Connecticut Green Bank
Docket No. 26-08-02
Response to Interrogatory CAE-32
Date of Submission: August 17th, 2026
Witness: Connecticut Green Bank - Sergio Carrillo

Question:

Id., p. 4. Discuss the prevalence of DC-coupled solar and storage systems compared to AC-coupled systems, as well as any anticipated technological changes or adoption trends in the future.

Response:

Within the Energy Storage Solutions ("ESS") Program's list of completed projects, AC-coupled Battery Energy Storage Systems ("BESS") appear to represent the majority of installed systems and are approximately 83% of the fleet across both electric distribution company ("EDC") territories. However, there are also a number of DC-coupled solar systems, approximately 17%, as well as certain systems that may be configured for either AC coupling or DC coupling, depending on the specific installation design and operational needs. The percentage of DC-coupled systems within the ESS dataset does not fully reflect the broader BESS market, as the EDCs have access to a larger population of systems through the interconnection dataset beyond those included in the ESS Program.

Within the ESS Program, the share of DC-coupled systems is likely to increase over time. This trend may be influenced by the growing use of Tesla Powerwall 3, which can be configured as an AC or DC coupled solution and is one of the more prevalent battery brands participating in the Program, along with FranklinWH, which also offers comparable system configurations and has introduced the aPower S which has the ability to be AC or DC coupled depending on the configuration.