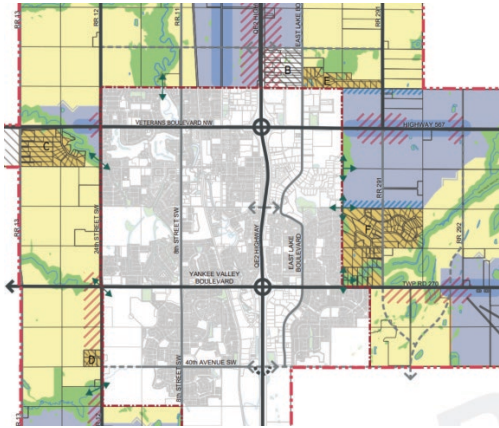


MPSC Renewable Energy and Energy Storage Facility Siting Meeting



MPSC Staff

May 28, 2024



Disclaimer

*The opinions
expressed today
are the
speaker's own
and do not
reflect the view
of the Michigan
Public Service
Commission or
the State of
Michigan.*

This meeting will be recorded and
the recording will be posted.

Sign up for our email distribution list:

[www.michigan.gov/mpsc/commission/workgroups/
2023-energy-legislation/renewable-energy-and-
energy-storage-facility-siting](http://www.michigan.gov/mpsc/commission/workgroups/2023-energy-legislation/renewable-energy-and-energy-storage-facility-siting)

Agenda

- **Welcome and Intro – MPSC**
- Drain Commissioners Update – MACDC representatives
- MPSC Staff Straw Proposals
 - Site Plans
 - Emergency Response and Fire Response Plans
 - Conditions for Consideration
- Open Comment Period – All participants
- Next Steps and Closing – MPSC

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www.michigan.gov/mpsc/commission/workgroups/2023-energy-legislation/renewable-energy-and-energy-storage-facility-siting

Implementation Process

Collaborate on solutions

Work collaboratively to develop potential draft guidance and application instructions

Public comment period

Public comment period in case docket followed by Commission order adopting application instructions and guidance

March

April-May

June

Summer

11/29/24

Solicit input

What questions and issues should the Commission address prior to the effective date?

File Staff proposal

File Staff proposed application instructions and guidance in docket June, 21, 2024

Implementation

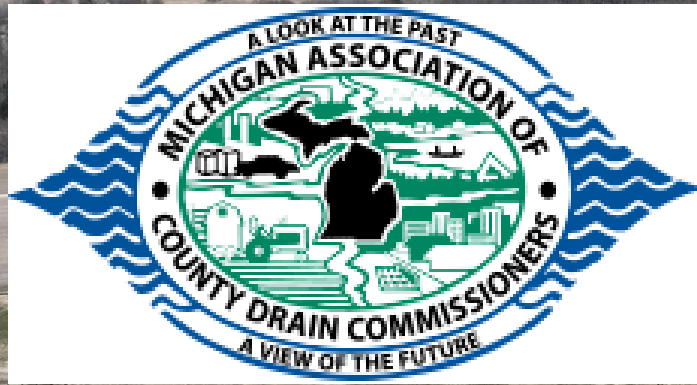
The effective date of the new law is 11/29/24.

Agenda

- Welcome and Intro – MPSC
- **Drain Commissioners Update – MACDC representatives**
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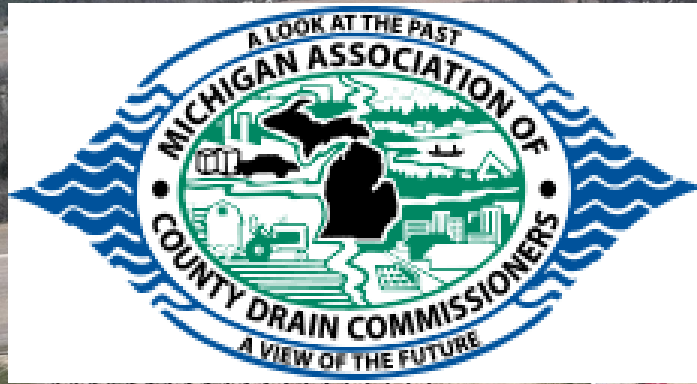


DRAFT

MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS

RECOMMENDATION FOR RENEWABLE ENERGY

- STORMWATER MANAGEMENT
- DRAIN UTILITY COORDINATION



MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS

Tony Newman, Shiawassee County Drain Commissioner,
Chair, MACDC Renewable Energy Committee

Renewable Energy Committee Members Presenting:

- Bernie Barnes, Gratiot County Drain Commissioner
- Ken Recker, Livingston County Deputy Drain Commissioner
- Carla Clos, Ingham County Deputy Drain Commissioner
- Ross Bower, FSB
- Doug Kelly, Clark Hill
- Alan Boyer, PEA Group
- Tim Inman, Spicer Group

COUNTY DRAIN COMMISSIONERS ARE INCLUDED IN PA 233 OF 2023 IN SECTION 225(1)P

Section 225 (1)p : A stormwater assessment and a plan to minimize, mitigate, and repair any drainage impacts at the expense of the electric provider or IPP. 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.

Commission Actions to Date

On February 8, 2024, the Commission issued an [Order](#) in Case No. U-21547 directing the Staff to hold public meetings starting in March 2024, engage with experts, local units of government, project developers and other interested persons to consider issues relating to application filing instructions or guidelines, the potential use of consultants and assessment of application fees, pre-application consultations, to consider guidance for use in the development of compatible renewable energy ordinances, as well as any additional issues that may arise during the engagement process. The Order directs Staff to file recommendations on application filing instructions, guidance relating to compatible renewable energy ordinances, and other recommendations by June 21, 2024, followed by a period for comments until July 17, 2024, and reply comments until August 9, 2024.



OUR GOAL:
COORDINATE THE DEVELOPMENT OF
RENEWABLE ENERGY COMPATIBLE WITH
STORMWATER AND DRAINAGE INFRASTRUCTURE



MACDC HISTORY

MACDC was established in 1899. Drainage was vital to settlement in Michigan since the state was historically dominated by swamps, posing potential health risks and making the land unfavorable for farming. One of the first laws passed by the new Michigan Legislature was a drainage act that led to the creation of drain commissioners, who since then have played a significant role in ensuring our lands are livable and suitable for agriculture and other uses. Without proper management of stormwater, flooding may occur, adversely impacting homes, businesses, and farmland. Although responsibilities vary by county, all drain commissioners play a role in protecting the health, safety, and welfare of the public.

MACDC

- THE MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS (MACDC) IS THE PROFESSIONAL ASSOCIATION FOR COUNTY DRAIN AND WATER RESOURCES COMMISSIONERS. MACDC IS DEDICATED TO PROTECTION OF THE HEALTH, SAFETY, AND WELFARE OF MICHIGAN'S CITIZENS, WHILE ALSO SEEKING TO PROTECT AND RESTORE MICHIGAN'S WATER RESOURCES. WE SEEK TO ACCOMPLISH THESE GOALS BY PROMOTING COLLABORATION, CONTINUING EDUCATION, AND PROFESSIONAL DEVELOPMENT.
- DRAIN COMMISSIONERS, SOMETIMES CALLED WATER RESOURCES COMMISSIONERS, ARE COUNTY-LEVEL OFFICIALS RESPONSIBLE FOR ADMINISTERING LAWS INVOLVING FLOOD PROTECTION, STORMWATER MANAGEMENT, AND SOIL EROSION. SOME SPECIFIC DUTIES PERFORMED BY THE DRAIN COMMISSIONER INCLUDE: ESTABLISHING, IMPROVING, AND MAINTAINING COUNTY DRAINS; REVIEWING STORMWATER DRAINAGE PLANS FOR CONSTRUCTION THAT MAY IMPACT A COUNTY DRAIN; AND MAINTAINING LAKE LEVELS, WHERE APPLICABLE.



EMPHASIS ON PUBLIC HEALTH

- THE PREVALENCE OF MALARIA WAS LONG AN OBSTRUCTION TO LARGE-SCALE SETTLEMENT OF MICHIGAN. ONE RHYME OF THE TIMES

DON'T GO TO MICHIGAN, THAT LAND OF ILLS

THE WORD MEANS AGUE, FEVER, AND CHILLS



- “DRAIN LAWS ... CAN BE UPHELD SOLELY UPON THE GROUND THAT SUCH DRAINS ARE NECESSARY FOR THE PUBLIC HEALTH. THEY PROCEED UPON THE BASIS THAT LOW, WET, AND MARSHY LANDS GENERATE MALARIA, CAUSING SICKNESS AND DANGER TO THE HEALTH AND LIFE OF THE PEOPLE...” *KINNE V BARE, 68 MICH 625, 628 (1885)*



MACDC POSITION

- REGARDLESS OF WHETHER THE MPSC IS ENGAGED BY PA 233, THE PROCESS IS NEEDED TO ENSURE THE PROPOSED RENEWABLE FACILITIES ARE COMPATIBLE WITH STORMWATER AND DRAINAGE INFRASTRUCTURE.
- REGARDLESS OF PROJECT SIZE, DRAIN COMMISSIONERS HAVE THE RESPONSIBILITY TO ENFORCE COMPLIANCE WITH THE DRAIN CODE, STORMWATER MANAGEMENT, AND PROTECT DRAINAGE INFRASTRUCTURE AND EASEMENTS.



MEET EARLY AND OFTEN

- THESE EFFORTS MUST BEGIN DURING THE DUE DILIGENCE PHASE OF THE PROPOSED PROJECT.
- DO NOT WAIT UNTIL THE DESIGN IS COMPLETE.

ACCOMMODATING DRAIN OFFICE NEEDS IS NOT AN AFTERTHOUGHT ACTIVITY.



DUE DILIGENCE CONSULTATIONS WITH DRAIN OFFICE

- THIS IS THE SINGLE MOST IMPORTANT WAY TO GET THINGS ON TRACK FROM THE VERY BEGINNING.
- NO OTHER SOURCE CAN PROVIDE IMPORTANT KNOWLEDGE ABOUT THE STORMWATER AND DRAIN UTILITIES.
- DRAIN RIGHTS OF WAY ARE OLD MOST OFTEN AND ARE IN EFFECT EVEN THOUGH THEY DO NOT SHOW UP IN THE MODERN DAY 40 YEAR CHAIN OF TITLE.
- DRAINS ARE UNIQUE IN THE FACT THAT MISS DIG WILL NOT PROVIDE ALL DUE DILIGENCE REQUIRED AND ONLY THE DRAIN OFFICE CAN FILL THAT NEED.
- DRAINAGE AND DRAINS ARE A CRITICAL UTILITY AND MUST BE VIEWED IN THIS WAY.
- COOPERATION AGREEMENT TO COVER DRAIN OFFICE EXPENSES, FEES AND CONSULTANT TIME.
- DRAIN OFFICE STAFFING SIZES ARE DIVERSE AND MAY NEED TO USE OUTSIDE ASSISTANCE TO SERVE THE PROJECT.



INSTRUCTIONS TO GET STARTED

PROCESS FOR SITING RENEWABLE ENERGY PROJECTS:

1. GO TO THE MACDC WEBSITE TO LOOK UP THE LINKS TO CONTACT THE COUNTY DRAIN OFFICE, GUIDELINES, AND REQUIREMENTS FOR COUNTY AND INTERCOUNTY DRAINS AND STORMWATER MANAGEMENT. [HTTPS://MACDC.US/RENEWABLE](https://macdc.us/renewable) WILL BE DEVELOPED AND BROUGHT ONLINE FOR THIS PURPOSE.
2. CONTACT THE DRAIN OFFICE WITH THE ACTUAL PROJECT LOCATION.
3. AFTER INTEGRATING ITEM 2 ABOVE INTO THE PROPOSED FACILITY PRELIMINARY DESIGN (BUT BEFORE MOVING INTO FINAL DESIGN) MEET WITH THE DRAIN OFFICE (AND PERHAPS ALSO THE MPSC) TO REVIEW THE APPROACH OF INTEGRATING THE STORMWATER AND DRAIN NEEDS.



SOURCE OF COUNTY GUIDELINES

- [HTTPS://MACDC.US/RENEWABLE](https://MACDC.US/RENEWABLE) WILL INCLUDE:
- HYPERLINKS FOR CONTACTS IN EACH DRAIN OFFICE TO BEGIN TO COORDINATE WITH. THE COUNTY DRAIN OFFICE WILL DETERMINE WHO TO WORK WITH FOR THE PROJECT, INTERNAL OR CONSULTANT, AND ITS REQUIREMENTS.
- HYPERLINKS TO USEFUL GUIDES AND STANDARDS TO WORK WITH THE DRAIN OFFICE
- REQUIREMENTS AND AGREEMENTS NEEDED WHEN INFRASTRUCTURE IS IMPACTED, I.E. CROSSING, TAP-IN, RELOCATION, ENCROACHMENT
- AGREEMENT REQUIREMENTS FOR ALTERED OR ADDITIONAL DRAIN RIGHT OF WAY
- GUIDELINES FOR SUBMITTAL PROCESS





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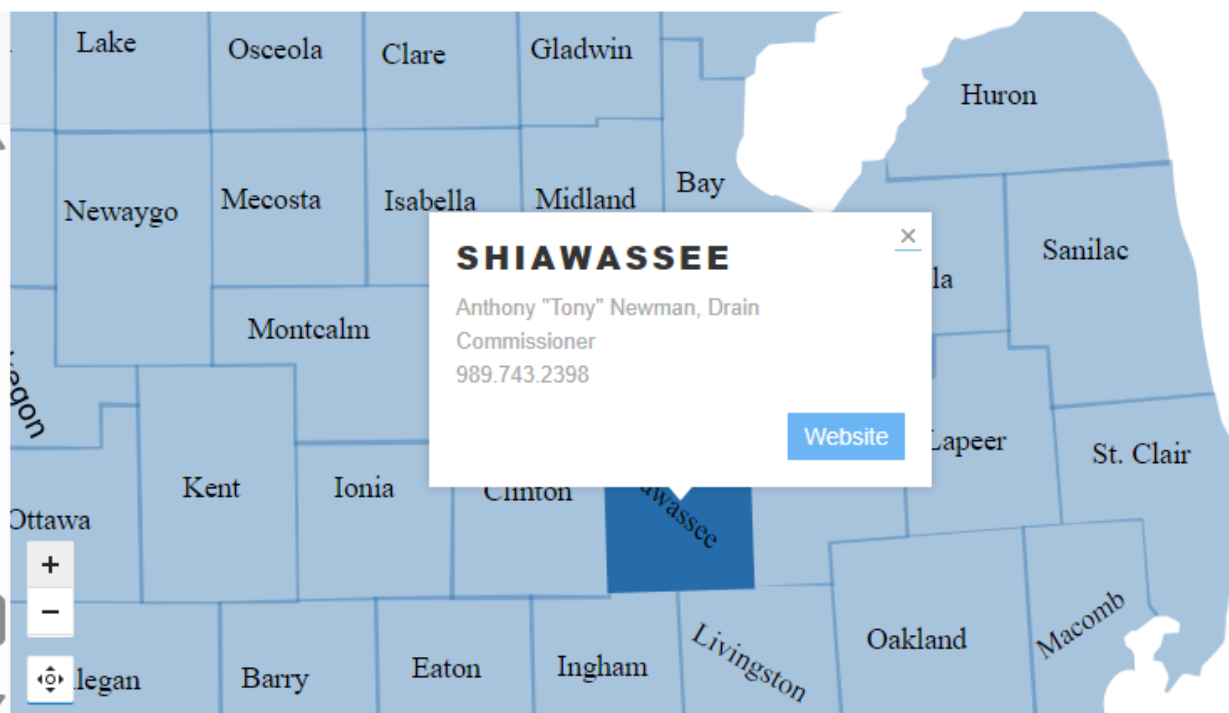
SANILAC

SCHOOLCRAFT

SHIAWASSEE

ST. CLAIR

ST. JOSEPH



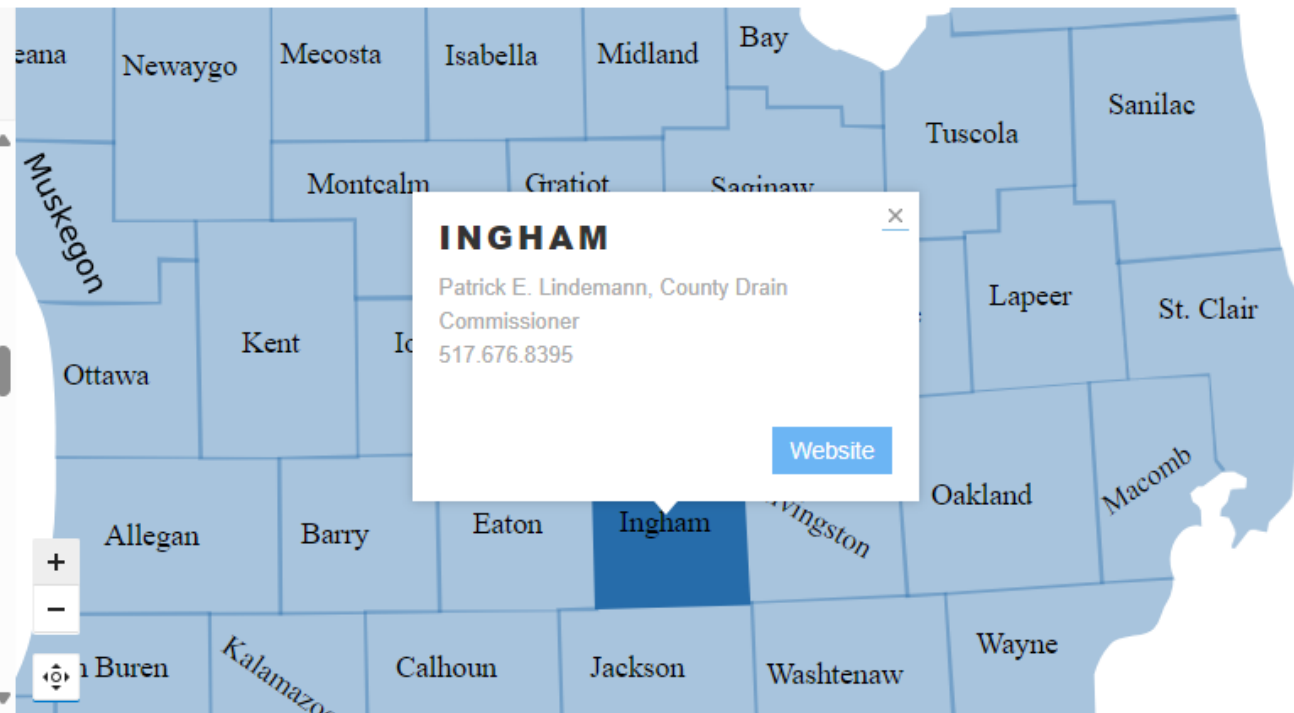


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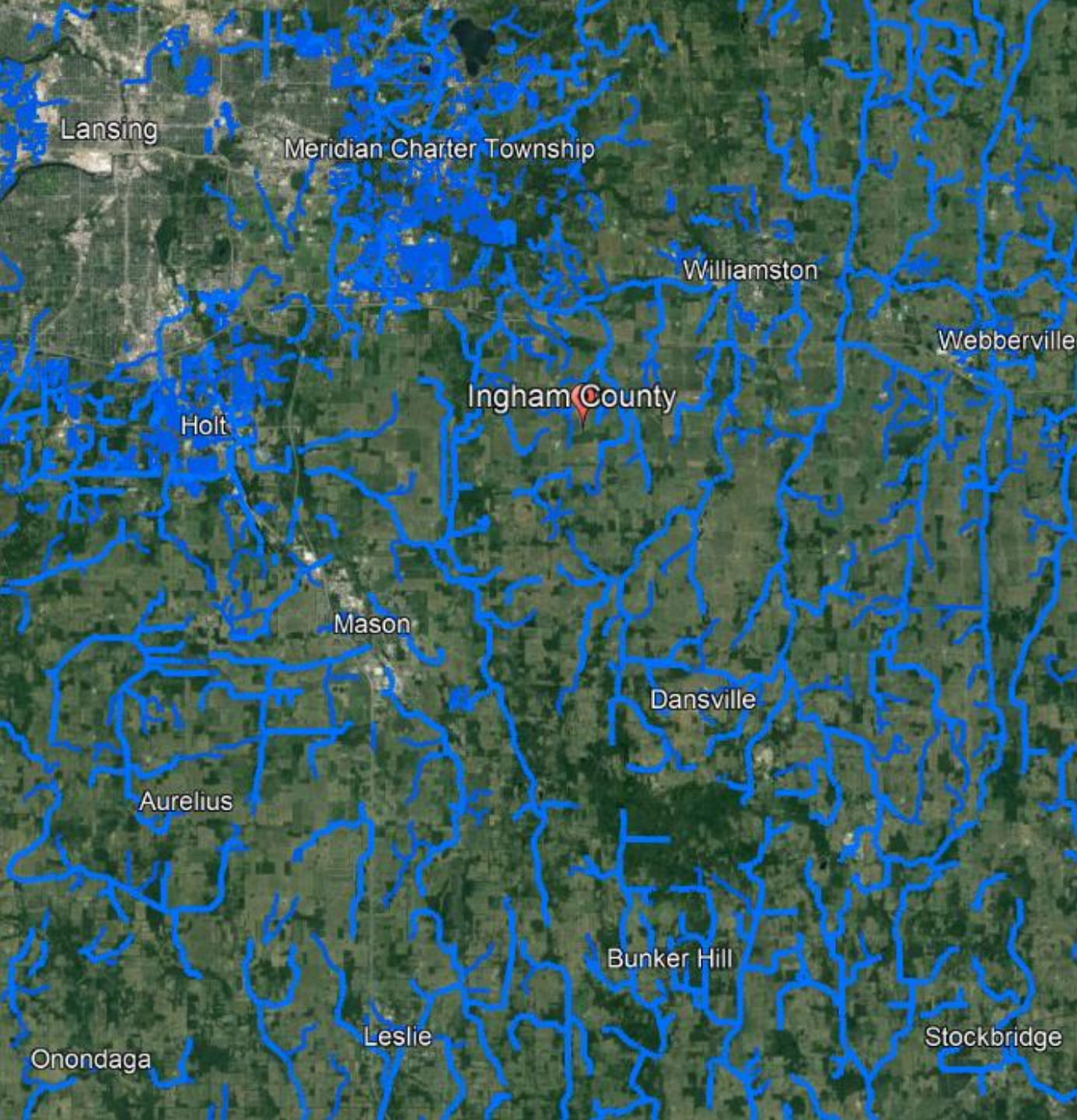
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[HOUGHTON](#)[HURON](#)[INGHAM](#)[IONIA](#)[IOSCO](#)[IRON](#)[ISABELLA](#)[JACKSON](#)

INGHAM

Patrick E. Lindemann, County Drain
Commissioner
517.676.8395

[Website](#)



AS AN EXAMPLE, THERE
ARE OVER 1,500 MILES
OF ESTABLISHED
COUNTY /
INTERCOUNTY DRAINS IN
INGHAM COUNTY
ALONE



THE INITIAL DRAIN OFFICE CONSULTATION SHOULD DEFINE THE FOLLOWING:

1. APPLICANT PROVIDES INFORMATION ABOUT CONCEPTUAL PROJECT:
 1. AREA TO BE IMPACTED
 2. LOCATION, SIZE, CAPACITY, RIGHT OF WAY, AND IMPROVEMENTS OF DRAINAGE AND DRAIN INFRASTRUCTURE
 3. RULES, PROCESSES, PROCEDURES, DESIGN STANDARDS, APPLICATIONS AND FEES FOR SUBMITTING A COMPLETE PACKAGE TO THE DRAIN OFFICE
2. DRAIN OFFICE DISCUSSES CONCEPTUAL PROJECT CONCERNS AND ITERATIONS.
3. DRAIN OFFICE PROCEEDS WITH A MINIMIZATION, MITIGATION AND / OR REPAIR ASSESSMENT (MMR)
 1. MINIMIZE IMPACT FIRST
 2. MITIGATE IMPACTS OR MAKE IMPROVEMENTS
 3. ELEMENTS THAT ADDRESS THE IMPACTS AND CONSEQUENCES OF THE PROPOSED PROJECT, WHETHER THOSE BE ON-SITE, ADJACENT, UPSTREAM OR DOWNSTREAM. IS THE PUBLIC, PERSONS OR PRIVATE PROPERTY PUT AT INCREASED RISK?



An aerial photograph of a solar farm. In the foreground, a drainage ditch with a stone-lined bank runs diagonally. To the right, rows of solar panels are visible, some of which are partially submerged in a muddy, brownish pool of water. The background shows more solar panels stretching towards a line of bare trees under a clear sky.

MMR ASSESSMENT

THE APPLICATION TO THE MPSC SHOULD INCLUDE THE MINIMIZE, MITIGATE AND REPAIR (MMR) ASSESSMENT APPROVAL OF THE DRAIN OFFICE, WITH CONDITIONS, IF ANY.

RESPONSE TO THE 3 QUESTIONS - INTRODUCTION

- EACH COUNTY OR INTERCOUNTY DRAIN IS ESTABLISHED AS ITS OWN CORPORATE ENTITY WITH ITS OWN SET OF FINANCIAL RECORDS, EASEMENTS AND RIGHTS-OF-WAY, PROPERTY RIGHTS, ETC. IN SOME COUNTIES, THERE ARE WELL OVER 1,000 ESTABLISHED COUNTY OR INTERCOUNTY DRAINS. EACH DRAIN IS MAINTAINED INDIVIDUALLY, WITH ITS OWN CAPACITY AND FUNCTION.
- COUNTY/INTERCOUNTY DRAIN SYSTEMS FUNCTION AS UTILITIES PROVIDING BENEFITS TO PUBLIC HEALTH, SAFETY, AND WELFARE AS THEY RELATE TO STORMWATER MANAGEMENT AND DRAINAGE. THE DRAIN OFFICE HAS AUTHORITY OVER COUNTY AND INTERCOUNTY DRAINS.
- THE APPLICATION TO THE MPSC SHOULD INCLUDE THE MMR AND THE PROVISIONAL APPROVAL OF THE DRAIN OFFICE.



1. WHAT SHOULD BE CONSIDERED IN A STORMWATER ASSESSMENT PLAN TO MITIGATE IMPACTS OF AN ENERGY FACILITY?

- AT A MINIMUM, THE FOLLOWING SHOULD BE CONSIDERED:
- LOCATION, ELEVATION, AND RIGHT-OF-WAY OF ESTABLISHED COUNTY/INTERCOUNTY DRAINS ON OR SERVING THE PROPERTY.
- RATE OF RUNOFF GENERATED
- VOLUME OF RUNOFF GENERATED
- WATER QUALITY OF RUNOFF GENERATED
- CAPACITY OF THE DOWNSTREAM RECEIVING SYSTEM
- IMPACT ON NEIGHBORING PROPERTIES
- FUTURE RETURN TO AGRICULTURAL USE OF THE LANDS THAT ARE AND WILL BENEFIT FROM THE PRESENCE OF THE COUNTY DRAIN SYSTEM AND ARE PART OF AN ASSESSABLE DRAINAGE DISTRICT.



2. WHAT DO YOU CONSIDER REASONABLE EFFORTS TO CONSULT WITH THE DRAIN COMMISSIONER BEFORE AN APPLICANT SUBMITS AN APPLICATION?

- THIS SLIDE SHOW REPRESENTS THE REASONABLE EFFORT TO CONSULT WITH THE DRAIN COMMISSIONER.
- CONSULTATION IS STEP ONE IN THE REVIEW PROCESS.
- PREAPPLICATION MEETING WITH THE DRAIN COMMISSIONER TO ASCERTAIN THEY FOLLOWING:
- THE STORMWATER MANAGEMENT REQUIREMENTS OF THAT PARTICULAR COUNTY;
- HOW THE PROPOSED SITING MAY AFFECT ACCESS TO OR MAINTENANCE OF COUNTY/INTERCOUNTY DRAINS LOCATED IN ESTABLISHED DRAIN EASEMENTS/RIGHT-OF-WAYS;
- HOW THE PROPOSED SITING MAY REQUIRE RELOCATION AND/OR RECONSTRUCTION OF COUNTY/INTERCOUNTY DRAINS THROUGH A PROPOSED FACILITY AND THE REQUIREMENTS (ENGINEERING & LEGAL) TO ACCOMPLISH SUCH.
- SUBMITTAL OF THE PRELIMINARY AND FINAL STORMWATER CONSTRUCTION PLANS FOR REVIEW.
- WRITTEN REVIEW OF THE STORMWATER MANAGEMENT PLAN BY THE DRAIN COMMISSIONER OR INTERCOUNTY DRAINAGE BOARD FOR EACH COUNTY OR INTERCOUNTY DRAIN AFFECTED, SAID WRITTEN REVIEW TO BE ISSUED WITHIN 45 DAYS OF SUBMISSION OF THE STORMWATER MANAGEMENT PLANS FOR REVIEW.



3. SHOULD THE MPSC CONSULT WITH THE COUNTY DRAIN COMMISSIONER DURING THE REVIEW OF THE APPLICATION? IF SO, HOW FORMAL OF A CONSULTATION? AT WHICH POINT OF THE APPLICATION?

- YES, THE MPSC SHOULD CONSULT WITH THE DRAIN COMMISSIONER AS EARLY IN THE APPLICATION PROCESS AS POSSIBLE.
- FACE-TO-FACE OR REMOTE MEETINGS WITH THE DRAIN COMMISSIONER SO THAT THE DRAIN COMMISSIONER'S COMMENTS BECOME PART OF THE RECORD.
- PRE-APPLICATION MEETING, AT THE SUBMISSION OF THE APPLICATION, AND DURING THE REVIEW PROCESS.



An aerial photograph of a vast solar farm. The image shows a dense grid of solar panels stretching across a large area. The panels are arranged in long, parallel rows, separated by narrow paths or access roads. The perspective is from a high angle, looking down on the array. The panels appear to be dark, possibly monocrystalline or polycrystalline silicon. The surrounding landscape is relatively flat and appears to be under development or recently cleared. In the top left corner, there's a small cluster of buildings and some trees. In the top right, there's a dirt area with some construction equipment. The overall scene conveys a sense of large-scale renewable energy production.

THANK YOU

MACDC RENEWABLE ENERGY COMMITTEE

MPSC Staff Draft Straw Proposals

- (1) Site Plans
- (2) Emergency Response and
Fire Response Plans
- (3) Conditions for Consideration

See: [Comment Request](#)

Staff Draft Site Plan Straw Proposal

Act 233 Site Plan Language

Sec. 224. (1) A site plan required under section 223 or 225 shall meet application filing requirements established by commission rule or order to maintain consistency between applications. The site plan shall include the following:

- (a) The location and a description of the energy facility.*
 - (b) A description of the anticipated effects of the energy facility on the environment, natural resources, and solid waste disposal capacity, which may include records of consultation with relevant state, tribal, and federal agencies.*
 - (c) Additional information required by commission rule or order that directly relates to the site plan.*
- (2) When it submits a site plan required under section 223 or 225 to the commission, an electric provider or independent power producer shall, for informational purposes, submit a copy to the clerk of each affected local unit.*

Site Plan Development

- Act 233
- NY Regulations: [chapter-xviii-title-19-of-nycrr-part-900-subparts-900-1-through-900-15.pdf](#)
- Ohio regulations: [OPSB Rule Review | Ohio Power Siting Board](#) and [ViewImage.aspx \(state.oh.us\)](#)
- WI regulations: [PUBLIC SERVICE COMMISSION OF WISCONSIN](#) and [PSC Wind Siting Rules](#)
- UM Capstone report recommendations and lessons learned.
- Discussions with subject matter experts, developers, local government officials and public comments received earlier in the process.

Six-Page Document

- ☐ Section 1 – Planned Facilities
- ☐ Section 2 – Area Land Use Information
- ☐ Section 3 – Explanatory Information
- ☐ Section 4 – Construction Information
- ☐ Section 5 - Alternatives
- ☐ Section 6 – Changes

Site Plan Section 1 – Planned Facilities

- ❑ USGS maps utilizing GIS mapping to the extent possible showing the proposed facilities including a two-mile radius.
 - Facility, electric collection lines, substation, roads, etc.
 - Lakes, streams, wetlands, etc.
 - Legal boundaries of cities, villages, townships, and counties
 - Area and right-of-way for the facility showing participating properties and adjacent properties
 - Aerial photograph with facility, fences, roads, occupied buildings, planned screening, landscaping, and vegetative cover
 - Setbacks and height of facilities
- (This is not a complete list of everything in this section.)

Site Plan Section 2 – Area Land Use Information

- ❑ USGS maps utilizing GIS mapping to the extent possible showing the proposed facilities and surrounding area
 - Facility and ancillary features not located on the site in relation to municipal boundaries and taxing jurisdictions
 - Existing and proposed land uses including prime farmland, PA 116 parcels, parks, schools, etc...
 - Existing overhead and underground facilities
 - Existing and proposed local zoning districts
 - Projected sound isolines and proposed facilities, adjacent properties lines and structures
 - For wind facilities, the area impacted by shadow flicker
- (This is not a complete list of everything in this section.)

Site Plan Section 3 – Explanatory Information

- ❑ Written explanations of the elements and features shown on all provided maps as well as other planned site/facility information including a description of the project area and the portion of the community where the project is located
 - Local land use plans, geography, topography, population centers, major industries, and landmarks
 - Justification for how the proposed location, layout, construction methods, etc minimize:
 - ❑ Environmental impacts, noise, visual impacts, impacts to traffic, impacts to solid waste disposal capacity, other

Site Plan Section 3 – Explanatory Information (2)

- Planned screening, landscaping, and vegetative cover
- Sound and flicker reports
- List of participating parcels
- Emergency Response Plan and Fire Response Plan

(This is not a complete list of everything in this section.)

Site Plan Section 4 – Construction Information

- ❑ Description of the project's proposed installation methods:
 - Soil surveying and testing
 - Construction activities
 - Depth of underground facilities
 - Post-construction restoration
 - Maps: planned crane/heavy equipment routes, drain & drain tile

(This is not a complete list of everything in this section.)

Site Plan Section 5 – Alternative Sites

- ❑ Provide a map and description of each alternative site location including rationale for why the alternatives were not selected.

Site Plan Section 6 – Minor Changes

Section 222(3): If the commission has issued a certificate for an energy facility, the electric provider or IPP may make minor changes, as defined by the commission, to the site plan if the changes are within the footprint of the previously approved site plan.

- ☐ Map and description of modifications and/or variations
- ☐ Minor changes are not: an increase in capacity or output, change in technology, technological changes impacting noise or permit requirements, reduced setbacks, height changes, require revised permits from any federal, state, or local permitting agency.

(Paraphrased for presentation purposes.)

Staff Draft Straw Proposal: Fire and Emergency Response Plans

Act 233 Fire and Emergency Response Plans

(All Projects) Application for certificate under 222(2) shall contain all of the following.....

Section 225 (q) - A fire response plan and an emergency response plan.

(Energy Storage Only) Section 226(8)(c)(ii) - The energy storage facility complies with the version of [NFPA 855](#) [“Standard for the Installation of Stationary Energy Storage Systems”](#) in effect on the effective date of the amendatory act that added this section or any applicable successor standard adopted by the commission as reasonable and consistent with the purposes of this subdivision.

Key Considerations

- ☐ Emphasis on human safety (facility personnel, first responders, general public)
- ☐ New and evolving technologies
 - Consultation and coordination with local first responders
 - Ongoing education/training

ERP and FRP Straw Proposal Development

- ❑ [New York Regulations](#) for renewable energy project applications
- ❑ [NFPA 855 Code](#) (National Fire Protection Association)
- ❑ Pacific Northwest National Laboratory report, “[Energy Storage in Local Zoning Ordinances](#)”
- ❑ University of Michigan report, “[Power in Partnership: Insights for siting utility-scale renewables in Michigan](#)”
- ❑ Discussions with subject matter experts.

Emergency Response Plans

1. The application shall include an Emergency Response Plan (ERP). The ERP shall include:
 - a. **Evidence of consultation or a good faith effort to consult with local first responders to ensure that the ERP is in alignment with acceptable operating procedures, capabilities, resources, etc.** If consultation with local first responders is not possible, provide evidence of consultation or a good faith effort to consult with other local emergency managers.
 - b. An identification of contingencies that would constitute a safety or security emergency (fire emergencies are to be addressed in a separate Fire Response Plan);
 - c. Emergency response measures by contingency;
 - d. Evacuation control measures by contingency;
 - e. Community notification procedures by contingency; and
 - f. An identification of potential approach and departure routes to and from the facility site for police, fire, ambulance, and other emergency vehicles.
 - g. **A commitment to review the ERP annually with fire departments and first responders** and update as needed.
 - h. Other information the applicants finds relevant.

Fire Response Plans

2. The application shall include a Fire Response Plan (FRP). The FRP shall include:
 - a. **Evidence 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.
 - b. A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies.
 - c. A description of all contingency plans to be implemented in response to the occurrence of a fire emergency.
 - d. **A commitment to conduct, or provide funding to conduct, site-specific training drills with emergency responders before commencing operation, and at least once per year while the facility is in operation.**

Training should familiarize local fire departments with the project, hazards, procedures, and current best practices.
 - e. An analysis of whether plans to be implemented in response to a fire emergency can be fulfilled by existing local emergency response capacity, and identification of any specific equipment or training deficiencies in local emergency response capacity.
 - f. Other information the applicants finds relevant.

NFPA 855

3. Changes to the design, type, manufacturer, etc. of facilities after the initial filing must be analyzed to determine if changes are necessary to the ERP or FRP. Additional consultation with local fire department and first responder is required for amended plans.
4. In addition to the requirements above, **applications for energy storage projects shall include the following in compliance with NFPA 855:**
 - a. Commissioning Plan (4.2.4 & 6.1.3.2)
 - b. Emergency Operation Plan (4.3.2.1.4)
 - c. Hazard Mitigation Analysis (4.4)

4.2.4 Commissioning Plan. A commissioning plan meeting the provisions of Chapter 6 shall be provided to the building owner or their authorized agent and the AHJ.

6.1.3 Commissioning Plan.

6.1.3.1 The system installer or commissioning agent shall prepare a written commissioning plan that provides a description of the means and methods necessary to document and verify that the system and its associated controls and safety systems, as required by this standard, are in proper working condition.

6.1.3.2 The commissioning plan shall include, but not be limited to, the following information:

- (1) An overview of the commissioning process developed specifically for the ESS to be installed and narrative description of the activities to be conducted
- (2) Roles and responsibilities for all those involved in the design, commissioning, construction, installation, or operation of the system(s)

- (3) Means and methods whereby the commissioning plan will be made available during the implementation of the ESS project(s)
- (4) Plans and specifications necessary to understand the operation of the ESS and all associated operational controls and safety systems
- (5) A detailed description of each activity to be conducted during the commissioning process, who will perform each activity, and at what point in time the activity is to be conducted
- (6) Procedures to be used in documenting the proper operation of the ESS and all associated operational controls and safety systems
- (7) Testing for any required fire detection or suppression and thermal management, ventilation, or exhaust systems associated with the installation and verification of proper operation of the safety controls
- (8) The following documentation:
 - (a) Commissioning checklist
 - (b) Relevant operational testing forms
 - (c) Necessary commissioning logs
 - (d) Progress reports
- (9) Means and methods whereby facility operation and maintenance staff will be trained on the system
- (10) Identification of personnel who are qualified to service and maintain the system and respond to incidents involving each system
- (11) A decommissioning plan meeting the provisions of Section 8.1 that covers the removal of the system from service and from the facility in which it is located and information on disposal of materials associated with each ESS

4.3 Emergency Planning and Training.

4.3.1* General. For ESS installations that exceed the maximum stored energy limits of Table 9.4.1, emergency planning and training shall be provided by the owner of the ESS or their authorized representative so that ESS facility operations and maintenance personnel and emergency responders can address foreseeable hazards associated with the on-site systems.

4.3.2 Facility Staff Planning and Training. For ESS installations that exceed the maximum stored energy limits of Table 9.4.1, an emergency operations plan and associated training shall be established, maintained, and conducted by ESS facility operations and maintenance personnel.

4.3.2.1 Emergency Operations Plan.

4.3.2.1.1 An emergency operations plan shall be readily available for use by facility operations and maintenance personnel.

4.3.2.1.2 For normally occupied facilities, the emergency operations plan shall be on site.

4.3.2.1.3 The plan shall be updated when conditions that affect the response considerations and procedures change.

4.3.2.1.4 The emergency operations plan shall include the following:

- (1) Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions
- (2) Procedures for inspection and testing of associated alarms, interlocks, and controls
- (3)* Procedures to be followed in response to notifications of system alarms or out-of-range conditions that could signify potentially dangerous conditions, including shutting down equipment, summoning service or repair personnel, and providing agreed-upon notification to fire department personnel, if required
- (4)* Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions

- (5) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required
- (6) Procedures for dealing with ESS equipment damaged in a fire or other emergency event, including contact information for personnel qualified to safely remove damaged ESS equipment from the facility
- (7) Other procedures as determined necessary by the AHJ to provide for the safety of occupants and emergency responders
- (8) Procedures and schedules for conducting drills of these procedures

4.3.2.1.5 The emergency operations plan in 4.3.2.1 shall not be required for electric utility facilities under the exclusive control of the electric utility located outdoors or in building spaces used exclusively for such installations.

4.4 Hazard Mitigation Analysis (HMA).

4.4.1* A hazard mitigation analysis shall be provided to the AHJ for review and approval where any of the following conditions are present:

- (1) Technologies not specifically addressed in Table 1.3 are provided
- (2) More than one ESS technology is provided in a single fire area where adverse interaction between the technologies is possible
- (3) Where allowed as a basis for increasing maximum stored energy as specified in 9.4.1.1 and 9.4.1.2
- (4) Where required by the AHJ to address a potential hazard with an ESS installation that is not addressed by existing requirements
- (5) Where required for existing lithium-ion ESS systems that are not UL 9540 listed in accordance with 9.2.2.1
- (6) Where required for outdoor lithium-ion battery ESS systems in accordance with 9.5.2.1

4.4.2 Failure Modes.

4.4.2.1* The hazard mitigation analysis shall evaluate the consequences of the following failure modes and others deemed necessary by the AHJ:

- (1) A thermal runaway or mechanical failure condition in a single ESS unit
- (2) Failure of an energy storage management system or protection system that is not covered by the product listing failure modes and effects analysis (FMEA)
- (3) Failure of a required protection system including, but not limited to, ventilation (HVAC), exhaust ventilation, smoke detection, fire detection, fire suppression, or gas detection

4.4.2.2 Only single failure modes shall be considered for each mode given in 4.4.2.1.

4.4.3 The AHJ shall be permitted to approve the hazard mitigation analysis as documentation of the safety of the ESS installation if the consequences of the analysis demonstrate the following:

- (1) Fires will be contained within unoccupied ESS rooms for the minimum duration of the fire resistance rating specified in 9.6.4.
- (2) Fires and products of combustion will not prevent occupants from evacuating to a safe location.
- (3) Deflagration hazards will be addressed by an explosion control or other system.

4.4.4 The hazard mitigation analysis shall be documented and made available to the AHJ and those authorized to design and operate the system.

4.4.5* Construction, equipment, and systems that are required for the ESS to comply with the hazard mitigation analysis shall be installed, tested, and maintained in accordance with this standard and the manufacturer's instructions.

Staff Draft Straw Proposal: Conditions for Consideration

Act 233 Section 226(6)

*Sec. 226: (6) In evaluating the application, the commission shall consider the feasible alternative developed locations described under section 225(1)(n), if applicable, and the impact of the proposed facility on local land use, including the percentage of land within the local unit of government dedicated to energy generation. **The commission may condition its grant of the application on the applicant taking additional reasonable action related to the impacts of the proposed energy facility, including, but not limited to, the following:***

- (a) Establishing and maintaining for the life of the facility vegetative ground cover. This subdivision does not apply to an application for an energy facility that is proposed to be located entirely on brownfield land.*
- (b) Meeting or exceeding pollinator standards throughout the lifetime of the facility, as established by the “Michigan Pollinator Habitat Planning Scorecard for Solar Sites” developed by the Michigan State University Department of Entomology in effect on the effective date of the amendatory act that added this section or any applicable successor standards approved by the commission as reasonable and consistent with the purposes of this subdivision. Seed mix used to establish pollinator plantings shall not include invasive species as identified by the Midwest Invasive Species Information Network, led by researchers at the Michigan State University Department of Entomology and supporting regional partners. This subdivision does not apply to an application for an energy facility that is proposed to be located entirely on brownfield land.*
- (c) Providing for community improvements in the affected local unit.*
- (d) Making a good-faith effort to maintain and provide proper care of the property where the energy facility is proposed to be located during construction and operation of the facility.*

Conditions for Consideration

1. An agreement from the applicant to hire a third-party independent monitor, funded by the applicant, selected in consultation with the MPSC Staff and to the extent practicable, the local unit of government, to be onsite during the construction process on a weekly basis to monitor the construction activities. The third-party independent monitor could provide weekly reports to the MPSC Staff, the local unit of government, and the applicant from the start of construction and continuing through the first 3 months of commercial operation.
2. An agreement to participate in a pre-construction meeting with the MPSC Staff, to the extent practicable local units of government which may include the County drain commissioner, and the third-party monitor to review final drawings signed by a professional engineer and plans and to review final approved permits and associated permit conditions prior to the start of construction. The certificate could also be conditioned on filing the final drawings, plans, and permits received in the docket prior to the start of construction.
3. An agreement by the applicant to repair or replace all public and private drainage systems damaged from construction or decommissioning processes.

Conditions for Consideration

4. An agreement to file mechanical completion certificates for the facilities in the docket.
5. An agreement from the applicant to a complaint process that is agreeable to Staff and to the extent practicable, the local unit of government. The complaint process should include the name of a designated developer/operator representative provided with the authority to resolve local complaints, a dedicated phone number for complaints, an email address for complaints, and website information instructing the public on the complaint resolution process. The complaint process should include regular reporting of complaints received and how each complaint was resolved to be filed on a periodic basis in the docket.
6. An agreement to provide emergency contact information for the site in the docket and keep it updated on an annual basis.
7. An agreement to the planned implementation of screening that is mutually agreeable to local landowners, the MPSC Staff, and to the extent practicable, the local unit of government or another intervening party.

Conditions for Consideration

8. An agreement to the planned implementation of vegetative ground cover in consideration of Michigan State University's "Michigan Pollinator Habitat Planning Scorecard for Solar Sites" and avoiding invasive species that is mutually agreeable to local landowners, the MPSC Staff, and to the extent practicable, the local unit of government, or another intervening party.
9. An agreement to bury underground facilities to a depth that is mutually agreeable to the landowners, the MPSC Staff, and to the extent practicable, the local unit of government or another intervening party.
10. An agreement to hire a third-party acoustics expert to conduct post-construction sound measurements and file the report in the docket. An agreement that if the post-construction sound measurements are close to or do not meet the statutory requirements, noise mitigation plans will be implemented and the post-construction sound measurements will be repeated and the results will be filed in the docket.
11. An agreement to conduct additional third-party sound measurements and if the sound level is not compliant with the statute, to implement noise mitigation during facility operations should significant complaints be received by the developer/operator, the local unit of government, or the MPSC.

Conditions for Consideration

12. An agreement to mitigate flicker that does not meet the statutory provisions.
13. An agreement to remedy at the applicant's cost, any electromagnetic interference that is disrupted by any wind energy facility and restore reception to at least the levels present before the wind energy facility began operations.
14. An agreement by the developer/operator to provide ongoing annual training for local fire departments and other first responders.
15. Approval contingent upon receiving approval for all other applicable state, federal, and local permits and an agreement to file a finalized list of all permits required for the construction of the process along with the permitting agency and when the permit was granted in the docket.
16. Approval contingent upon the execution of a decommissioning agreement approved by the Commission and an agreement to demonstrate that financial assurance has been acquired and will be maintained throughout the operational life of the facilities, as outlined in the decommissioning agreement.
17. An agreement to comply with all other applicable (non-zoning) ordinances throughout the operational life of the facilities that were in effect at the time the MPSC certificate was issued.

Conditions for Consideration

18. An agreement to comply with the provision of periodic reports over time on the amount of electricity produced per turbine or per parcel, a report listing complaints received during the time period as well as the developer/operators' response including resolution and/or plans for mitigation, a report outlining the operating condition and performance of the facilities on the site (including non-producing ancillary equipment, structures, fencing, locks, gates, screening, vegetative ground cover and other items specifically listed in the condition), a report listing any failures of equipment or structures that took place during the period as well as repairs that have been made during the time period or are planned or underway, and a report of any improvements made to the site or facilities during the period as well as any planned improvements or planned changes to the site or facilities including changes to fencing or ancillary equipment during the reporting period, to be filed in the docket.
19. An agreement to provide annual maintenance plans and annual inspection results in the docket.

Conditions for Consideration

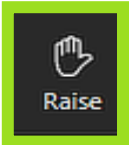
- 20. An agreement to file a glare technical study and glare mitigation plans in the docket.
- 21. An agreement to provide for community improvements in the affected local unit.
- 22. An agreement to maintain proper care for the property where the energy facility is proposed and to be located during the construction and operation of the facility.
- 23. An agreement to utilize a project labor agreement or operate under a collective bargaining agreement for the construction and maintenance work to be performed.
- 24. An agreement to indemnify and hold harmless the Commission and its officials, employees, agents, and representatives for any and all claims or causes of action arising from any acts or omissions of the certificate recipient done in connection with the issuance of the certificate.
- 25. An agreement confirming the applicant's acceptance and agreement to comply with all terms and conditions in the certificate.

How To Submit A Comment

Online

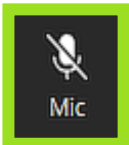
All attendees will be muted until called upon to speak which is on a first-come, first-serve basis.

To Be Called On:

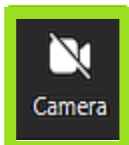


Raise your hand by clicking on the “Raise” icon.

When Called On:



Unmute your mic by clicking on the “Mic” icon.



You may turn on your camera by clicking on the “Camera” icon.

By Telephone

Dial: 248-509-0316;
Passcode: 931 820 311#

To Be Called On:

Press *5 to enter the line to speak.

When Called On:

Press *6 to unmute.

By Email

Send informal comments to:
colec1@michigan.gov and
baldwinj2@michigan.gov

Next Steps

- Thank you for your input and participation in today's meeting.
- Additional input is welcomed.
- Please send your **comments by June 12**. Comments will help to inform revisions to straw proposals. **You may include any comments** not already supplied through this engagement process!
- Staff's proposed application instructions and guidance will be filed in Case No. U-21547 by June, 21, 2024.
 - Public comments may be filed in the docket by July 17.
 - Reply comments may be filed in the docket by August 9.

Written Comments

Email To:

Colec1@michigan.gov and
Baldwinj2@michigan.gov

Mail To:

Michigan Public Service Commission
Attn: Cathy Cole
P.O. Box 30221
Lansing, MI 48909

Sign up for our email distribution list:

www.michigan.gov/mpsc/commission/workgroups/2023-energy-legislation/renewable-energy-and-energy-storage-facility-siting

Upcoming Meetings

➤ **Wednesday, July 10, 2024 at 3:00 pm (virtual) - *NEW DATE***

1. Review Staff's 6/21 proposal filed in the docket
2. Sound modeling and sound measurement procedures proposal (tentative)

*Additional details to be announced closer to the meeting date

Please email questions and informal comments to
colec1@michigan.gov and baldwinj2@michigan.gov

Sign up for our email distribution list:

www.michigan.gov/mpsc/commission/workgroups/2023-energy-legislation/renewable-energy-and-energy-storage-facility-siting