Battery Energy Storage Systems (BESS)

Town Law Development—Part 2

Jim Ulvestad (Town Board Member)

June 30, 2026

Goals of This Presentation

- Discussion of open questions raised at May 5 discussion of BESS Tiers and Gardiner zones
  - Suggested choices for Town Board consideration
- Additional topics not discussed on May 5, for consideration
  - Noise limits
  - Setbacks
  - Decommissioning, bonding, and permitting

- Display proposed Use Table and illustrated zoning map

- Results will go into a **DRAFT** law, which will be subject to further revision and change.

Electricity Consumption in Gardiner

- Power consumption averaged over all year, all times of day
  - Estimate: ~5 MW
- Power consumption at peak (summer afternoon, >90º F)
  - Estimate of 3-4 times average: ~15-20 MW
- Total energy usage at peak for 4-6 hours
  - Estimate of ~60-120 MWh

Extreme Price Spikes on Hot Days

June 24, 2025

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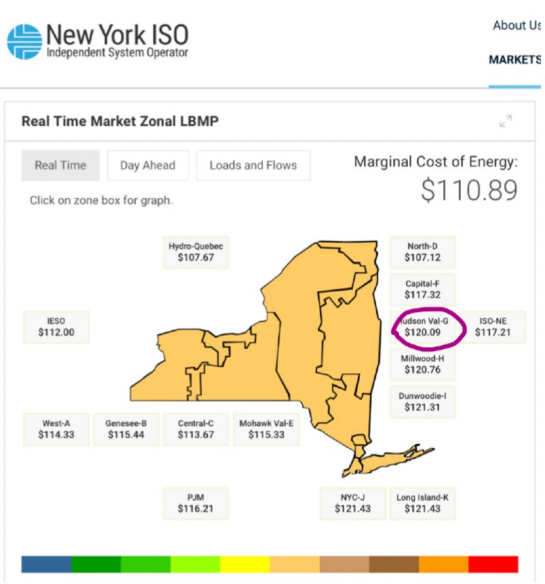

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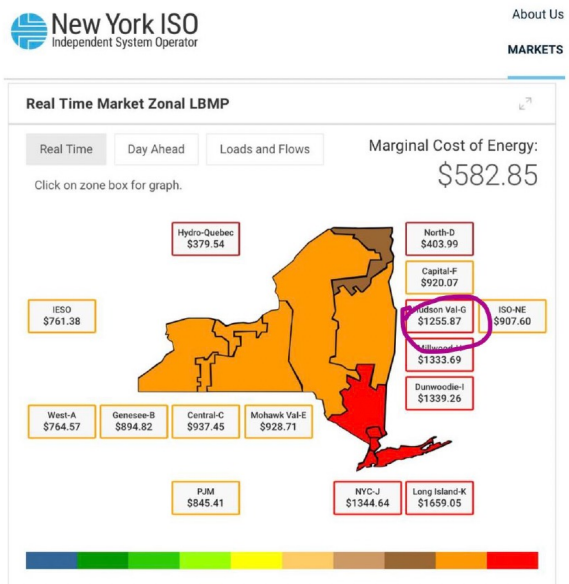

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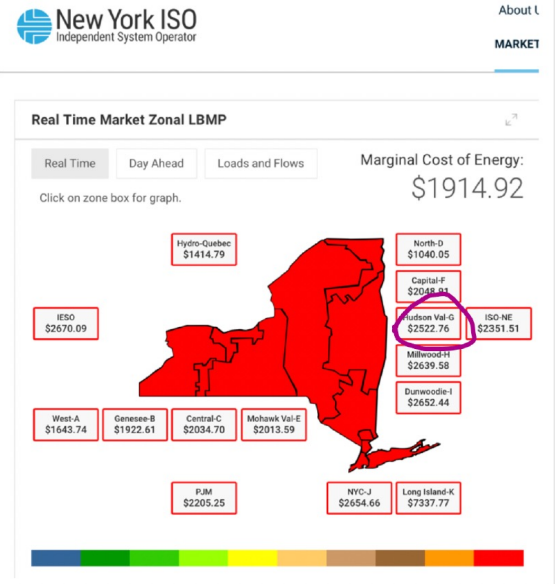


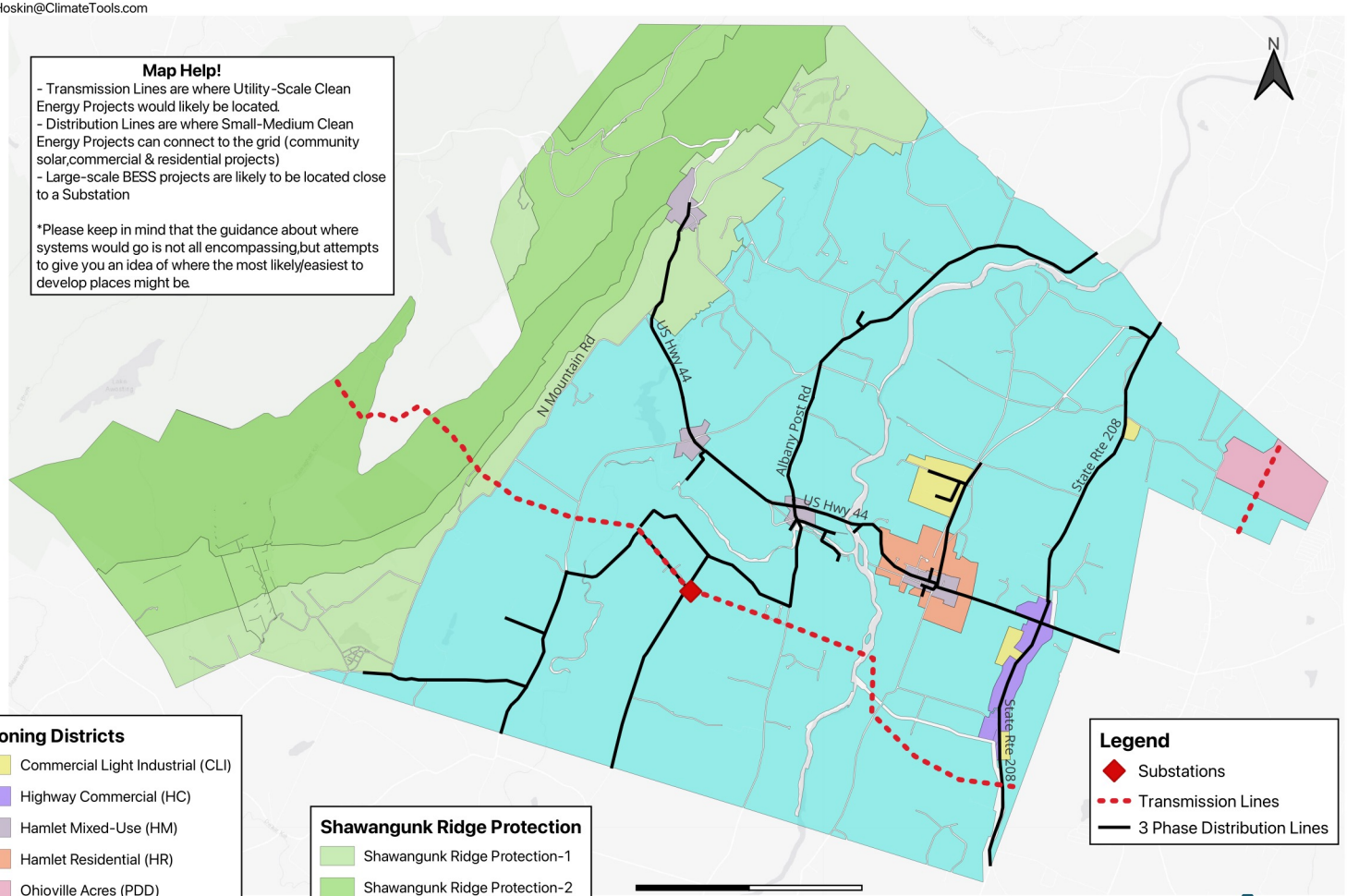
Copied from Jeff Seidman presentation, April 14, 2026

Proposed BESS Tiers

- Tier 1: ≤ 80 kWh Accessory Use
- Tier 2: 80-600 kWh Accessory Use
- Tier 3: 600 kWh – 8 MWh
- Tier 4: 8 MWh – upper limit?

Revised May 2026
Sources: Ulster County GIS Dept.,
Central Hudson Utility Company
For use as visual tool
Eva.Hoskin@ClimateTools.com

Town of Gardiner - Zoning & Utility Map



Proposed Questions from May 5

- Question 1: Permit Tier 2 (80-600 kWh) in SP-1 or not? Yes
- Question 2: Permit Tier 2 (80-600 kWh) in HR and Hamlet Expansion Overlay or not? No?
- Question 3: Permit Tier 3 (up to ~8 MWh) in parts of RA and HM or not?
  - Sub-question 3a: Should there be an overlay district along 3-phase transmission lines? Yes
  - Sub-question 3b: Should there be an overlay district at the Burnt Meadow substation and/or along part of the high-voltage transmission lines in RA District? Yes, for Tier 3
  - Sub-question 3c: Should permission be allowed by defining a floating district in conjunction with a large-scale solar array sited in the RA District? No, too confusing?
- Question 4: Is 8 MWh the right upper limit for Tier 3? Yes
- Question 5: Should there be an overlay district allowing Tier 4 (> 8 MWh) at the Burnt Meadow power substation or along part of the H-V transmission lines? No?

Other Questions Regarding Tiers/Zones

- Upper limit for Tier 4 (proposed to allow in PDD only)
  - Recommend 100 MWh
- Relation to Aquifer Protection District (APD)
  - APD is currently under development, not yet in zoning code
  - Difficult to write law for moving target
- Overlay on 3-phase and high-voltage lines
  - Battery System Overlay (BSO)
  - Propose allowing Tier 3 ≤ 500 feet from lines in RA only (already to be allowed in HC, CLI, and PDD)

Proposed Tiers and Current Zones—May 5

	Tier 1 (< 80 kWh)	Tier 2 (80-600 kWh)	Tier 3 (0.6-8 MWh)	Tier 4 (> 8 MWh)
SP-3	Yes	No	No	No
SP-2	Yes	No	No	No
SP-1	Yes	?	No	No
RA	Yes	Yes	No*	No*
HR	Yes	?	No	No
HM	Yes	Yes	No	No
Overlays	Yes	No#	No	No
Floating	Yes	Yes	No	No
CLI	Yes	Yes	Yes	No
HC	Yes	Yes	Yes	No
PDD	Yes	Yes	Yes	Yes

- No* for RA alludes to the possible issues of overlays (1) along 3-phase distribution lines (Tier 3) or (2) along high-voltage transmission lines and Burnt Meadow substation (Tiers 3 and 4).
- No# for Overlays indicates the possibility of allowing Tier 2 in Hamlet Expansion Overlay.

Proposed Tiers and Current Zones--Updated

	Tier 1 (< 80 kWh)	Tier 2 (80-600 kWh)	Tier 3 (0.6-8 MWh)	Tier 4 (> 8 MWh)
SP-3	Yes	No	No	No
SP-2	Yes	No	No	No
SP-1	Yes	Yes	No	No
RA	Yes	Yes	BSO only	No
HR	Yes	No?	No	No
HM	Yes	Yes	No	No
Overlays	Yes	No (except BSO)	No	No
Floating	Yes	Yes	No	No
CLI	Yes	Yes	Yes	No
HC	Yes	Yes	Yes	No
PDD	Yes	Yes	Yes	Yes

- Aquifer Protection District: TBD

Noise, Setbacks, Height, Definitions

- Noise Limits
  - Current code requires noise ≤ 70 dBA at property boundary during day; ≤ 60 dBA at night (10 pm – 7 am)
  - Recommend ≤ 55 dBA at boundary, all hours of day
    - 50 dBA is about the ambient noise level inside a “normal” home; 60 dBA is a normal conversation at a distance of a few feet
- Setbacks
  - Tiers 1 and 2: Follow current zoning law
  - Tier 3: Suggest 100 feet from property boundary
  - Tier 4: Suggest 300 feet from property boundary
- Height limits
  - Recommend following current zoning laws
- Public Utility definition: Exclude BESS from definition

Site Plan, Decommissioning, Bonding, & Permitting (Tiers 3 and 4)

- Site plan and special use permit through Planning Board
  - Includes many criteria for landscaping, etc.
- Decommissioning and Bonding
  - Extensive decommissioning plan required
  - Bonding amount TBD by Town, re-evaluate every 2 years
- Permitting
  - Permitting fee in addition to standard Planning Board fee?
  - Based on capacity
    - E.g., $1000/yr/MWh?
- Site-specific SEQRA review also required for any proposed system

Revised May 2026
Sources: Ulster County GIS Dept., Central Hudson Utility Company
For use as visual tool
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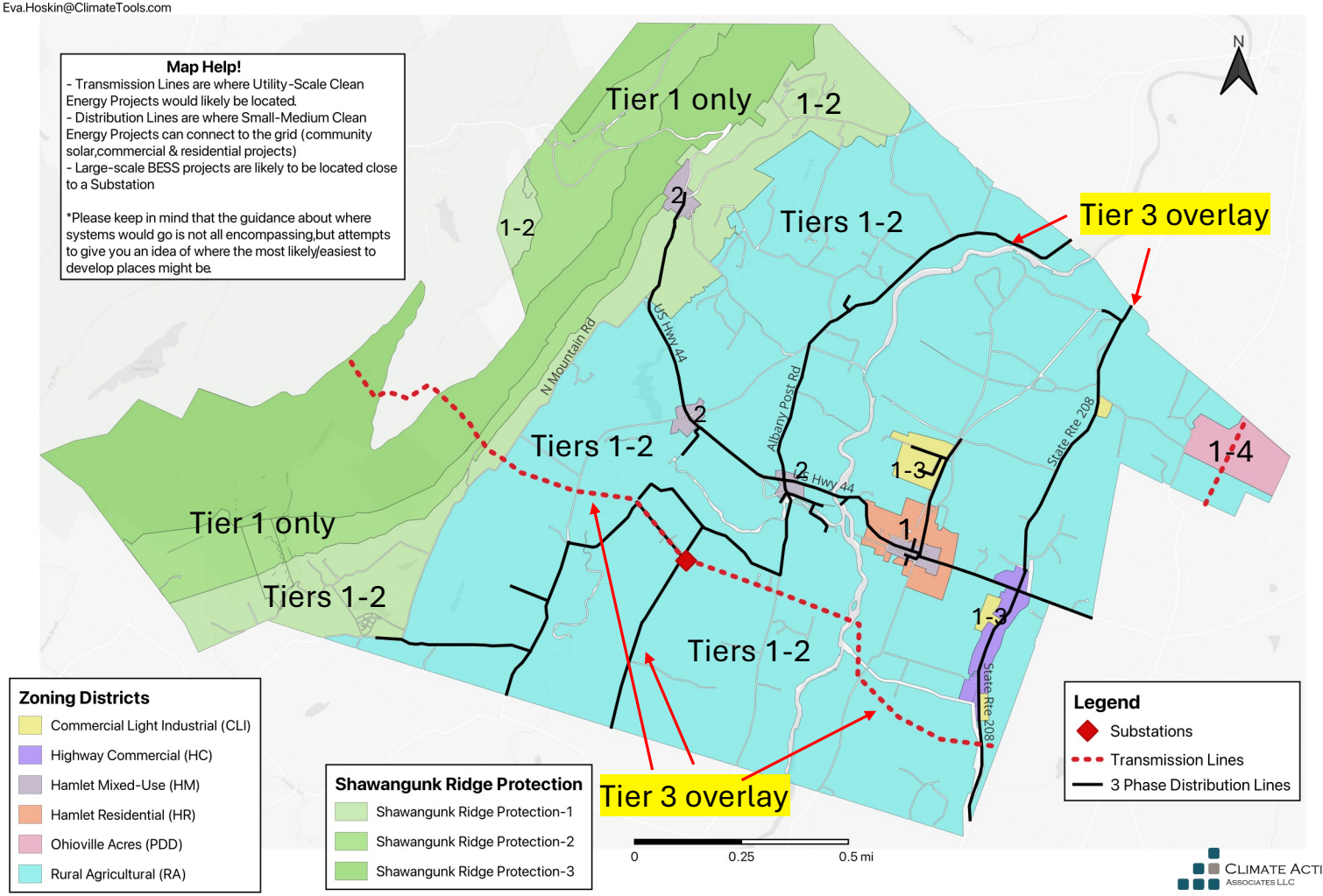
Town of Gardiner - Zoning & Utility Map with draft BESS law



Timeline for Gardiner Town BESS Law

- June 30—Special Board meeting to agree on initial parameters of Draft Town Law + vote on 6-month moratorium extension
- July 23—6-month moratorium extension begins
- July/August—Draft Town Law and amendments to Zoning Code
- August/September—Iteration with attorney(s)
- September/October—Submit draft to Town of Gardiner Planning Board and Ulster County Planning Board for review
- October—Incorporate Planning Board suggestions into draft
- November—Public hearing on draft law; revise based on input
- December—Town Board vote on BESS Law

Backup slides Follow

General Comments

- Town code and zoning laws provide guidance and constraints for future BESS developments
  - Small-scale BESS (< 600 kWh, currently defined as Tiers 1 and 2) are subject to general building code and fire code restrictions and inspections
  - Larger-scale BESS (> 600 kWh, Tiers 3 and 4) have many additional requirements from the New York State fire code
    - Any proposals to construct Tier 3 or 4 BESS would require a site plan, planning board review, special use permit, demonstration that all the requirements of the fire code are met, any additional requirements that we might put in our BESS code, and site-specific SEQRA review
- BESS code would establish guidelines for permitting (or not) different BESS tiers in various locations, currently unregulated in Town Code. This does not imply any commitment to hosting such systems, none of which have been proposed to the Town of Gardiner to date.