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March 7, 2023

Arapahoe County Public Works and Development
Planning Division
6924 Lima Street
Centennial, CO 80112

RE: Proposed Front Range Energy Storage Battery Energy Storage System
USR with 1041 Application and Minor Subdivision

Dear Public Works and Development:

Our company, Atwell, LLC on behalf of the property owner, Lowry Environmental Protection Cleanup Trust Fund, and applicant, Front Range Energy Storage, LLC, is proposing a project within unincorporated Arapahoe County. The subject property is a 19.10-acre (832,202 sf.) lot to be created by minor subdivision, within the A-1 Agricultural zoning district, generally located at the SW corner of S. Harvest Road and Quincy Avenue (a portion of PPI 2071-07-1-00-003). The proposed project is a battery energy storage system ("BESS") that will enhance the reliability of the electrical grid and add value to the "Green Power Pathway" that has been approved by the Public Utilities Commission.

The development application includes a minor subdivision and Use by Special Review with 1041("USR with 1041"). The minor subdivision includes one lot and one tract. The lot is 19.10 acres (the location of the proposed battery energy storage facility), and the tract is 83.67 acres (the remainder of the land owned by the Lowry Environmental Protection Cleanup Trust Fund). The tract will remain undeveloped as part of this application, and will be reserved for future subdivision by others. As the enclosed application materials demonstrate, the application complies with all applicable requirements for approval of a minor subdivision.

The County has advised the applicant that the proposed BESS will be processed as "Major Electrical Facilities of a Private Company," which is permissible in the A-1 Zoning District as a USR with 1041. As the enclosed application materials demonstrate, the application complies with all applicable requirements for approval of a USR with 1041.

Operationally, the proposed BESS will be interconnected to Xcel Energy's Harvest Mile substation located directly south of the subject property. The BESS will provide Xcel Energy the ability to balance electric grid services by providing energy reserves, frequency regulation, and renewable energy balancing. The battery system will charge directly from the existing electrical grid (via the electricity provided by an interconnection to the substation during periods when demand for energy is low) and discharge electricity through the same path (through the substation and into the grid) when demand for energy is high. This is a very important project for the region and for the State of Colorado, as it will enhance the reliability of the electrical grid, improve the state's ability to continue to diversify its energy mix, and help the state meet its objectives for electrical infrastructure modernization.

The BESS's batteries are contained within purpose-built enclosures that include bidirectional inverters (converting AC power from power lines to DC power for batteries, and vice versa). These containers are laid out in individual rows with electrical transformers. In addition to the battery containers, other accessory equipment is proposed, including a small, project specific electrical substation. The battery containers will be supported on concrete pad foundations. Once installed, the containers will not be more than 12 feet in height above the ground. The proposed project substation will include approximately 2,000 square-feet of concrete pad foundations for associated facilities including an electrical step-up transformer, switchgear/control unit, up to four lightning poles approximately 50 feet in height (for security and safety purposes), and a dead-end structure up to approximately 90 feet in height. An electrical transmission line would also be installed to provide a connection to the Harvest Mile substation that is directly south of the site.

Within the 19.1-acre subject property, the area of the battery units and substation is approximately 8.65 acres, which leaves 10.45 acres or 54.7% of open space on the site, which includes the access roads, existing subterranean gas pipeline easements along the western portion of the site and the onsite detention pond.

If you have any questions or need any additional information, please feel free to call me at 303-868-5658.

Respectfully,



Chris Sveum, P.E.
Project Manager

cc: Front Range Energy Storage, LLC

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