

KYMEA ENERGY CENTER I GENERATION APPLICATION

October 2024

KENTUCKY MUNICIPAL ENERGY AGENCY
1700 EASTPOINT PKWY, SUITE 220
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Contents

1. Applicant Information
2. Description of Proposed Site
3. Public Notice Evidence
4. Compliance with Local Ordinances and Regulations
5. Setback Requirements
6. Public Notice Report
7. Efforts to locate near Existing Electric Generation
8. Proof of Service to County and Municipality Officials
9. Effect on Kentucky Electricity Generation System
10. Effect on Local and Regional Economies
11. Record of Environmental Violations
12. Site Assessment Report
13. Decommissioning Plan

Application Attachments

- A. Context Map
- B. Notice of Application
- C. Certificate of Compliance
- D. Notice of Public Meeting
- E. Public Meeting Documentation
- F. Transitional Cluster Study Agreement
- G. Provisional System Impact Study Agreement
- H. Economic Report
- I. Decommissioning Plan
- J. Decommissioning Cost Model (xlsx)
- K. Cumulative Environmental Assessment

1. Applicant Information

REQUIREMENT: per KRS 278.706(2)(a); *The name, address, and telephone number of the person proposing to construct and own the merchant electric generating facility*

COMPLIANCE: Please see below for the requested information.

- Name: Kentucky Municipal Energy Agency
Attn: Doug Buresh, President and CEO
- Address: 1700 Eastpoint Parkway, Suite 200
Louisville, Kentucky 40223
- Phone: (502) 242-5635

Person Responsible: Doug Buresh

2. Description of Proposed Site

REQUIREMENT: per KRS 278.706(2)(b); *A full description of the proposed site, including a map showing the distance of the proposed site from residential neighborhoods, the nearest residential structures, schools, and public and private parks that are located within a two (2) mile radius of the proposed facility*

COMPLIANCE:

This application (Application) is to construct and operate KYMEA Energy Center I, a natural gas power plant, consisting of four Wartsila 18V50SG reciprocating internal combustion engine (RICE) generators, each with a nominal capacity of 18.8 MW for a total of approximately 75 MW. Kentucky Municipal Energy Agency (KYMEA) plans to install a natural gas transmission line one mile east of the project site to interconnect with an interstate pipeline Texas Gas Transmission Company operates.

KYMEA Energy Center I will be located in Madisonville, Kentucky city limits, and will be adjacent to the Madisonville Wastewater Treatment plant located at 1715 A C Slaton Road. The Project Site is comprised of two sites designated as the Plant Site and the Substation Site. The Plant Site is approximately 12 acres bound by the Madisonville Wastewater Treatment Plant on the west, the CSX railroad on the east and AC Slaton Road on the south. The property to the south of AC Slaton Road contains former coal refuse ponds resulting from prior mining activity.

The Substation Site will be purchased by KYMEA and deeded to Louisville Gas & Electric/Kentucky Utilities (LGE/KU). The Substation will be owned by LGE/KU and located adjacent to the plant on the east side of the railroad. The Substation Site is generally bounded by the railroad, Bean Cemetery Road and AC Slaton Road and is approximately 9.5 acres. A 69 kV generator lead line owned by KYMEA will connect the Plant to the Substation and a 69 kV line owned by LGE/KU will connect the Substation to the existing 69 kV transmission lines running along the south side of A C Slaton Road and the west side of Bean Cemetery Road. This lead line extension will extend approximately 500 feet from the high side of the two main power transformers located on the south extent of the plant site across the railway and running to the east to a new substation to be owned by Louisville Gas & Electric Company and Kentucky Utilities. In addition, a new high pressure gas line will be constructed to serve the plant running from the Texas Gas high pressure network near Frank Hill Road westward for approximately one mile to the Plant Site.

A map showing the location of residential structures, schools, and public and private parks in relation to the project is located in Attachment A. There is one home on a parcel adjoining the project site's parcel. That home will be 765 feet from the facility. There are no residential neighborhoods within 2,000 feet of the RICE Power Facility.

The Project Site is in the Madisonville City Limits and is zoned General Industrial. Pursuant to TITLE XV §156.031 of the Madisonville, Kentucky Code of Ordinances, the following minimum setback requirements have been established for the project: 20 feet from the front of the project, 25 feet per side, 25 feet rear. KYMEA Energy Center I will abide by the Madisonville ordinance and comply with the minimum setbacks.

Person Responsible: Doug Buresh

3. Public Notice Evidence

REQUIREMENT: per KRS 278.706(2)(c); *Evidence of public notice that shall include the location of the proposed site and a general description of the project, state that the proposed construction is subject to approval by the board, and provide the telephone number and address of the Public Service Commission. Public notice shall be given within thirty (30) days immediately preceding the application filing to:*

- 1. Landowners whose property borders the proposed site; and*
- 2. The general public in a newspaper of general circulation in the county or municipality in which the facility is proposed to be located*

COMPLIANCE:

A sample letter that was sent to landowners whose property borders the proposed site, followed by the list of addresses and names of those landowners who were sent notices on September 30, 2024 is contained in Attachment B. Two copies of this notice were mailed to each landowner; one via regular US Mail and one via USPS Certified Mail. Please see Attachment B for certified mail receipts.

Also contained in Attachment B is the tearsheet of the notice published in *The Messenger* on October 3, 2024, which is the newspaper of general circulation in Madisonville, Hopkins County, Kentucky.

Person Responsible: Doug Buresh

4. Compliance with Local Ordinances and Regulations

REQUIREMENT: per KRS 278.706(2)(d); *A statement certifying that the proposed plant will be in compliance with all local ordinances and regulations concerning noise control and with any local planning and zoning ordinances. The statement shall also disclose setback requirements established by the planning and zoning commission as provided under KRS 278.704(3)*

COMPLIANCE:

KYMEA Energy Center I lies entirely in Madisonville, Kentucky, a member of the Hopkins County Joint Planning Commission.

KYMEA certifies that the project will follow all local ordinances and regulations concerning setbacks and any other applicable local planning and zoning ordinances. A statement certifying these facts is submitted as Attachment C.

The Project Site is in the Madisonville City Limits and is zoned General Industrial. Pursuant to TITLE XV §156.031 of the Madisonville, Kentucky Code of Ordinances, the following minimum setback requirements have been established for the project: 20 feet from the front of the project, 25 feet per side, 25 feet rear. KYMEA Energy Center I will abide by the Madisonville ordinance and comply with these minimum setbacks.

Person Responsible: Doug Buresh

5. Setback Requirements

REQUIREMENT: per KRS 278.706(2)(e); *If the facility is not proposed to be located on a site of a former coal processing plant and the facility will use on-site waste coal as a fuel source or in an area where a planning and zoning commission has established a setback requirement pursuant to KRS 278.704(3), a statement that the exhaust stack of the proposed facility and any wind turbine is at least one thousand (1,000) feet from the property boundary of any adjoining property owner and all proposed structures or facilities used for generation of electricity are two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility, unless facilities capable of generating ten megawatts (10MW) or more currently exist on the site. If the facility is proposed to be located on a site of a former coal processing plant and the facility will use on-site waste coal as a fuel source, a statement that the proposed site is compatible with the setback requirements provided under KRS 278.704(5). If the facility is proposed to be located in a jurisdiction that has established setback requirements pursuant to KRS 278.704(3), a statement that the proposed site is in compliance with those established setback requirements:*

COMPLIANCE:

KYMEA Energy Center I is not proposed to be located on the site of a former coal processing plant, nor will it use any waste coal as a fuel source. No existing electricity generating facilities are on-site at the project location.

The Madisonville, Kentucky Code of Ordinances established setback requirements for the project in TITLE XV § 156.031. The project will have minimum lot setbacks of 20 feet from the front, 25 feet per side, and 25 feet from the rear of the lot. There is no rear yard lot setback required where rail spur forms the rear property line.

KYMEA Energy Center I is within the jurisdiction of the Hopkins County Joint Planning Commission and has specific setback requirements set by Madisonville ordinance. Accordingly, the setback requirements identified in KRS 278.704(2) and KRS 278.706(2)(e) do not apply to this project. The project will comply with those setback requirements over which the City of Madisonville and the Hopkins County Joint Planning Commission have primacy. As such, no motion for deviation is required.

Person Responsible: Doug Buresh

6. Public Notice Report

REQUIREMENT: per KRS 278.706(2)(f); *A complete report of the applicant's public involvement program activities undertaken prior to the filing of the application, including:*

- 1. The scheduling and conducting of a public meeting in the county or counties in which the proposed facility will be constructed at least ninety (90) days prior to the filing of an application, for the purpose of informing the public of the project being considered and receiving comment on it;*
- 2. Evidence that notice of the time, subject, and location of the meeting was published in the newspaper of general circulation in the county, and that individual notice was mailed to all owners of property adjoining the proposed project at least two (2) weeks prior to the meeting; and*
- 3. Any use of media coverage, direct mailing, fliers, newsletters, additional public meetings, establishment of a community advisory group, and any other efforts to obtain local involvement in the siting process*

COMPLIANCE:

On May 25-26, 2023, KYMEA staff and consultants met with Mayor Cotton, Electric Superintendent Melton, and members of the Madisonville Electric Department to investigate potential reciprocating internal combustion engine (RICE) sites in and around the Madisonville area. Site selection criteria included 20 to 30 acres of land located near high pressure natural gas and 69 KV or higher KU transmission lines. Mayor Cotton was instrumental in identifying a City-owned piece of property that met the criteria and is perfectly suited for a 75 MW RICE power plant. After KYMEA's Board of Directors authorized the Agency to move forward with an equipment vendor and engineering, procurement, and construction services, KYMEA returned to Madisonville in February and May 2024 to meet with City officials to further investigate the site and perform the necessary due diligence for site suitability. The City was instrumental in providing the assistance KYMEA needed from local agencies and City officials.

An in-person public meeting was held on July 1, 2024, in the Madisonville City Council Chambers. The notice for the in-person meeting was published on June 15, 2024 in *The Messenger*, which is the newspaper of general circulation in Madisonville, Hopkins County, Kentucky. The tearsheet and affidavit of publication is attached as Attachment D. In addition, individual notices of the meeting were mailed to property owners adjoining the proposed project two weeks in advance of the meeting. Copies of these letters are attached as Attachment D.

The public meeting took place at the City Council Chambers on the second floor of the Madisonville Municipal Utilities building, located at 77 North Main Street, Madisonville, KY 42341. Attendees included local elected officials, City staff, KYMEA staff and consultants, representatives from local community organizations, and several adjoining residential property owners. It started at 10:00 AM with a welcome from Doug Buresh of KYMEA, followed by an

introduction to KYMEA and a review of the project utilizing the attached display boards. Doug opened the floor for a Q&A session and solicited comments on the Project. Questions included the following: Who will be on the siting board? Is KYMEA adding new members? Where is the source of the natural gas, how big will the line be and will it cross private property? How does this site size and generation capacity compare with the Ashwood solar project? Where will this power flow? How do power prices compare with other utilities? Will the city realize tax revenue or receive other economic benefits from the project? Why did KYMEA choose Hopkins County? Attendees were provided three handouts: *KYMEA Energy Center Fact Sheet*, *KYMEA Energy Center Q&A*, and *Kentucky's Electric Generation and Transmission Siting Process*. A copy of these handouts, in addition to pictures of the event, are attached as Attachment E.

List of Attendees:

1. Mayor Kevin Cotton
2. Lincoln Fugal (City Engineer)
3. Frank Wallace (Building Official)
4. Mandy Todd (Planning and Zoning)
5. Kim Blue (City Clerk)
6. Rob Saint (City Administrator)
7. Brad Porter (Electric Department Superintendent)
8. Jody Groves (Electric Department)
9. Lisa Miller (Chamber of Commerce)
10. Hopkins County Judge Executive Jack Whitfield
11. Michelle Hixon (KYMEA Dir of Admin. Services & Communications)
12. Doug Buresh (President/CEO KYMEA)
13. Stan Conn (KYMEA Owner's Engineer)
14. Charles Musson (KYMEA Outside Legal Counsel)
15. Tony Space (City Council)
16. Larry Noffsinger (City Council)
17. Frank Stevenson (City Council)
18. Bill Rudd (Madisonville Hopkins County EDC)
19. Jason Pollard (PSE)
20. Kelly Forbes (Madisonville Hopkins County ED)
21. Katie Wyatt (Hopkins County JPC)
22. Allan Todd (Wastewater Treatment Superintendent)
23. Joe Evans (City Attorney)
24. Devi Thorp (Groves Electrical)
25. Chris Lindsey (property owner)
26. Diana Philips (City Finance Superintendent)
27. Amy Keith (Mayor's Assistant)
28. Amy Frogue (Pennyrile ADD)
29. Keith and Diane Dexter (property owner)

Person Responsible: Doug Buresh

7. Efforts to locate near Existing Electric Generation

REQUIREMENT: per KRS 278.706(2)(g); *A summary of the efforts made by the applicant to locate the proposed facility on a site where existing electric generating facilities are located;*

COMPLIANCE:

It is rare for utility-scale gas projects to be co-located with existing electricity generating infrastructure, such as a coal or natural gas fired power plant. KYMEA engaged West Peak Energy and nFront Consulting to identify a location near LG&E/KU Transmission Lines, near an interstate natural gas pipeline, and near a member utility. Only one such location was identified where existing electric generating facilities were located. However, that site ultimately was determined not to be as feasible as other sites for KYMEA Energy Center I, and Owensboro Municipal Utilities wanted to reserve the site for a potential plant of its own.

The project will interconnect to a gas transmission line operated by the Texas Gas Transmission Company (Texas Gas) that is located one mile east of the project site. At KYMEA's expense, KYMEA will construct a gas transmission line to interconnect the project with the Texas Gas transmission line.

Person Responsible: Doug Buresh

8. Proof of Service to County and Municipality Officials

REQUIREMENT: per KRS 278.706(2)(h); *Proof of service of a copy of the application upon the chief executive officer of each county and municipal corporation in which the proposed facility is to be located, and upon the chief officer of each public agency charged with the duty of planning land use in the jurisdiction in which the facility is proposed to be located;*

COMPLIANCE:

A copy of the Siting Board application for the project was electronically transmitted to Madisonville, Kentucky Mayor Kevin Cotton, Hopkins County Judge/Executive Jack Whitfield, and Hopkins County Joint Planning Chairman Janet Wyatt, on the date of electronic filing of this application.

Person Responsible: Doug Buresh

9. Effect on Kentucky Electricity Transmission System

REQUIREMENT: per KRS 278.706(2)(i); *An analysis of the proposed facility's projected effect on the electricity transmission system in Kentucky;*

COMPLIANCE:

The addition of KYMEA Energy Center I is generally expected to provide improved reliability and voltage support to the LGE/KU transmission system by providing reliable generation nearer to system loads in the western portion of their system where significant coal generation retirements have occurred over the last several years. Preliminary injection studies have demonstrated that this generation pairs particularly well with KYMEA's renewable power supply, the Ashwood Solar project and its projected generation shape. The close proximity of the 69 kV interconnection to LG&E/KU's 161 kV system is also favorable. Actual system upgrade requirements will depend greatly on other proposed potential projects in the area. These results will be determined through the Generation Interconnection Request process.

KYMEA submitted a Generation Interconnection Request on February 21, 2024 and was assigned Queue Number LGE-GIS-2024-002. FERC 2023A required LG&E/KU to convert from a serial to a cluster study process in order to clear its study backlog. KYMEA will participate in the Transitional Cluster process which is scheduled to begin on October 1, 2024. A copy of this Transitional Cluster Study Agreement is attached as Attachment F. In addition, KYMEA has filed a Provision Interconnection Service Request on August 12, 2024 and signed the Provisional System Impact Study Agreement on September 9, 2024 and awaits that study process to begin. A copy of this Provisional System Impact Study Agreement is attached as Attachment G.

Person Responsible: Doug Buresh

10. Effect on Local and Regional Economies

REQUIREMENT: per KRS 278.706(2)(j); *An analysis of the proposed facility's economic impact on the affected region and the state;*

COMPLIANCE:

See Attachment H for a report on the projected impact of KYMEA Energy Center I on local and regional economies, written by Paul A. Coomes, Ph.D, an Emeritus Professor of Economics from the University of Louisville.

On page 1 of the report, it states:

There are two primary impacts expected from the project. First, there will be a spike in construction and linked jobs as the site is built out over approximately two years. Using estimates of the construction payroll, I estimate that there will be a total (direct and spinoff) of 111 new job-years in the county from the construction phase, with new labor income of \$17.5 million. For the operations phase, I estimate there will be an annual increase of 49 jobs with labor income of \$3.3 million.

The City of Madisonville levies an occupational tax of 2.5 percent on wages, salaries and other compensation. Hopkins County Fiscal Court levies an additional 0.5 percent occupational tax. Applying that to the direct plant activity yields a one time increase of \$424,000 from construction, and an annual increase to the jurisdictions of \$51,000 from operating the plant. Because the plant is to be owned by a nonprofit association of municipalities there will be no new property taxes generated from the facility itself. The company will also make a \$100,000 annual payment in lieu of taxes to compensate the City for public services like police, fire and roadwork.

Person Responsible: Paul Coomes

11. Record of Environmental Violations

REQUIREMENT: per KRS 278.706(2)(k); *A detailed listing of all violations by it, or any person with an ownership interest, of federal or state environmental laws, rules, or administrative regulations, whether judicial or administrative, where violations have resulted in criminal convictions or civil or administrative fines exceeding five thousand dollars (\$5,000). The status of any pending action, whether judicial or administrative, shall also be submitted;*

COMPLIANCE:

KYMEA has not violated any state or federal environmental laws or regulations. There are no pending actions against KYMEA.

Person Responsible: Doug Buresh

12. Site Assessment Report

REQUIREMENT: per KRS 278.706(2)(1); *A site assessment report as specified in KRS 278.708. The applicant may submit and the board may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report*

COMPLIANCE:

The Site Assessment report is being contemporaneously filed herewith; please see the separate document titled “KYMEA Energy Center I: Site Assessment Report.”

Person Responsible: Individuals identified in Site Assessment Report.

13. Decommissioning Plan

REQUIREMENT: *A decommissioning plan that shall describe how the merchant electric generating facility will be decommissioned and dismantled following the end of its useful life. The decommissioning plan shall, at a minimum, include plans to:*

- 1. Unless otherwise requested by the landowner, remove all above-ground facilities;*
- 2. Unless otherwise requested by the landowner, remove any underground components and foundations of above-ground facilities. Facilities removed under this subparagraph shall be removed to a depth of three (3) feet below the surface grade of the land in or on which the component was installed, unless the landowner and the applicant otherwise agree to a different depth;*
- 3. Return the land to a substantially similar state as it was prior to the commencement of construction;*
- 4. Unless otherwise requested by the landowner, leave any interconnection or other facilities in place for future use at the completion of the decommissioning process;*
- 5. Secure a bond or other similar security for the project to assure financial performance of the decommissioning obligation, provided that:*
 - a. The amount of the proposed bond or similar security shall be determined by an independent, licensed engineer who is experienced in the decommissioning of solar electric generating facilities and has no financial interest in either the merchant electric generating facility or any parcel of land upon which the merchant electric generating facility is located. The proposed amount of the bond or similar security shall be either:*
 - i. The net present value of the total estimated cost of completing the decommissioning plan, less the current net salvage value of the merchant electric generating facility's components; or*
 - ii. The bond amount required by a county or municipal government that has established a decommissioning bond requirement or similar security obligation in the county or municipality where the merchant electric generating facility will be located. If the facility will be located in more than one (1) county or municipality that has established a decommissioning bond or similar security obligation, then the higher amount shall be required for the facility;*
 - b. The bond or other similar security names:*
 - i. For property that is leased by the applicant, each landowner from whom the applicant leases land and the Energy and Environment Cabinet as the primary co-beneficiaries; or*
 - ii. For property that is owned by the applicant, the Energy and Environment Cabinet as the primary beneficiary;*

c. If the merchant electric generating facility is to be located in a county or municipality that has not established a decommissioning bond or other similar security obligation, the bond or other similar security shall name the county or municipality as a secondary beneficiary with the county's or municipality's consent;

d. The bond or other similar security shall be provided by an insurance company or surety that shall at all times maintain at least an "Excellent" rating as measured by the AM Best rating agency or an investment grade credit rating by any national credit rating agency and, if available, shall be noncancelable by the provider or the customer until completion of the decommissioning plan or until a replacement bond is secured; and

e. The bond or other similar security shall provide that at least thirty (30) days prior to its cancellation or lapse, the surety shall notify the applicant, its successor or assign, each landowner, the Energy and Environment Cabinet, and the county or city in which the facility is located of the impending cancellation or lapse. The notice shall specify the reason for the cancellation or lapse and provide any of the parties, either jointly or separately, the opportunity to cure the cancellation or lapse prior to it becoming effective. The applicant, its successor, or its assign, shall be responsible for all costs incurred by all parties to cure the cancellation or lapse of the bond. Each landowner, or the Energy and Environment Cabinet with the prior approval of each landowner, may make a demand on the bond and initiate and complete the decommissioning plan.

6. Communicate with each affected landowner at the end of the merchant electric generating facility's useful life so that any requests of the landowner that are in addition to the minimum requirements set forth in this paragraph and in addition to any other requirements specified in the lease with the landowner may, in the sole discretion of the applicant or its successor or assign, be accommodated; and

7. Incorporate the requirements of paragraphs (m)1. to 6. of this subsection into the applicant's leases with landowners.

COMPLIANCE: The KYMEA Energy Center I Decommissioning Plan complies with the foregoing requirements and is attached as Attachment I. The corresponding decommissioning cost model is attached as Attachment J.

Person Responsible: Wes Turechek, Stanley Consultants

14. Cumulative Environmental Assessment Summary

REQUIREMENT: per KRS 224.10-280; *Cumulative environmental assessment and fee required before construction of facility for generating electricity -- Conditions imposed by cabinet -- Administrative regulations.*

(1) Except for a person that commenced construction of a facility prior to April 15, 2002, or that has received a certificate of public convenience and necessity from the Public Service Commission prior to April 15, 2002, no person shall commence to construct a facility to be used for the generation of electricity unless the person:

(a) Submits a cumulative environmental assessment to the cabinet with the permit application; and

(b) Remits a fee set pursuant to KRS 224.10-100(20) by the cabinet to defray the cost of processing the cumulative environmental assessment.

(2) The person may submit and the cabinet may accept documentation of compliance with the National Environmental Policy Act (NEPA) as satisfying the requirements to file a cumulative environmental assessment under subsection (1) of this section.

(3) The cumulative environmental assessment shall contain a description, with appropriate analytical support, of:

(a) For air pollutants:

1. Types and quantities of air pollutants that will be emitted from the facility; and

2. A description of the methods to be used to control those emissions;

(b) For water pollutants:

1. Types and quantities of water pollutants that will be discharged from the facility into the waters of the Commonwealth; and

2. A description of the methods to be used to control those discharges;

(c) For wastes:

1. Types and quantities of wastes that will be generated by the facility; and

2. A description of the methods to be used to manage and dispose of such wastes; and

(d) For water withdrawal:

1. Identification of the source and volume of anticipated water withdrawal needed to support facility construction and operations; and

2. A description of the methods to be used for managing water usage and withdrawal.

(4) The cabinet may impose such conditions regarding the timing, volume, duration, or type of pollutants on a permit, registration, general permit, or permit-by-rule for a facility subject to this section as are necessary to comply with applicable standards.

(5) The cabinet may promulgate administrative regulations to implement the provisions of this section.

COMPLIANCE: The project's Cumulative Environmental Assessment is attached as Attachment K. The Cumulative Environmental Assessment is also being submitted to the Energy and Environment Cabinet.

Person Responsible: Doug Buresh