

Guidelines for End-of-Life/Recycling of Lithium Ion Battery Energy Storage Systems: Energy Storage Association Corporate Responsibility Initiative



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

09/10/2020

The Energy Storage Association (“ESA”) issued what it describes as a “Corporate Responsibility Initiative” titled:

Guidelines for End-of-Life and Recycling of Lithium Ion Battery Energy Storage Systems (“Guidelines”)

The stated purpose of the *Guidelines* is to:

1. address the end-of-life (EOL) management challenges that arise as the stationary energy storage system (ESS) industry grows; and
2. serve as a reference for manufacturers, integrators, developers, financiers, asset owners and others to inform product development, project planning, execution and policy related to EOL management.

The *Guidelines* provide insight into end-of-life management of lithium ion batteries from decommissioned storage systems in an environmentally sustainable way. The suggested importance of the *Guidelines* is the fact that the most prevalent energy storage technology in both EV and ESS applications is lithium ion batteries of various chemistries and types.

These energy storage systems are classified as hazardous waste upon reaching end-of-life.

The *Guidelines* note:

Managing advanced industrial batteries after their useful lives poses unique challenges for many stakeholders in the industry value chain. With deployments on a gigawatt-hour (GWh) scale of ESS battery systems planned, the industry must address an approach for managing the extensive fleet of advanced industrial batteries that are being deployed now and will need to be managed responsibly upon reaching end-of-life in future years.

Components of the *Guidelines* include:

- Li-ion ESS Decommissioning and Recycling
- Decommissioning Process
- Current Estimates of Decommissioning and Recycling Cost
- Decommissioning Cost Accounting
- Existing Facility EOL Planning Guidelines

- EOL Considerations for ESS Under Development
- Design for Recycling
- Allocating Contractual responsibility for End-of-Life
- Industry Action to promote and Improve Recycling
- Conclusion
- Appendix A: Federal Regulation of Li-ion Waste Batteries
- Appendix B: Approaches to Achieve a Circular Economy

A copy of the *Guidelines* can be downloaded [here](#).