

KYMEA ENERGY CENTER I SITE ASSESSMENT REPORT

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1 PROPOSED SITE DEVELOPMENT PLAN

REQUIREMENT: *per KRS 278.708 (3)(a); A description of the proposed facility that shall include a proposed site development plan that describes:*

- 1 *Surrounding land uses for residential, commercial, agricultural, and recreational purposes;*
- 2 *The legal boundaries of the proposed site;*
- 3 *Proposed access control to the site;*
- 4 *The location of facility buildings, transmission lines, and other structures;*
- 5 *Location and use of access ways, internal roads, and railways;*
- 6 *Existing or proposed utilities to service the facility;*
- 7 *Compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5); and*
- 8 *Evaluation of the noise levels expected to be produced by the facility*

COMPLIANCE: Please see the Application, Section 2 for a detailed description of the proposed Project and Project area. The following items provide information specifically in response to requirements 1 through 8 listed above.

1. The Project Site lies amongst primarily former coal mine properties served by the adjacent rail lines. The Plant Site was formerly mined underground in the West Kentucky 9 and 11 seams. The property to the south contains former coal refuse ponds resulting from prior mining activity. The City property to the east of Bean Cemetery Road was surface mined (WKY 14) and has been reclaimed. Currently, the adjoining properties are primarily a mix of agricultural (92%) and industrial (4.5%) with the balance being mixed agricultural/residential (see Kirkland Report section I, which is attached as Appendix A). The Madisonville Wastewater Treatment plant is located adjacent to the Plant Site. Currently, the property is zoned General Industrial as shown on attached map.
2. The Plant Site and Substation Site are shown on the attached proposed Minor Subdivision Plat being presented to the Madisonville Planning Commission and attached hereto as Appendix B. The legal description of the Plant Site is identified in Appendix C.
3. The Plant Site access will be provided at one location off AC Slaton Road and will be used during construction and operation of the plant. The Project will be enclosed by a gated security fence which will be monitored and operated from the plant control room or by card access after the plant is operational. Preliminary arrangement for Plant Site fencing is shown on Stanley Consultants Site General Arrangement, attached as Appendix D. The Substation will be owned by LG&E/KU and site access will also be off AC Slaton Road and the substation will be in a locked and gated chain link fence enclosure. Preliminary arrangement for Substation Site fencing is shown on Patterson & Dewar Engineers Site Layout, attached as Appendix E. The gas line will terminate within the confines of the Plant Site and the meter station will be in a locked gated fence.
4. The preliminary arrangement for the Plant Site is shown on Stanley Consultants Site General Arrangement, attached as Appendix D. Preliminary arrangement for Substation Site including generator lead line from the plant switchyard and proposed connections to the transmission system

is shown on Patterson & Dewar Engineers Site Layout, attached as Appendix E. A new underground high pressure gas line will be constructed to serve the plant running from the Texas Gas high pressure network near Frank Hill Road for approximately one mile to the Plant Site as shown on attached Preliminary Pipeline Route, attached to the application as Appendix F.

5. The Plant Site access will be provided at one location off AC Slaton Rd. The site access will be used during construction and operation of the plant. Aggregate roads will be installed during the construction and will be used during the majority of the construction phase. Permanent asphalt roads will be installed towards the end of construction. The location of proposed access and internal roads are shown on Stanley Consultants Site General Arrangement, attached as Appendix D. There is an existing railway adjacent to site, but it will not be used during construction or operation of the plant. Also see attached Palmer Traffic Impact Study.
6. The facility will receive utility services as described below:

Water – Water will tie into the existing off-site City of Madisonville municipal water supply to supply the domestic potable water, plant service water, and plant fire water loop (see Utilities Map).

Gas - 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 (see Preliminary Pipeline Route).

Sanitary sewer– Sanitary drains will be gravity drained to a central lift station. The discharge from the lift station will be pumped off-site to the City of Madisonville Wastewater Treatment Plant adjacent to the Plant Site (see Utilities Map).

Electrical – Electrical export and service will be provided using the transmission line through the 69kV LG&E/KU substation. A secondary connection will be made to the City of Madisonville Municipal Electric Utility distribution currently running through the Plant Site (see Utilities Map).

7. As stated in Section 5 of the Application, there are no residential neighborhoods (as defined by KRS 278.700 (6)), schools, hospitals, or nursing homes within two thousand (2,000) feet of the Plant Site. Pursuant to KRS 278.704(4), KYMWA Energy Center I will not need to seek a deviation from this setback requirement because there are local zoning ordinances establishing minimum setbacks, with which KYMEA Energy Center I will comply.
8. The construction and operational noise study report provided in Appendix G identifies the noise levels expected by the facility. The findings are further explained in Section 3 below.

Person Responsible: Doug Buresh

2 COMPATIBILITY WITH SCENIC SURROUNDINGS

REQUIREMENT: *per KRS 278.708 (3)(b); An evaluation of the compatibility of the facility with scenic surroundings.*

COMPLIANCE: The Project site is located in an area with adjoining land primarily being a mix of agricultural and industrial uses. The appearance of the facility is industrial in nature, but this facility will be located adjoining a wastewater treatment plant. The Project Site lies amongst primarily former coal mine properties served by the adjacent rail lines. The Plant Site was formerly mined underground in the West Kentucky 9 and 11 seams. The property to the south contains former coal refuse ponds resulting from prior mining activity. The City property to the east of Bean Cemetery Road was surface mined (WKY 14) and has been reclaimed. The closest home is over 700 feet away and there are existing intervening trees. I do not see any basis for an impact on property value from the appearance.

Additional information regarding the site's compatibility with surroundings is included in the report of Richard Kirkland, attached as Appendix A.

Persons Responsible: Doug Buresh and Richard Kirkland

3 PROPERTY VALUE IMPACTS

REQUIREMENT: *per KRS 278.708 (3)(c); The potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the facility.*

COMPLIANCE: Please refer to the Property Value Impact Report provided as Appendix A (Kirkland Appraisals LLC 2024). In his transmittal letter, Mr. Kirkland provides the following conclusions on page 1.

The adjoining properties are well set back from the proposed RICE facility and supplemental vegetation is proposed to enhance the areas where the existing trees do not currently provide a proper screen. There are a number of other uses in the area that are likely already negatively impacting property values in the area and those uses help to define this market regardless of the RICE facility. The closest and only adjoining home will be 765 feet from the facility. This trailer is significantly removed from the facility and sales data supports a finding of no impact on this home. The next closest homes are more than double that distance from the proposed facility and similarly support a finding of no impact on property value.

Based on the data and analysis in this report, it is my professional opinion that the RICE facility proposed at the subject property will have no impact on the value of adjoining or abutting properties and that the proposed use is in harmony with the area in which it is located.

Person Responsible: Richard Kirkland

4 ANTICIPATED NOISE LEVELS

REQUIREMENT: *per KRS 278.708 (3)(d); Evaluation of anticipated peak and average noise levels associated with the facility's construction and operation at the project boundary*

COMPLIANCE: See Appendix G for a report studying the anticipated operational and construction noise levels as studied and measured at nearby receptors.

Person Responsible: David J. Parzych

5 EFFECT ON ROAD AND RAILWAYS

REQUIREMENT: *per KRS 278.708 (3)(e); The impact of the facility's operation on road and rail traffic to and within the facility, including any anticipated degradation of roads and lands in the vicinity of the facility*

COMPLIANCE: The report provided in Appendix H discusses the Project's impact on road traffic, and possible degradation of roads as a result of the Project. The following is the conclusion of the report on page 9:

When comparing the no build analysis to the build analysis it was determined that the roadways in the study area will continue to operate at a LOS similar to existing conditions. The analysis determined that under proposed conditions AC Slaton Road experience minor degrading to a LOS "B" and Bean Cemetery Road will continue to operate at a LOS "A". The turn lane analysis determined that no additional turn lanes are warranted for any roadways based on the traffic volumes on the road. The sight distance analysis determined that passenger cars and trucks entering the roadways from the development can do so safely.

Based on the analyses performed, no changes to the roadway network are recommended within the study area in order for traffic conditions to operate within acceptable conditions.

In addition, the project will not use rail traffic for delivery of materials. Accordingly, there will be no impact on the rail traffic associated with the facility.

Person Responsible: John Coburn

6 MITIGATION MEASURES

REQUIREMENT: per KRS 278.708(4): *The site assessment report shall also suggest any mitigating measures to be implemented by the applicant to minimize or avoid adverse effects identified in the site assessment report; and per KRS 278.708(6); The applicant shall be given the opportunity to present evidence to the board regarding any mitigation measures. As a condition of approval for an application to obtain a construction certificate, the board may require the implementation of any mitigation measures that the board deems appropriate.*

COMPLIANCE:

Recognizing the potential impact of increased noise of the proposed RICE facility during operations, KYMEA is proposing to reduce the operating noise levels through various equipment and technologies.

The building wall and roof will be designed to have a high Sound Transmission Class (STC) of approximately 38 or greater, as opposed to an STC of 24. The ceiling has exposed insulation providing a Noise Reduction Coefficient (NRC) of 0.82, rather than 0.85. Silencers will be included on the building wall ventilation and roof ridge vent. Note the mitigation technologies discussed are representative and minor changes may result from final design and equipment selection. The noise report attached as Appendix G estimates that these mitigation measures will reduce the noise from 75 dB(A) at the nearest residential receptor to 54 dB(A).

With respect to mitigating construction noise, KYMEA proposes the following actions:

- Construction activities will be limited to daytime hours.
- Mufflers and engine shrouds are required on all trucks and other engine-powered equipment.
- Trucks and other engine-powered equipment shall observe all posted speed limits and limit idling.
- Vehicles' horns shall only be used when absolutely necessary.

In addition, KYMEA proposed these additional mitigation measures:

- The project will provide an emergency response plan to local officials.
- KYMEA will control access to the site during construction and operation.
- KYMEA's access control strategy shall also include appropriate signage to warn potential trespassers.
- KYMEA will obtain necessary permits regarding truck and other construction traffic.

Person Responsible: Doug Buresh