability transfer process which we were *not* informed of, and did not learn about until after the deadline (12/2/19) had passed. We do not feel the process which led to the effective loss of deliverability for our now operational hybrid resource was fair and just. Prior to this letter, we have attempted to pursue a resolution with CAISO to regain the deliverability that was *not* credited to our project's storage component, although our project had converted to on-site solar charged energy storage in 2018, long before CAISO's deadline (See Appendix A for timeline of actions.) But because our project's deliverability was not associated with the already studied storage component, the project effectively lost ~75% of deliverability due to NQC adjustments.

In May of this year, we met with staff and CAISO staff, along with representatives of the California Energy Storage Alliance (CESA), to seek a clear process by which our project could regain the

¹ Interconnection queue for CAISO, and the IOUs indicate numerous gigawatts of hybrid resources in development

lost deliverability. However, it was communicated to CESA in June that CAISO did not feel that further steps would be taken to rectify the situation. We do not have clarity on a path forward for regaining the lost deliverability, beyond staff's advice to reapply. Securing an award of deliverability to a distribution interconnected resource is highly uncertain, time-consuming and not inexpensive under the best of circumstances. In the case of our operational hybrid resource, such a project would be 'at the back of the line', where, *if any deliverability were available at the applicable location*, other prospective projects just entering the interconnection queue would be considered and awarded deliverability before our project would be considered. This is not appropriate when our project's deliverability was effectively taken away from the project in a manner that was not "fair and just", where we were not informed of the need to request a deliverability transfer directly to CAISO.

We have followed all the rules, at least those that we communicated to us. We do not have staff working on transmission-connected projects directly with CAISO. We received no notice from SCE of the deliverability transfer requirement which for our distribution interconnected resource, SCE is the only source of communication allowed through the DGD program. Given that we weren't notified by SCE, how were we supposed to know that we needed to submit a transfer request to CAISO?²

In our May meeting with CAISO, knowledgeable staff stated that it was a "no brainer" to transfer deliverability to storage from the solar component of a generator to avoid the sweeping ELCC derating of a project's deliverability as effectively reduced by the project's NQC.³ CAISO also acknowledged that Notice had NOT been provided to DGD program participants by the DGD program administrator and single point of contact (SCE in our case). The lack of Notice to distribution interconnected resources that didn't otherwise have any direct interaction with CAISO is not "fair and just."

Thank you again for this board's consideration of our request for a clear process to regain deliverability that doesn't penalize us further in seeking to be made whole given this circumstance and the clear steps we've taken to add storage to meet CAISO and system goals. We are requesting that you direct staff to seek an equitable outcome where a clear path is available for our project to regain the deliverability that was lost.

Regards,



Freeman S. Hall
B2U Storage Solutions, Inc.
2425 Olympic Blvd., Suite 4000-W
Santa Monica, CA 90404

² It is also worth noting that when SCE awarded Deliverability to our project in the DGD program, neither SCE nor CAISO adjusted the award by a solar ELCC to a lower effective NQC. Our resource was granted 7.5MW of Deliverability which CAISO's system had not derated. This indicates that a request of Deliverability transfer from the solar to storage component of our project should not have been necessary to avoid effectively losing the Deliverability that was awarded by SCE on a technology agnostic basis.

³ Such a step to convert Deliverability from the solar to storage component of our project was described as a "no brainer" by Ms. Deb Levine in a May 5, 2020 meeting with CAISO staff on this situation.

Appendix A: Timeline

Timeline Regarding Deliverability related matters for SEPV Sierra LLC, a distribution interconnected solar charged battery hybrid resource, located in SCE service territory in Lancaster, CA

Date	Event	Comment
April 2017	Deliverability Application to SCE in Distributed Generation Deliverability (DGD) program	
May 2017	Deliverability Award Notice from SCE (7.5Mw) in DGD program	
November 2018	Storage Request submitted to SCE as a material modification application (MMA)	
March 2019	Storage Request MMA approved by SCE	
May 2019	Long lead time equipment orders placed (inverter, transformer, switchgear, batteries, and modules)	
November 2019	Construction Started on DC-coupled energy storage system	
December 2, 2019	CAISO Deadline to request Deliverability transfer	SCE did not notify DGD program participants of Deliverability transfer request process implemented by CAISO, or that SCE's award of Deliverability in DGD program, not previously adjusted for NQC on a technology basis, would be materially reduced due to NQC Deliverability 'discounting'; Deliverability reductions applied even for resources where storage MMAs had been studied and approved by SCE
February 13, 2020	Submitted Deliverability transfer request to SCE	Submitted Deliverability transfer letter to SCE upon learning about CAISO Deliverability transfer process (see attached)
February 20, 2020	Submitted Deliverability transfer request to CAISO	Submitted form to CAISO after being told by SCE that this should be directed to CAISO (see attached)
April 15, 2020	Interconnection Facilities completed by SCE	Delay by SCE due to Covid impacts
May 10, 2020	Ph1 of Energy Storage System commissioned, declared Commercial Operation for Markets (COM), approved by CAISO on 5/14	ISO project # 16GEN1376, which is being updated to 20NGR11200, after recognition by CAISO that solar charged battery hybrid resource had been mischaracterized by CAISO NRI consultants US-Most

Appendix B: Deliverability Transfer request and explanatory letter dated February 13, 2020



February 13, 2020

Queue Management Department
California Independent System Operator
250 Outcropping Way
Folsom, CA 95630

Southern California Edison Company
Manager, Grid Contracts Management
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

As you know, SEPV Sierra, LLC (SEPV), wholly owned by Solar Electric Solutions, LLC, is developing the SEPV Sierra Project (Project). The Project is a solar-and-storage (S+S) hybrid resource with 8.5 MW capacity at the Point of Interconnection (POI). The Project is comprised of three combined Interconnection Requests (IRs), designated in the Southern California Edison Company (SCE) Wholesale Distribution Tariff (WDT) as WDT290A, WDT290B, and WDT1528. The storage component will charge only from the solar component.

SCE has fully approved the consolidation of these queue positions under a single Small Generator Interconnection Agreement (SGIA) (in the finalization process), SEPV has provided all required deposits, and SCE and SEPV have already completed the necessary interconnection work. The first portion of the project has been constructed, and SEPV has requested Permission to Operate (PTO) from SCE; that permission is expected to be received at any time.

The Project was originally studied as a solar-only facility and awarded Resource Adequacy (RA) deliverability under the Deliverability for Distributed Generation (DGD) on that basis. Please see the allocation award listing submitted with this document, where the Project IRs receiving deliverability are the two first listed in the 2017 allocation process (WDT290A and WDT290B, shown at their original 3 MW and 4.5 MW POI capacity limits).

The Project hereby submits the attached Deliverability Transfer Request Form, to transfer the 7.5 MW of deliverability awarded to that solar capacity to the approved storage component. To the extent that this transfer request would constitute a modification of the Project, SEPV requests such a modification under Section 3.4.5 (Modifications to the Small Generating Facility) of the existing SCE-SEPV WDT290A and WDT290B SGIA's.

SEPV offers the information below in support of this request – both the assumptions regarding the deliverability of the original solar capacity and the amount of the deliverability-transfer request.

Information supporting this request

- **This request meets the requirements of CAISO Tariff Appendix DD, Section 8.9.9 for deliverability transfer**, i.e., the proposed reallocation would:
 - Be among Generating Units at the same POI and under the same GIA.
 - Not increase the aggregate output as a result of the transfer.
- **This request meets the requirements of Section 8.9.9 regarding methodology**, i.e., is based on “the current Deliverability Assessment methodology.” There are two parts to the “current Deliverability Assessment methodology” for the Project award through the DGD process: (1) The CAISO methodology used to determine deliverability available for allocation through that process; and (2) the SCE method used to allocate that available deliverability to the Project (and others receiving such DGD awards).

With respect to the current CAISO methodology, SEPV is aware that the CAISO has filed with FERC tariff changes to significantly revise that methodology. However, as of the date of this request, FERC has not ruled on the CAISO’s filing, so the methodology used to determine the original award remains in place and would apply to this request.

(Another reason for processing this request under the current CAISO methodology is the level of communications regarding recent December 2nd deliverability-transfer submittals to the CAISO. These communications were not clearly targeted to nor passed on in a timely way to DGD projects seeking interconnection under distribution-level tariffs, and developers with projects only at the distribution level were not necessarily aware of the process or its implications. Regardless of that issue, as indicated above, this request was submitted under the current tariff CAISO provisions, and there is no basis in the tariff for applying any different standards or methodology.)

With respect to the current SCE DGD award methodology, the Project DGD award document clearly indicates that SCE allocated the Project a full 7.5 MW of deliverability. This is apparent both through the explicit 7.5 MW shown for the two solar-generation queue positions in the “Assigned DS” and “Assigned Deliverability Capacity against Available PDGD” columns, and subtraction of a combined 7.5 MW from the DGD available for assignment in the “Remaining Deliverability Capacity against Available PDGD” column.

Other solar photovoltaic projects on the awards list similarly received DGD awards for their full output at the POI, not some lesser amount based on CAISO study methods. SEPV has no reason to assume that SCE has changed its DGD award practices since 2017 and, assuming that is the current situation, this award practice should be considered SCE’s “current methodology” for purposes of this request, even though it differs from the CAISO study methodology.

Thus, the request assumes that the Project was most recently “studied” at 7.5 MW of deliverability and retains that amount today. If CAISO and or SCE determines that this is not the case, SEPV requests the rationale for any disagreement with this conclusion, with references to specific CAISO or SCE tariff provisions.

- **The 7.5 MW deliverability transfer is sufficient to support the requested Full Capacity Deliverability Status (FCDS) for the storage component.** As indicated above, the storage will have 34 MWh of storage capacity, more than sufficient to support a 7.5 MW FCDS deliverability amount under the current CAISO study methodology.

Conclusion

No other modifications are requested, e.g., the Project would retain the same Commercial Operation Date (COD), installed capacity, POI location and maximum output, and technology. SEPV understands that CAISO's approval of this request may be conditioned on a successful conclusion of the current SGIA consolidation process.

Please let me know if you require additional information to evaluate this request.

Thank you in advance for your consideration.

Sincerely,



Freeman S. Hall
President
Solar Electric Solutions, LLC
2425 Olympic Blvd., Suite 4000-W
Santa Monica, CA 90404

Copy relevant CAISO and SCE staff

2150 Allston Wy, Suite 400
Berkeley, CA 94704

September 9, 2020

To Whom It May Concern:

On behalf of the California Energy Storage Alliance (CESA), I write to attest that I have reviewed the interconnection deliverability matters of the SEPV Sierra project, in Lancaster, CA, that lost deliverability for its project due to a CAISO process.

I attest that the SEPV Sierra project clearly sought to transfer deliverability to its energy storage attributes in order to retain deliverability and to supply Resource Adequacy (RA) from its energy storage assets. This effort was undertaken in good faith by SEPV Sierra and **was started prior to the CAISO's deliverability transfer window in 2019. This shows that the resource was clearly unaware of the CAISO's statements and deliverability transfer protocols and timelines, which makes sense since the resource had interfaced only with the distribution system company, Southern California Edison, on its interconnection and deliverability, and because the resource is managed by a small team that lacked exposure to CAISO "Market Notices" via other projects**

CESA represents a broad spectrum of energy storage companies and industry members. We seek reasonable outcomes and support adding energy storage to the electric system to support a cleaner, greener, safer, and more reliable electric system for all Californians.

I hope that you'll urgently consider the situation of SEPV SIERRA to appropriately restore any inappropriately removed RA deliverability. We should support projects that act in good faith and clearly work to support state reliability, e.g. by adding storage to existing resources to improve the performance, RA value, and to address CAISO needs.

I welcome any discussion on these matters and all the best.

Sincerely,



Alex J. Morris
Executive Director
California Energy Storage Alliance
www.storagealliance.org