

HAYES TOWNSHIP

COUNTY OF CHARLEVOIX, STATE OF MICHIGAN

ORDINANCE NO. 6.2

ADOPTED: _____

EFFECTIVE: _____

BATTERY ENERGY STORAGE SYSTEM ORDINANCE

This Ordinance is to establish minimum requirements and regulations for the construction, erection, placement, location, maintenance, modification, operation, and decommissioning of Battery Energy Storage Systems in the Township in a manner that promotes economic development and ensures the protection of health, safety, and welfare while also avoiding adverse impacts to important areas such as agricultural lands, residential areas, endangered species habitats, conservation lands, and other sensitive lands.

HAYES TOWNSHIP, CHARLEVOIX COUNTY

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**SECTION I :DEFINITIONS ADDED TO ARTICLE II RULES OF CONSTRUCTION
AND DEFINITIONS**

The following definitions shall be added to Article 2.02 of the Township Zoning Ordinance, and shall be inserted into said Zoning Ordinance so that all definitions are in alphabetical order:

Battery Energy Storage System: One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt car battery, an electric motor vehicle, or small store-bought batteries designed and used purely for household electronic items.

Battery Energy Storage System, On-Site: a Battery Energy Storage System that is an accessory use that is intended to primarily serve the needs of the consumer on-site.

Battery Energy Storage System, Small Off-Site: A Battery Energy Storage System that is a principal use (or co-located with a second principal use) and that is designed and built to connect into the distribution or transmission grid with a nameplate capacity less than 50 megawatts.

Battery Energy Storage System, Large Off-Site: A Battery Energy Storage System (BESS) that is a principal use (or co-located with a second principal use) and that is designed and built to connect to the transmission grid with a nameplate capacity of 50 megawatts or more.

51 *Non-Participating Property:* Any property that is adjacent to a participating property, but is not
52 part of the battery storage project.

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55 *Participating Property:* A battery energy storage system host property or any real property that is
56 the subject of an agreement that provides for the payment of monetary compensation to the
57 landowner from the system owner (or affiliate) regardless of whether any part of a system is
58 constructed on the property.

59
60 **SECTION II**

61 **AMEND ARTICLE III GENERAL PROVISIONS TO ADD A NEW SECTION 3.28,**
62 **TITLED “ON-SITE BATTERY ENERGY STORAGE SYSTEM REGULATIONS”**
63 **ADD A NEW SECTION 3.29, TITLED “OFF-SITE BATTERY ENERGY STORAGE**
64 **SYSTEM REGULATIONS”**

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66 A new Section 3.28 entitled “On-Site Battery Energy Storage Systems” is added to the
67 Township Zoning Ordinance to read as follows:

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69
70 **Section 3.28 On-Site Battery Energy Storage Systems.**

- 71
72 1. On-Site Battery Energy Storage System shall be allowed as an accessory use in all
73 zoning districts, subject to the provisions of this Zoning Ordinance.
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75 2. A zoning permit shall be required for all on-site battery energy storage system.
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3. On-Site battery energy storage with an aggregate energy capacity of more than 1 megawatt are subject to additional regulations in the applicable fire code, and required documentation shall be submitted along with the building/electrical permit applications.

4. Coverage. Lot coverage shall not exceed the otherwise permissible percentage of lot coverage for buildings in the applicable district, as specified in Article IV, section 4.13.

5. Setbacks. All battery energy storage system structures and related structural apparatus not physically attached to a building shall satisfy the setback requirements in the applicable district, as specified in Article 4.13 or the specific Section for such district, as applicable.

A new Section 3.29, titled “Off-Site Battery Energy Storage Systems” is hereby added to the Township Zoning Ordinance to read as follows:

Section 3.29 Off-Site Battery Energy Storage Systems.

The following requirements shall apply to all off-site battery energy storage systems:

~~1. Site Selection. In the “AG” Agricultural Preservation District (“Agricultural”), this land use shall not unreasonably diminish farmland, including, but not limited to,~~

prime farmland and, to the extent that evidence of such farmland is available in the
evidentiary record, farmland dedicated to the cultivation of specialty crops.

1 Battery Energy Storage Systems, Small Off-Site shall be allowed as a special land-
use in the following zoning districts:

A. Agricultural (A-1)

B. General Industrial (I-1)

C. Rural Residential (RR) when co-located with a Principal Use Solar Energy
System Special Land Use

D. Neighborhood Commercial (C1) and General Commercial (C2)

2. Battery Energy Storage Systems, Large Off-Site shall be allowed as a special land
use in the following zoning districts:

A. Agricultural (A-1)

B. General Industrial (I-1)

C. Rural Residential (RR) when co-located with a Principal Use Solar Energy
System Special Land Use

D. Neighborhood Commercial (C1) and General Commercial (C2)

SECTION III

AMEND ARTICLE VII SUPPLEMENTAL SITE DEVELOPMENT STANDARD TO ADD SECTION 7.01.23 OFF-SITE BATTERY ENERGY STORAGE SYSTEMS

The following minimum setbacks shall be required. Setbacks are measured from the nearest facility structure to the nearest point on the associated item:

- E. 100 feet from any property line of a non-participating property
- F. 300 feet from the nearest point on the outer wall of a dwelling on nonparticipating property
- G. 50 feet measured from the nearest edge of a public road right-of-way, or distances as defined in the current versions of NFPA code 1 and 855 and any future amendment to these.

5. Height. The height of battery energy storage system structures, except for electric distribution and transmission poles, shall not exceed a height of twenty (20) feet as measured from the natural grade of the property beneath the structure. Stacking of battery storage system components is prohibited.

6. Fencing. The system shall be completely enclosed with fencing in compliance with the latest version of the National Electrical Safety Code or any applicable successor standard approved by the Michigan Public Service Commission.

7. Sound. The system may not generate a maximum sound in excess of 55 average hourly decibels as measured at the property line of an adjacent non-participating property. Decibel modeling shall use the A-weighted scale designed by the American National Standards Institute. The Planning Commission may require the applicant to provide a sound study as part of the special land use review process

- 152 8. Lighting. The system must implement dark sky-friendly lighting solutions as
153 defined in Article II, Section 3.20.
- 154
- 155 9. Impacts of Battery Energy Storage System, Small Off-Site and Battery Energy
156 Storage System, Large Off-Site.
- 157
- 158 A. The following requirements shall apply to the entire system, or to designated
159 components of the system, as indicated:
- 160
- 161 i. Safety Signage. The system shall post signs in compliance with NFPA
162 70/70E or any applicable successor code in place at the time of
163 application for approval. Additionally, signage shall be provided per
164 NFPA 855 7.4.4, or any applicable successor code in place at the time
165 of application for approval, including information on the system type
166 and technology, special hazards, fire suppression system and 24-hour
167 emergency contact information, including reach-back phone number.
168 A clearly visible warning sign concerning voltage shall be placed at
169 the base of all pad-mounted transformers and substations.
- 170
- 171 ii. Other Signage: Additional signage may be permitted or required by
172 the Planning Commission as is necessary to ensure the safe operation
173 of the system.
- 174
- 175 iii. The facility shall comply with NFPA 855 “Standard for the
176 Installation of Stationary Energy Storage Systems”, or any

177 applicable successor standard adopted by the Michigan Public
178 Service Commission.

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180 B. The Planning Commission shall require reasonable measures to minimize
181 visual impacts by preserving existing natural vegetation, requiring new
182 vegetative screening or other appropriate measures. The Planning
183 Commission shall determine such visual screening measures as may be
184 required, if any, on a site specific basis pursuant to the standards for special
185 land use approval as specified in Section 3.24 and/or the standards for site
186 plan approval as specified in Article V of this Ordinance, as most applicable
187 to the circumstances. In making this determination the Planning
188 Commission is specifically authorized to consider whether additional visual
189 screening measures are appropriate where a system is proposed to be located
190 on property adjacent to a residential use and/or a residential district zoning
191 classification. All screening/landscaping shall be properly maintained
192 throughout the life of the project including replacement of any dead
193 landscaping within six months.

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195 C. If the system includes an access drive(s) for maintenance purposes, the
196 surface of the access drive(s) shall be permeable (unless on brownfield land
197 or on an already paved surface at the time of application for approval, such
198 as a parking lot or former building foundation.)

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200 D. Except as otherwise depicted on and subject to approval of the Planning
201 Commission, the area within which the system is located shall not be paved

with asphalt/concrete or any other surface material that is impermeable to water other than for slab foundations for structures and equipment. This shall not apply to a system located on brownfield land or on an existing paved area such as a former building slab or in an unused parking area when adequate parking remains for all other uses on the site.

- E. All surface water runoff created by construction and operation of the project shall be effectively managed on-site.

10. Installation and Operational Safety. The system shall comply with all of the following requirements:

- A. The system shall be designed and constructed for interconnection to a Michigan Public Service Commission or Midcontinent Independent System Operator regulated utility electrical power grid and shall be operated with such interconnection.

- B. The system and all foundation elements shall comply with all applicable building and electrical code requirements, and any applicable federal/state regulations. The manufacturer's engineer or another qualified engineer shall provide written certification that the design, installation (including foundations), and interconnection is compliant with the manufacturer and industry standards, all applicable local construction and electrical codes, and any applicable federal/state regulations.

C. Other than transmission or distribution lines for interconnection to the electric power grid, all electrical wiring shall be buried underground; except where the manufacturer's engineer or a qualified engineer employed by the utility that owns/operates the electrical power grid to which the system shall be interconnected certifies an underground wiring installation is not permitted by an applicable code and/or applicable federal/state regulation, with attached complete documentation supporting any such certification.

D. The system shall be designed, located, and maintained so as to comply with all applicable codes and regulations.

11. Public Safety: The Emergency Response Plan and Fire Response Plan shall provide reasonable protection of the public health, welfare and safety including but not limited to an emergency shutdown procedure, safety plans to include electrical, fire, smoke, and hazardous materials release, emergency response protocols and identification of typical hazards related to, electrical, fire, smoke and hazardous materials pertinent to the facility. Upon request, all systems shall provide first responder training at the site.

12. Repair and Augmentation. In addition to repairing or replacing facility components to maintain the system, the facility may at any time be augmented without the need to submit a new site plan so long as the augmentation is within the same footprint (e.g., same dedicated use building or on footings/foundations in the same location) as the original permit. If there is a change in the battery chemistry, an updated Hazard Mitigation Analysis and Emergency Operation Plan shall be provided.

When a facility is anticipated to be augmented over its lifetime by adding additional components, the applicant should apply for the final/augmented site arrangement. A proposal to increase the size the project footprint shall be considered a new application, subject to the ordinance standards at the time of the request.

13. Decommissioning and Removal.

A decommissioning plan approved by the planning commission, including a decommissioning agreement acceptable to the Township Attorney, is required at the time of application and shall be in recordable form.

A. The decommission plan shall include:

i. The anticipated manner in which the project will be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g., access drive, fencing), or restored for viable reuse of the property consistent with the zoning district. Pursuant to this requirement, the decommissioning plan shall be required to include that any structures up to forty-eight (48) inches below-grade shall be removed for disposal.

ii. The projected decommissioning costs shall reflect the actual cost of decommissioning the project. Salvage value shall not be included in the cost to decommission the project.

iii. Prior to any construction, the method of ensuring that funds will be available for site decommissioning and stabilization (in the form of surety bond or cash deposit).

B. A review of the amount of the surety bond, based on inflation, and current removal costs shall be completed every 2 years, for the life of the project, and approved by the Planning Commission. A Principal-Use Battery Energy Storage System owner may at any time:

i. Proceed with the decommissioning plan approved by the Planning Commission, and remove the system as indicated in the most recent approved plan; or

ii. Amend the decommissioning plan with Planning Commission approval and proceed according to the revised plan.

C. Decommissioning of a ~~Principal-Use~~ Off-Site Battery Energy Storage System must commence when the soil is dry to prevent soil compaction and must be complete within 18 months after abandonment. A Battery Energy Storage System that has not produced electrical energy for 12 consecutive months shall prompt an abandonment hearing.

i. Restoration shall include bringing soil and topography of the land to their pre-development composition to ensure permitted uses upon restoration. Soil tests shall be required as part of the decommissioning plan both before development and prior ~~and upon completion of~~ to the decommissioning.

295 14. Special ~~Land~~ Use Permit and Site Plan Application Requirements. Applications for
296 special ~~land~~ use permit approval shall comply with Articles ~~VI~~ and VI of this
297 Ordinance. A formal application for site plan approval for this ~~land~~ **special** use shall
298 comply with Section 9.02 of this Ordinance. An incomplete application will not be
299 accepted. Each such application shall also be subject to the following additional
300 submission requirements:

- 301
- 302 A. The complete name, address, and telephone number of the applicant.
- 303 B. The planned date for the start of construction and the expected duration of
304 construction.
- 305 C. A description of the system, including a site plan as described in Section
306 224 of the Clean and Renewable Energy Waste Reduction Act, 2008 PA
307 295, MCL 460.1224. The following items must be shown on the site plan:
- 308 i. A map of all properties upon which any component of a facility or
309 ancillary feature would be located, and all properties within one
310 thousand (1,000) feet. This should indicate the location of all
311 existing structures and shall identify such structures as occupied or
312 vacant.
- 313 ii. Lot lines and required setbacks shown and dimensioned including
314 horizontal and vertical elevation drawings that show the location and
315 height of the Battery Energy Storage System on the land and
316 dimensions of the Battery Energy Storage System.

- 317 iii. Size and location of existing and proposed water utilities, including
318 any proposed connections to public, or private community sewer or
319 water supply systems.
- 320 iv. A map of any existing overhead and underground major facilities for
321 electric, gas, telecommunications transmission within the facility and
322 surrounding area
- 323 v. The location and size of all surface water drainage facilities,
324 including source, volume expected, route, and course to final
325 destination.
- 326 vi. A map depicting the proposed facilities, adjacent properties, all
327 structures within participating and adjacent properties, property
328 lines, and the projected sound isolines along with the modeled sound
329 isolines including the statutory limit
- 330 D. A description of the expected use of the system.
- 331 E. Expected public benefits of the proposed system.
- 332 F. The expected direct impacts of the proposed system on the environment and
333 natural resources and how the applicant intends to address and mitigate
334 these impacts.
- 335 G. Information on the effects of the proposed system on public health and
336 safety.
- 337 H. A description of the portion of the community where the system will be
338 located.

- I. A statement and reasonable evidence that the proposed system will not commence commercial operation until it complies with applicable state and federal environmental laws, including, but not limited to, the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
- J. ~~Evidence~~ Written documentation efforts to consult of consultation, before submission of the application, with the Department of Environment, Great Lakes, and Energy and other relevant state and federal agencies before submitting the application, including, but not limited to, the Department of Natural Resources and the Department of Agriculture and Rural Development to determine potential permit requirements.
- K. The Soil and Economic Survey Report under Section 60303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.60303, for the county where the proposed system will be located.
- L. Interconnection queue information for the applicable regional transmission organization.
- M. If the proposed site of the system is undeveloped land, a description of feasible alternative developed locations, including, but not limited to, vacant industrial property and brownfields, and an explanation of why they were not chosen.
- N. If the system is reasonably expected to have an impact on television signals, microwave signals, agricultural global position systems, military defense radar, radio reception, or weather and Doppler radio, a plan to minimize and mitigate that impact is required. Information in the plan concerning military

defense radar is exempt from disclosure under the Freedom of Information Act, 1976 PA 442, MCL 15.231 to 15.246, and shall not be disclosed by the ~~planning~~ commission or the electric provider or independent power producer except pursuant to court order.

O. A stormwater assessment and a plan to minimize, mitigate, and repair any drainage impacts at the expense of the applicant. The applicant shall make reasonable efforts to consult with the county drain commissioner before submitting the application and shall include evidence of those efforts in its application.

P. A fire response plan and an emergency response plan.

i. The fire response plan (FRP) shall include:

1. ~~Evidence~~ Written documentation of consultation or a good faith effort to consult with local fire department representatives to ensure that the FRP is in alignment with acceptable operating procedures, capabilities, resources, etc. If consultation with local fire department representatives is not possible, provide evidence of consultation or a good faith effort to consult with the State Fire Marshal or other local emergency manager.
2. A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies.
3. A description of all contingency plans to be implemented in response to the occurrence of a fire emergency.

4. A commitment to review and update the FRP with fire departments, first responders, and county emergency managers at least once every three (3) years.
 5. An analysis of whether plans to be implemented in response to a fire emergency can be fulfilled by existing local emergency response capacity. The analysis should include identification of any specific equipment or training deficiencies in local emergency response capacity and recommendations for measures to mitigate deficiencies.
 6. Other information the applicants finds relevant.
- ii. The emergency response plan (ERP) shall include:
1. ~~Evidence~~ Written documentation of consultation or a good faith effort to consult with local first responders and county emergency managers to ensure that the ERP is in alignment with acceptable operating procedures, capabilities, resources, etc.
 2. An identification of contingencies that would constitute a safety or security emergency (fire emergencies are to be addressed in a separate fire response plan);
 3. Emergency response measures by contingency;
 4. Evacuation control measures by contingency;
 5. Community notification procedures by contingency;

- 408 6. An identification of potential approach and departure routes
409 to and from the facility site for police, fire, ambulance, and
410 other emergency vehicles;
- 411 7. A commitment to review and update the ERP with fire
412 departments, first responders, and county emergency
413 managers at least once every three (3) years;
- 414 8. An analysis of whether plans to be implemented in response
415 to an emergency can be fulfilled by existing local emergency
416 response capacity, and identification of any specific
417 equipment or training deficiencies in local emergency
418 response capacity; and
- 419 9. Other information the applicants finds relevant.

420 Q. A report detailing the sound modeling results along with mitigation plans to
421 ensure that sound emitted from the system will remain below the statutory
422 limit throughout the operational life of the system.

423 R. Any other information regarding compliance with the requirements herein.

- 424
- 425 15. Waiver. Because of the ever-changing technical capabilities of battery storage
426 infrastructure and of new technology in general, the Township Planning
427 Commission shall have the authority to review and consider alternatives in both the
428 dimensional and physical requirements contained in this ordinance as part of the
429 special land use review process, and other requirements.

- 431 16. ~~Building~~ **Special Use** Permit. Prior to issuance of a ~~Building~~ **Special Use** Permit,
432 the following information shall be provided.
- 433
- 434 A. Equipment specification sheets.
- 435
- 436 B. Identification and contact information for the installer(s) of the proposed
437 system.
- 438
- 439 C. Augmentation Plan.
- 440
- 441 D. Approved Decommissioning Plan and Decommissioning Agreement.
- 442
- 443 E. Life expectancy of the system components including the anticipated
444 schedule for battery replacement to maintain megawatts over the system's
445 lifetime.
- 446
- 447 F. Hazard Mitigation Analysis.
- 448
- 449 G. Operation and Maintenance Manual.
- 450
- 451 H. Identification and contact information for the installer of the system.
- 452
- 453 I. Electrical schematic plan for the system, including disconnect devices.
- 454
- 455 J. An Approved FRP and ERP.

K. An executed Community Host Agreement in the amount of \$2000 per megawatt.

L. Proof of financial guarantee for decommissioning.

16. Transfers. No transfer in ownership of the SES shall occur prior to providing 60 days' notice to the Township and upon Township approval verifying that the new owner agrees to carry out the terms of the special land use and site plan approval.

SECTION IV

AMEND ARTICLE IV CONCERNING RESIDENTIAL DISTRICTS

Sections 4.04, .05, .06, .07, .08, .09 of the Township Zoning Ordinance are amended to add the following use as a permitted use in the RR- Rural Residential District, the R-1Low Density Residential **District**, the R-2 Small Lot Residential **District**, the R-3 One and Two-family Residential **District**, R-4 Multiple Family Residential **District** and R-5 Mobile Home Park District, respectively:

- On-Site Battery Energy Storage System.

SECTION V

AMEND SECTION 4.12 CONCERNING INDUSTRIAL DISTRICTS

Section 4.12 of the Township Zoning Ordinance is amended to add the following use as a permitted use in the I-R Restricted Industrial Zoning District:

- On-Site Battery Energy Storage System.

SECTION VI

AMEND SECTIONS 4.10 AND 4.11 CONCERNING COMMERCIAL DISTRICTS

Sections 4.10 and 4.11 of the Township Zoning Ordinance are amended to add the following use as a permitted use in the C-1 **Neighborhood** Commercial District and the C-2 **General** Commercial District respectively:

- On-Site Battery Energy Storage System.

SECTION VII

AMEND SECTION 4.03 CONCERNING THE AGRICULTURAL DISTRICT

Section 4.03 of the Township Zoning Ordinance is amended to add the following use as a permitted use in the (A) Agricultural District:

- On-Site Battery Energy Storage System.

SECTION VIII

AMEND SECTION 4.03 CONCERNING THE AGRICULTURAL DISTRICT

Section 4.03 of the Township Zoning Ordinance is amended to add the following use as a special ~~land~~ use in the (A) Agricultural District:

- Battery Energy Storage System, Large Off-Site.
- Battery Energy Storage System, Small Off-Site.

SECTION IX

AMEND SECTION 4.12 CONCERNING THE INDUSTRIAL DISTRICT

Section 4.12 of the Township Zoning Ordinance is amended to add the following use as a special ~~land~~ use in the I-1 General Industrial District:

- Battery Energy Storage System, Large Off-Site.
- Battery Energy Storage System, Small Off-Site.

SECTION X

AMEND SECTION 4.04 CONCERNING THE RURAL RESIDENTIAL DISTRICT

Section 4.04 of the Township Zoning Ordinance is amended to add the following use as a special ~~land~~ use in the Rural Residential Zoning District:

- Battery Energy Storage System, Large Off-Site when co-located with a Principal Use Solar Energy System Special ~~Land~~ Use.

- Battery Energy Storage System, Small Off-Site when co-located with a Principal Use Solar Energy System Special ~~Land~~ Use.

SECTION XI

COMPLIANCE

Applicant, developer and operator are required to comply with all applicable Federal, State and local ordinances permit requirements for the life of the project and decommissioning.

SECTION XII

SEVERABILITY

The provisions of this ordinance are hereby declared to be severable and if any clause, sentence, word, section or provision is hereafter declared void or unenforceable for any reason by a court of competent jurisdiction, it shall not affect the remainder of such ordinance which shall continue in full force and effect.

SECTION XIII

REPEALER AND EFFECTIVE DATE

All ordinances or parts of ordinances in conflict herewith are hereby repealed. This ordinance shall take effect 8 days after publication, after adoption, as required by law.

Clerk _____

Township _____