



STORAGE BATTERY SYSTEM PERMITTING

STEP	RESPONSIBLE PARTY	INSTRUCTIONS
1	Property Owners or Contractor	Obtain STORAGE BATTERY PROJECT CLEARANCE LETTER for site plan from the South Davis Metro Fire Agency : Submit site plans via email to Fire Marshal, Casey Vorwaller, at cvorwaller@sdmetrofire.org AND Fire Inspector, Amanda Mertens amertens@sdmetrofire.org (CLEARANCE LETTER <u>must</u> be included with battery application materials.) See Attachment 5 , <i>South Davis Metro Fire Agency "Battery Site Plan Requirements,"</i> for Fire Code guidelines.
2	Property Owners or Contractor	Obtain BLOCK DIAGRAM (ONE-LINE) APPROVAL for battery plan from Bountiful City Light & Power (submit site plans via email to power company solar representatives Kim Bushnell (kbushnell@bountiful.gov) and Jerrell Jensen (jjensen@bountiful.gov)). Upon approval of the block diagram, Power will stamp the diagram. <u>Please include the stamped diagram with your battery application.</u> Site plan should include: property owner's name, property address, transfer switch and disconnect equipment information and battery system size (in kWh).
3	Property Owners or Contractor	SUBMIT COMPLETED BATTERY SYSTEM PERMIT APPLICATION PACKET via email to PLANNING@BOUNTIFUL.GOV AND PAY \$50 APPLICATION FEE AT 801-298-6190. See Attachment 1 for a list of items to be submitted. Please use the check-list provided to ensure your application is complete. INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.
4	Bountiful City Planning & Engineering	Approve battery system plans. (Applicant will be notified when permit is ready for issuance.)
5	Contractor or Property Owner	Pay Battery System Building Permit fee. Fee may be paid by phone via credit card at 801-298-6190.
6	Contractor or Property Owner	Upon completion of battery system installation, call Engineering at (801) 298-6125 for INSPECTION.
7	Bountiful City Engineering	Engineering INSPECTION at property.
8	Bountiful City Engineering	Contact Power Company with approval to alert them to new battery system power source.

PHONE NUMBERS	
Planning:	801 298-6190
Engineering:	801 298-6125
Metro Fire:	801 677-2400
Power:	801 298-6072 (Kim or Jerrell)

PERMIT COSTS		
	Application Fee	\$50.00
	**Building Permit for City	\$300.00
	**Building Permit for State	\$3.00
	**Building Permit for Plan Check	\$30.00
	TOTAL	\$383.00



BATTERY SYSTEM APPLICATION PACKET

Please include the following with your application (8 1/2 x 11" paper, single-sided only):
INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

SITE PLAN: One set of the proposed site plan drawn at 1:10 scale or as required by the City Engineer and City Planner. A site plan shall include:

- Plan view (bird's-eye) of site with placement of battery system.
- A north arrow, the scale of the drawing, and the date of the drawing.
- Street names and addresses.

FOR GROUND-MOUNTED BATTERY SYSTEMS, THE FOLLOWING:

- Property lines with dimensions.
- All sidewalks, driveways, curbs and gutter, and parking areas.
- All existing easements, rights-of-way, and any other restrictions on the use of the property.
- Existing buildings, proposed buildings, and other significant features on the site.
- Existing buildings and significant features located on adjacent properties within 50 feet (50') of the subject property boundaries.
- When required by the City Planner or City Engineer, and for all new construction, a survey including both existing and proposed contours of the land at intervals of two feet (2') or better.

ONE-LINE DIAGRAM (electrical diagram or block diagram)

ENGINEER ANALYSIS LETTER: Engineer's letter should include an analysis of the existing structure with added battery equipment, it should indicate the engineer has based analysis on a site visit or has examined photos.

COMPLETED BATTERY PACKET FORMS:

- Battery System Questions (Attachment 2)
- Bountiful City Light & Power – Battery System Diagram form (Attachment 3)
- Building Permit Application (Attachment 4)

SPEC SHEETS: Battery System product information

PHOTOS: Electrical service (City meter main with disconnect)
4 CLEAR Photos: Location (10 ft either side), Dead Front ON, Dead Front OFF, and Panel Label.

SOUTH DAVIS METRO FIRE AGENCY: Approval Letter (See Attachment 5 for guidelines)

\$50 APPLICATION FEE Please call 801-298-6190 to pay by Credit Card

For Office Use Only

Date Rec'd _____

- Fire: Ltr of Approval
- Questions Complete (kWH)
- Battery Sys Agt (signed prop owner)
- BCLP Diagram (signed)

\$50 App Fee Rec'd _____

- Permit App
- Site Plan
- One-Line (2 sets)
- Engineer Ltr (analysis, photos?)

Battery info to POWER

- Spec sheets
- Elec serv photo
- ___ kWH ___ Modules
- Check prop owner



STORAGE BATTERY QUESTIONS

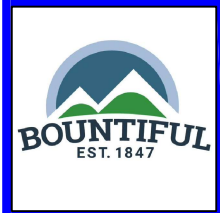
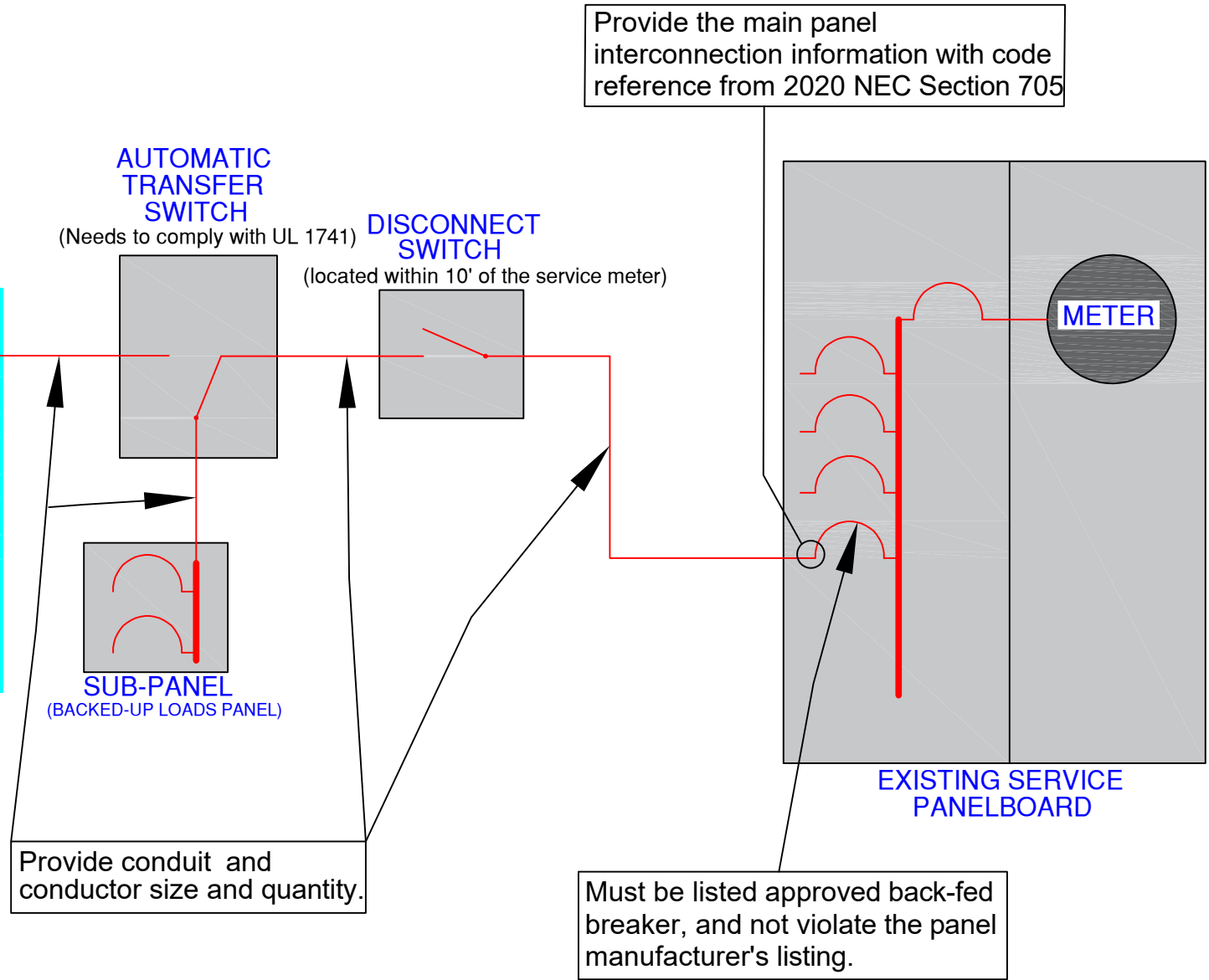
(See Bountiful City Code Section 14-14-126 for additional information.)

Size of Battery System	
<p>1. Battery System Dimensions</p> <p>2. Total Number of Battery Modules</p> <p>3. Total Rating of Battery System</p>	<p>1.</p> <p>2.</p> <p>3. _____ kWH</p>
Mounting Location	
<p>Where will the battery system be mounted? (roof/wall/other)</p>	
<p>What access to the battery system is available?</p>	
<p>1. What is the material the battery system will be mounted to? (sheetrock/brick/concrete/tile/steel/other)</p> <p>2. Will battery system be enclosed inside a building?</p>	<p>1.</p> <p>2.</p>
Engineering Analysis	
<p>How will the battery system be connected to the mounting material?</p>	
<p>Please summarize the engineer's analysis of the existing mounting structure with added battery equipment.</p>	<p>(do <u>not</u> simply refer to an attachment)</p>

Service Upgrade	
<p>Will you be performing a Change of Service as part of this Battery Permit? <i>*This may also be done by separate Permit prior to the Battery System Application. The Fee is the same. Please contact Engineering @ 801-298-6125</i></p>	<p>Will the new service be:</p> <p>1. _____ Add \$75.00 Overhead</p> <p>2. _____ Add \$150.00 Underground</p> <p>3. _____ No Additional Fee - No Change of Service Required</p>

BATTERY SYSTEM

(Needs to comply with UL 9540).
Provide size (capacity) of batteries.



**BOUNTIFUL CITY BATTERY SYSTEM REQUIREMENTS
SAMPLE ONE LINE**

CITY ENGINEER: 801-298-6125
POWER ENGINEER: 801-298-6072

**BOUNTIFUL CITY
BUILDING PERMIT APPLICATION
STORAGE BATTERY SYSTEM**

DATE OF APPLICATION:

VALUE OF PROJECT:

ESTIMATED START DATE:

ESTIMATED COMPLETION DATE:

BUILDING ADDRESS:

PROPERTY OWNER

NAME:

PHONE:

ADDRESS:

EMAIL ADDRESS:

GENERAL CONTRACTOR:

ADDRESS:

CONTACT PERSON:

PHONE:

PHONE:

EMAIL ADDRESS:

EMAIL ADDRESS:

STATE LICENSE NO:

ELECTRICAL CONTRACTOR:

PHONE:

ADDRESS:

STATE LICENSE NO:

EMAIL ADDRESS:

CONTACT PERSON:

BOUNTIFUL CITY ENGINEERING DEPARTMENT:

City Hall, 795 South Main Street, Bountiful, UT 84010

PHONE: 801 298-6125

Office Hours: Monday-Thursday, 7:00 a.m. – 6:00 p.m.

FOR OFFICE USE ONLY

DATE ENTERED: _____

PERMIT NO: _____

PLANNING REVIEW COMPLETE

ENGINEERING REVIEW COMPLETE

BUILDING OFFICIAL REVIEW COMPLETE

DATE

INITIALS

DATE

INITIALS

DATE

INITIALS

South Davis Metro Fire Agency "Storage Battery System Requirements"

All Storage Battery System plans are required to have a **South Davis Metro Fire Agency Storage Battery System Project Clearance Review Letter** prior to submittal to Bountiful City.

Storage Battery System plans should be submitted to Fire Marshal Casey T. Vorwaller, South Davis Metro Fire Agency, via email: cvorwaller@sdmetrofire.org **AND** amertens@sdmetrofire.org Amanda Mertens, Fire Inspector. Plans will then be reviewed for firefighter and occupant safety and, if approved, a *Storage Battery Project Clearance Review Letter* will be issued. Please address all fire code questions to Fire Marshal Vorwaller. See Attached [Utah Code Section 15A-3-202](#) Beginning with section R327.1

Per the South Davis Metro Fire Agency, the items they will be looking for on the reviews will be:

1. An aerial site plan, preferably a satellite image (google maps), of the structure,
2. Location of the batteries on the structure including location and access in and around the building,
3. The location of the main shut off for the battery system, including what identification signs will be used,
4. A description of the type of battery system being installed (a/c, d/c, grid-tie, stand alone, etc.).

Please include the following on the application:

1. Name of Project/Residence/Business
2. Physical address of project including which city it is in
3. Contact info for battery system installation company including address, phone number, email address, name of designer, name of installer.

South Davis Metro Fire Agency Contact Information:

Casey T. Vorwaller
Fire Marshal
cvorwaller@sdmetrofire.org

Amanda Mertens
Fire Inspector
amertens@sdmetrofire.org
Office: (801) 677-2407
Front Desk: (801) 677-2400

Effective 7/1/2021**15A-3-202 Amendments to Chapters 1 through 5 of IRC.**

- (29) In IRC, Section R327.1 is deleted and replaced with the following: "327.1 General. Energy storage systems (ESS) shall comply with the provisions of this section.
Exceptions:
1. ESS listed and labeled in accordance with UL 9540 and marked "For use in residential dwelling units", where installed in accordance with the manufacturer's instruction and NFPA 70.
2. ESS less than 1kWh (3.6 megajoules)."
- (30) In IRC, Section R327.2 is deleted and replaced with the following: "327.2 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540.
Exception: Where approved, repurposed unlisted battery systems from electric vehicle are allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm) from exterior walls, property lines and public ways."
- (31) In IRC, Section R327.3 is deleted and replaced with the following: "327.3 Installation. ESS shall be installed in accordance with the manufacturer's instructions and their listing."
- (32) In IRC, Section R327, a new section 327.3.1 is added as follows: "327.3.1 Spacing. Individual units shall be separate from each other by not less than three feet (914 mm) except where smaller separation distances are documented to be adequate based on large-scale fire testing complying with Section 1206.2.3 of the adopted International Fire Code."
- (33) In IRC, Section 327.4 is deleted and replaced with the following: "327.4 Locations. ESS shall be installed only in the following locations:
1. Detached garages and detached accessory structures.
2. Attached garages separated from the dwelling unit living space in accordance with Section R302.6.
3. Outdoors or on the exterior side of exterior walls located not less than 3 feet (914 mm) from doors and windows directly entering the dwelling unit.
4. Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard.
ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into sleeping rooms."
- (34) In IRC, Section 327.5 is deleted and replaced with the following: "327.5 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating of the ESS shall not exceed:
1. 40 kWh within utility closets, basements, and storage or utility spaces.
2. 80 kWh in attached or detached garages and detached accessory structures.
3. 80 kWh on exterior walls.
4. 80 kWh outdoors on the ground.
ESS installations exceeding the permitted individual or aggregate ratings shall be installed in accordance with Sections 1206.2.1 through 1206.2.12 of the adopted International Fire Code."

- (35) In IRC, Section 327.6 is deleted and replaced with the following: "327.6 Electrical installation. ESS shall be installed in accordance with NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction."
- (36) In IRC, Section 327, a new section 327.7 is added as follows: "327.7 Fire detection. Rooms and areas within dwelling units, basements, and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section R314. A heat detector, listed and interconnected to the smoke alarms, shall be installed in locations within dwelling units and attached garages where smoke alarms cannot be installed based on their listing."
- (37) In IRC, Section 327, a new section 327.8 is added as follows: "327.8 Protection from impact. ESS installed in a location subject to vehicle damage shall be protected by approved barriers."
- (38) In IRC, Section 327, a new section 327.9 is added as follows: "327.9 Ventilation. Indoor installations of ESS that include batteries that produce hydrogen or other flammable gasses during charging shall be provided with mechanical ventilation in accordance with Section M1307.4."
- (39) In IRC, Section 327, a new section 327.10 is added as follows: "327.10 Electric vehicle use. The temporary use of an owner or occupant's electric-powered vehicle to power a dwelling unit while parked in an attached or detached garage or outdoors shall comply with the vehicle manufacturer's instructions and NFPA 70."
- (40) In IRC, Section 327, a new section 327.11 is added as follows: "327.11 Signage. A sign located on the exterior of the dwelling shall be installed at a location approved by the authority having jurisdiction which identifies the battery chemistry included in the ESS. This sign shall be of sufficient durability to withstand the environment involved and shall not be handwritten."

Amended by Chapter 102, 2021 General Session
Amended by Chapter 199, 2021 General Session