Policy Position on Dual-use Energy Storage Serving Both Transmission and Energy Market Services Functions

In this document, the U.S. Energy Storage Association (ESA) outlines its official principles and policy positions regarding dual-use energy storage resources serving both a transmission function, also known as “storage-as-transmission” and an energy market services function. ESA’s principles reflect the fundamental values that we seek to uphold in our policy and regulatory advocacy. ESA’s policy positions reflect specific matters that we will work to operationalize through laws, administrative rules, programs, and other policy or regulatory activities. The principles and policy positions presented herein are interdependent and, as such, ESA intends that the following principles and policy positions be referenced as a whole and not in part.

The document refers to dual-use storage offering both energy services and transmission services only. For ESA’s positions on storage-as-transmission only, please see our 2019 policy statement.

Additionally, the focus of this document is on regional transmission planning. While some of the below recommendations may apply to interregional or local transmission planning, they are intended to be read as applying to regional planning processes – hence our general reliance on Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) as responsible entities.

Guiding Principle: The policy positions in this document are intended to address dual-use energy storage resources’ provision of generation and transmission services (the positions do not address ownership and competition). For ESA’s positions on ownership and competition, please see our 2018 policy statement.

PRINCIPLE 1: ISO/RTO tariffs must allow energy storage resources to participate in transmission services and market services. Accordingly, the ISO/RTO transmission planning process must allow energy storage resources to offer to meet the needs of, and requirements for, upgrades for which they are technically feasible of providing. Tariff and market rules should allow a single energy storage resource to receive compensation for the provision of both transmission and market services as long as those services are technically feasible and as long as those services are operationally and financially distinct.
**PRINCIPLE 2**: Storage as transmission projects seeking to offer services in organized markets should not be competitively advantaged as a result of timing differences in the transmission planning process. Any storage project that has been submitted for approval or has been approved in a regional transmission planning process that seeks to also offer services to an organized market shall be subjected to the existing generator interconnection study process.

**PRINCIPLE 3**: There are multiple combinations of full vs. partial cost-recovery and market revenue crediting that can be contemplated for dual-use storage. Regional processes should allow for all such mechanisms to be developed and filed for approval.

**PRINCIPLE 4**: ISOs/RTOs should put in place measures to mitigate potential market distortions from dual-use storage. As an example, if a storage resource serves a transmission function and also participates in wholesale markets, the storage asset may be required to adopt an established or agreed upon way of accounting for transmission revenues in the calculation of its bid or offer price in the market.

**PRINCIPLE 5**: ISO/RTO Staff will have the option to maintain control of the dispatch of a dual-use storage asset for transmission operations, as it is the ISO/RTO that holds the burden of reliability. As captured in [ESA’s storage as transmission policy position from 2019](#), ISO/RTO control of any storage resource will be subject to the restrictions agreed upon in an operating agreement specific for the individual resource. The dual-use storage asset owner/operator will be responsible for offering market services to the organized market, as an ISO/RTO cannot participate in its own market. Opportunities for market participation will be based upon studies and will also be reflected in the resource operating agreement. The parameters to define state-of-charge (SOC) management for transmission operations purposes shall also be formalized in the operating agreement, and ISO/RTO Staff shall again have the option to exercise control. SOC management for market participation purposes will be left to the asset owner/operator. The criteria for when ISO/RTO Staff may take control of a dual-use storage resource for SOC management purposes will be based on specific operating conditions or periods of time derived from studies and forecasts. Such criteria will be specified in the resource operating agreement.