

Requests for Information (RFI) for Interstate Power & Light (IPL):

1. Process Water and Wastewater

Given that the proposed alternative onsite process-water supply and wastewater-treatment facilities are not currently shown on the Major Site Plan and may constitute a Material Change to the Project, Linn County is seeking the following additional information and documentation to complete the record:

IPL Response: Alliant Energy's Iowa energy company, Interstate Power and Light (IPL), recognizes the importance of the need to demonstrate that adequate water supply and wastewater services can be provided to the proposed Morgan Valley Energy Center (MVEC) facility as part of the rezoning process. To provide the necessary certainty at this stage of project development, IPL has identified a truck-based water supply and wastewater disposal solution that can support the facility during construction, and as a long-term operational solution. IPL has successfully utilized a similar approach at another combustion turbine site in Iowa for over 20 years.

Under this approach, process water would be transported to MVEC from IPL's Prairie Creek Generating Station (PCS) located at 3300 C Street SW in Cedar Rapids, and process wastewater would be transported to the City of Cedar Rapids Water Pollution Control Facility at 7525 Bertram Rd SE for treatment and disposal. Process water demand at MVEC is primarily associated with combustion turbine inlet air evaporative cooling used only when ambient temperatures exceed 59F. Accordingly, trucking would generally occur from April through October and is currently estimated to require approximately two to ten process water deliveries and one to three wastewater loads per day. When practical, the same trucks would be used for inbound water delivery and outbound wastewater transport, thereby minimizing total truck trips.

The truck-based process water supply would not affect the availability of water required for fire protection. MVEC will provide dedicated on-site fire water storage to provide the required fire protection water supply independent of the facility's process water supply arrangement.

Implementation of the truck-based water supply and wastewater management alternative would not alter the findings or operational conclusions presented in the Traffic Impact Study prepared for MVEC. The anticipated increase in traffic associated with this alternative represents a minor addition to overall traffic on the surrounding roadway network and would result in only a limited number of additional truck movements during peak-hour periods. The study intersection has sufficient capacity to accommodate these additional trips, and the projected increase in traffic does not affect the study's conclusions regarding intersection operations, roadway capacity, or the ability of the surrounding roadway network to accommodate project-related traffic. IPL will continue to coordinate with the IDOT and the county secondary roads departments to address any traffic flow concerns.

IPL continues to pursue service from the Cedar Rapids Water Division (CRWD) as its preferred long-term solution for process water supply and wastewater disposal. If City utility service is not finalized, IPL is also evaluating on-site wells for process water supply and on-site wastewater treatment with permitted discharge to Morgan Creek. If neither alternative is implemented, MVEC will have sufficient on-site water storage and truck loading/unloading infrastructure to allow the truck-based water supply and wastewater management system to operate as a permanent solution for the life of the facility.

Therefore, adequate water supply, wastewater management, fire protection, and transportation facilities and services are available or will be provided before MVEC is placed into operation. These services do not depend upon execution of a municipal utility agreement or development of a well water supply. The identified facilities and service arrangements provide a sufficient and reliable basis for the County to

determine that MVEC satisfies the adequate public facilities and Minimum Levels of Service requirements of Linn County Code §107-69.

- a. **Revised Major Site Plan.** A revised Major Site Plan showing the proposed location and physical footprint of all onsite process-water supply, water-treatment, wastewater-treatment, and related equipment, including any associated tanks, buildings, piping, ponds, discharge facilities, access areas, or other infrastructure, and identifying any other material changes to the 55-acre facility footprint.

***IPL Response:** Please refer to the attached updated Major Site Plan: GA003A - Trucked or City Water Option. GA003A depicts the facilities necessary to accommodate the proposed truck-based water supply and wastewater management approach, including dedicated truck loading and unloading areas, service/fire water and wastewater storage tanks. These facilities are located entirely within the original 55-acre development area identified in the Rezoning Application and do not require an expansion of the proposed development area. The physical arrangement depicted on GA003A would also work, should IPL secure water/wastewater from CRWD.*

- b. **Gas Turbine Process-Water Requirements.** Documentation from the gas turbine supplier (Siemens) identifying the required quantity and water-quality specifications for process water used by the air-inlet evaporative coolers, including applicable limits for constituents such as dissolved solids, hardness, silica, chlorides, and other parameters relevant to equipment operation.

***IPL Response:** The proposed truck-based water supply and wastewater management approach precludes the need for on-site pretreatment of process water for the combustion turbine inlet air evaporative cooling system, and treatment of evaporative cooler blowdown prior to off-site transport and disposal. The blowdown rate will be optimized based on operating conditions and water quality required by the Siemens specifications to minimize the potential for fouling of the evaporative cooling media.*

Regarding potential alternatives, IPL has evaluated how the use of either CRWD water or on-site wells could impact plant design. Both options could be utilized while maintaining the Siemens water quality requirements for the turbine evaporative coolers. In the case of on-site wells, it is anticipated that remotely regenerated, demineralized water trailers would be necessary to treat a portion of the evaporator cooler makeup water. An alternate Major Site Plan: GA003B – Well Water Option, depicts where this equipment would potentially be located. Based on groundwater quality samples taken from existing wells in the vicinity, the use of demineralized water trailers to treat makeup water is not expected to result in any on-site waste discharge (to be confirmed pending final groundwater samples taken from a potential on-site test well). In all cases, it is anticipated the evaporative cooler system will operate at approximately three to four cycles of concentration to manage both water usage and water quality. Blowdown from the evaporative coolers would be treated as described below.

- c. **Cedar Rapids Water Supply Confirmation.** A certified letter from the Cedar Rapids Water Division confirming that its potable-water supply can provide the quantity, pressure, and water quality required for the Project's process-water needs.

***IPL Response:** The proposed truck-based process water supply, supported by appropriately sized on-site service/fire water storage and pumping systems, provides an independent and reliable means of satisfying the facility's water volume, pressure, and water quality requirements. This approach is not dependent upon the availability of municipal water service.*

- d. **Water-Treatment Equipment.** Identification of the type, capacity, and anticipated physical dimensions of any water-treatment equipment required to make either onsite groundwater or Cedar Rapids potable water suitable for the Project's process-water requirements, including, as applicable, reverse osmosis, filtration, softening, demineralization, or other treatment systems.

IPL Response: *Under the proposed truck-based process water supply approach, on-site water treatment facilities are not required.*

If CRWD is ultimately selected as the source for process water supply, preliminary engineering investigations indicate that no on-site water treatment will be required to meet the water quality requirements provided by Siemens for the inlet air evaporative cooler system. The site layout depicted in G003A would not change.

If on-site wells are ultimately selected as the process water source, the existing 55-acre project development area provides sufficient space to accommodate the necessary well and wastewater treatment equipment. Accordingly, each of the identified water supply alternatives can be accommodated within the proposed development area.

- e. **Process Wastewater.** A detailed estimate of the volume, chemical composition, treatment requirements, and proposed discharge method for all process wastewater generated by the Project, including turbine water-wash wastewater and air-inlet evaporative-cooler blowdown. The analysis should identify the anticipated concentrations of relevant constituents and whether pretreatment or additional treatment would be required before discharge.

IPL Response: *Under the proposed truck-based process wastewater management approach, no on-site wastewater treatment facilities would be required.*

If CRWD is ultimately selected to provide wastewater service, no on-site wastewater treatment is anticipated. The need for wastewater pre-treatment will be determined in coordination with CRWD based on the characteristics of the proposed discharge. Based on early engineering water chemistry evaluations, we do not believe any pre-treatment will be required.

If on-site wells are ultimately selected as the process water source, the existing 55-acre project development area provides sufficient space to accommodate the necessary evaporative cooler blowdown treatment facilities. It is anticipated that the treatment could be as minimal as the addition of sodium hypochlorite to remove ammonia and react with dissolved iron, and a set of bag/cartridge filters to remove the iron/particulate matter. If the removal of other metals is required, the treatment system could expand to include equalization, pH adjustment, chemical precipitation, ultrafiltration, and solids treatment with clarification, filtration, thickening, and either dewatering or offsite slurry management. The proposed discharge method of treated process wastewater would be to the site stormwater detention system. Any overflow of this system would be to the local watershed and Morgan Creek in compliance with Iowa DNR's NPDES permit program.

Combustion turbine compressor water-wash systems will utilize truck-delivered demineralized water. Water-wash effluent will be collected separately from other process wastewater streams in dedicated 3,000 gallon storage tanks, and transported off site for appropriate disposal. The dedicated storage capacity will be sufficient to store several months' anticipated volume of compressor water-wash effluent. The remaining process wastewater generated by the facility will consist primarily of evaporative cooler blowdown.

- f. **Water-Treatment Regeneration Wastewater.** The expected volume and chemical composition of wastewater generated by regeneration, backwashing, membrane cleaning, or other water-treatment processes, together with the proposed treatment and final discharge method.

IPL Response: Under the proposed truck-based process water supply and wastewater disposal approach, no on-site water treatment facilities are required. This approach eliminates back wash and water treatment equipment regeneration chemicals and waste from the site.

If CRWD is ultimately selected as the source for process water supply, preliminary engineering investigations indicate that no on-site water treatment will be required to meet the water quality requirements provided by the OEM for the inlet air evaporative cooler system. Likewise, if CRWD is ultimately selected to provide wastewater service, no on-site wastewater treatment is anticipated. The need for wastewater pre-treatment will be determined in coordination with CRWD based on the characteristics of the proposed discharge. Based on early engineering water chemistry evaluations, we do not believe any pre-treatment will be required.

If on-site wells are ultimately selected as the process water supply source, the existing 55-acre project development area provides sufficient space to accommodate the necessary well water treatment equipment (see Simple Cycle Project Overall Site Plan – Well Water Option drawing G003B). The current planned approach with well water supply would be to provide a 65/35 blend of demineralized water with untreated well water. Demineralized water would be produced via rented demineralizer trailers which would be regenerated off-site, so no regeneration wastewater would be expected at the project site.

- g. **Groundwater Availability Verification.** Confirmation from an appropriately qualified and independent certified groundwater professional or other technical expert that IPL's preliminary desktop analysis supports the conclusion that sufficient groundwater is available onsite to meet the Project's anticipated process-water requirements, including consideration of sustainable yield, anticipated pumping rates, seasonal conditions, and potential impacts to existing groundwater users.

Linn County is requesting this information because the current Major Site Plan does not identify the location or physical extent of the alternative water-supply and wastewater-treatment facilities, and the available information does not yet establish whether the alternative configuration can be accommodated within the proposed 55-acre footprint or what additional environmental, operational, or site-development impacts may result.

IPL Response: Under the proposed truck-based process water supply approach, operation of the combustion turbines is not affected by on-site groundwater availability.

To support the potential for an on-site supply well, a desktop study performed by Sargent & Lundy reviewing available data on the Iowa Well Information System, Iowa Source Water Protection Program well database, and the Iowa Geological Survey/US Geological Survey Water Atlas No 6 (Water Resources of East-Central Iowa) indicates that the Silurian Bedrock Aquifer is likely capable of meeting the water needs of the plant. IPL may, subject to applicable permit approvals, elect to install a test water well with monitoring wells to confirm that well production capability will not impact the aquifer or nearby private supply wells. The test water well, if pursued, will also validate expected well water quality and help further inform water and wastewater treatment equipment needs.

2. Spill Prevention Control and Countermeasure (SPCC) Plan

Given that the Project includes several large above-ground electrical transformers and other equipment containing insulating oil, as well as a fin-fan air-cooled heat exchanger utilizing a glycol-water system, Linn County is seeking the following additional information and documentation to complete the record:

- a. **Spill Containment Means and Methods.** Confirmation that positive spill-containment measures will be provided for all above-ground equipment containing hazardous liquids, including insulating oil and glycol-water solutions, where required by applicable federal, state, or local requirements. The response should identify the proposed containment capacity, design criteria, and location of the containment systems and demonstrate that they are appropriately sized to contain potential releases from the associated equipment.

IPL Response: Alliant Energy confirms that the Morgan Valley Energy Center will incorporate positive spill-containment and prevention measures into the facility design for all above-ground equipment containing insulating oil and other hazardous liquids, where required by applicable federal, state, or local requirements.

Specific physical containment locations, capacities, materials, drainage controls, and design criteria will be established during the final engineering design phase when equipment selection, precise liquid volumes, grading, and precipitation inputs are finalized.

Under federal regulations (40 CFR § 112.7(c)), containment or diversionary structures for oil-containing equipment must prevent discharges and address the equipment's typical failure modes and potential release volumes. For bulk storage containers, secondary containment will be designed to hold the volume of the largest single container plus sufficient freeboard for precipitation. All containment systems will be sized, designed, and documented based on potential release volumes, site drainage, and good engineering practices.

While federal SPCC regulations specifically govern oil-containing equipment, Alliant Energy will address the fin-fan air-cooled heat exchanger's glycol-water system separately under applicable chemical handling requirements and project design standards during final design to protect local water resources.

- b. **Spill Prevention, Control, and Countermeasure (SPCC) Plan.** Confirmation that an SPCC Plan will be prepared by a qualified professional and submitted to Linn County for review as part of the Project's environmental and site-development documentation. The SPCC Plan should be coordinated with and submitted concurrently with the Project's Stormwater Pollution Prevention Plan (SWPPP), where practicable, so that potential releases and stormwater-related impacts are addressed comprehensively.

IPL Response: Alliant Energy confirms that a final facility-specific Spill Prevention, Control, and Countermeasure (SPCC) Plan will be prepared for the Morgan Valley Energy Center before commercial operation begins.

The SPCC Plan and its supporting containment calculations will be reviewed, approved, and certified by a licensed professional engineer in accordance with 40 CFR § 112.3(d). This certification will confirm that the plan reflects good engineering practices, is adequate for the facility, and establishes regular inspection and training protocols.

The final SPCC Plan will be coordinated with the project's Stormwater Pollution Prevention Plan (SWPPP), where practicable, to ensure that spill controls, drainage management, and stormwater protections are aligned and addressed comprehensively. Alliant Energy will submit the SPCC Plan and relevant containment documentation to Linn County as part of the project's final environmental and site-development records.

Alliant Energy currently implements 743 SPCC plans across its service territory, demonstrating extensive experience in maintaining compliance, conducting training, and implementing spill-prevention plans effectively.

3. Boland Farm Property Setback Reductions

Given that the proposed fuel gas conditioning equipment is located approximately 400 feet from existing structures on the Boland Farm, and that IPL is requesting reductions to the required residential dwelling and yard setbacks, as required by *Minimum Levels of Service requirements of Linn County Code §107-69(a)*, from 1,000 feet and 200 feet, respectively, to 650 feet and 100 feet, Linn County is seeking the following additional information and documentation to complete the record:

- a. **Authorization from Landowner.** A written and recorded waiver or other legally enforceable instrument from the affected landowner expressly authorizing the requested reductions and identifying the specific structures and property interests to which the waiver applies.

***IPL Response:** IPL and Boland Farms, Ltd. have executed a Neighbor Agreement addressing the applicable setback and sound requirements for the Project and providing the associated waivers. The executed agreement will be recorded with Linn County prior to the Linn County Board of Supervisors taking final action on the rezoning application. Although, as between IPL and Boland Farms, Ltd., the Neighbor Agreement would allow for a much smaller setback, Boland Farms, Ltd. has also submitted an Agreement for Reduced Setback to the Board of Supervisors for its approval pursuant to the terms of Section 3(g)(3)(e) and 3(g)(3)(h) of Linn County Ordinance #4-3-2026, which would set the residential setback at 650 feet. This separate Agreement for Reduced Setback is intended to allow for Mr. Boland to remain in his residence if he so chooses after construction of the energy center.*

- b. **Hazard and Operability / Process Safety Analysis.** Confirmation that IPL has completed an appropriate Hazard and Operability Study (HAZOP), process hazard analysis, or equivalent engineering safety assessment for the proposed fuel gas conditioning system and has evaluated the potential consequences of a natural gas release, vapor-cloud ignition, fire, or vapor-cloud explosion involving the equipment. The assessment should specifically address the approximately 400-foot separation between the fuel gas conditioning equipment and the existing structures on the Boland Farm and identify the engineering controls, physical barriers, detection systems, isolation systems, emergency shutdown systems, and other protective measures proposed to reduce the potential for injury or damage to those existing structures.

***IPL Response:** IPL will comply with all code requirements, including NFPA, for design of the fuel gas conditioning system. Any HAZOP analysis would occur when the P&IDs and associated process, equipment, piping, instrumentation, control, and protection information are sufficiently developed to permit a meaningful systematic review, while the design remains sufficiently flexible to incorporate HAZOP recommendations. IPL anticipates the design reaching this level of completeness in Q3 2027.*

4. Noise Analysis.

Given that the Preliminary Sound Study indicates that the Project-Only sound sources are predicted to result in a sound pressure level of approximately 75 dBC at the Boland Farm and 74 dBC at the Ced Rel Motel, and that IPL is requesting an increase in the allowable sound level at the Boland Farm to 85 dBC, Linn County is seeking the following additional information and documentation to complete the record:

- a. **Authorization from Landowner.** A written and recorded waiver or other legally enforceable instrument from the affected landowner expressly authorizing the requested dbA and dbC sound limit increases.

***IPL Response:** IPL and Boland Farms, Ltd. have executed a Neighbor Agreement addressing the applicable setback and sound requirements for the Project and providing the associated waivers.*

The executed agreement will be recorded with Linn County prior to the Linn County Board of Supervisors taking final action on the rezoning application.

- b. **Basis for Requested Increase.** Clarification as to whether the requested increase from 75 dBC to 85 dBC at the Boland Farm is intended, in whole or in part, to accommodate potential future noise generated by the proposed combined-cycle air-cooled condenser (ACC) and associated equipment. If so, IPL should identify the anticipated sound contribution from the future combined-cycle equipment and explain how that equipment was accounted for in the requested 85 dBC limit.

***IPL Response:** No, the increase is not intended to accommodate a future combined-cycle plant. Any future combined cycle conversion would be able to comply with current EU-2 noise ordinance limits. This limit was requested as part of negotiated agreement to provide engineering and administrative margin.*

- c. **Revised Sound Study.** A revised Sound Study demonstrating the predicted sound levels at the Boland Farm and Ced Rel Motel under the operating scenario that would result in an 85 dBC Project-Only sound pressure level at the Boland Farm. The revised study should specifically demonstrate that Project-Only sound sources capable of producing 85 dBC at the Boland Farm will not cause the sound level at the Ced Rel Motel to exceed the applicable 75 dBC maximum sound limit. The analysis should include any other Project-Only sound sources that are reasonably foreseeable based on the proposed Project configuration.

***IPL Response:** No operating scenario is expected that would result in an 85 dBC project-only sound pressure level at the Boland Farm. Our current sound study shows that the predicted sound pressure level at the Boland farm to be 75 dBC. This Sound Study includes all planned Project-Only sound sources. This limit was requested as part of negotiated agreement to provide engineering and administrative margin.*

- d. **Start up and shut down noise levels.**

***IPL Response:** IPL consulted with the combustion turbine manufacturer to evaluate typical startup and shutdown sound levels. The Morgan Valley Energy Center is designed as an indoor facility, which helps reduce sound levels at all operating modes, including startup and shutdown.*

Per the OEM turbine supplier, for the indoor simple-cycle configuration, startup and shutdown noise impacts are expected to be minimal and of limited duration. During startup, auxiliary equipment such as the Static Frequency Converter (SFC) and compressor bleed systems are active; however, any transient noise effects are expected to diminish as the unit reaches minimum load, typically within approximately five minutes. During shutdown, the fuel gas vent valves operate as part of the fuel gas purge sequence for approximately 30 seconds.

Based on the OEM turbine supplier's experience, startup and shutdown activities are not expected to result in any significant or sustained increase in noise levels relative to normal plant operation.

- e. **Impacted Neighbors.** Financial or non-financial programs for surrounding property owners that may be impacted by exceeded noise levels

***IPL Response:** IPL does not anticipate any noise level exceedance. If measured sound levels exceed the EU-2 ordinance limits, IPL is committed to developing engineered solutions and / or working with individual neighbors on a case-by-case basis to bring the project into compliance.*

5. Air Quality Modeling.

Given that the Project's preliminary air-quality modeling indicates that certain criteria pollutants, including PM_{2.5} and nitrogen oxides (NO_x), may exceed applicable Significant Monitoring Concentrations (SMCs), Linn County is seeking the following additional information and documentation to complete the record and determine whether the Project, as currently proposed, can satisfy applicable air-quality requirements:

IPL Response: Please see IPL's responses below, noting that the preliminary modeling results identify pollutants for which additional analysis may be required under the air-permitting process; an exceedance of a Significant Monitoring Concentration is not, by itself, a modeled violation of an applicable ambient air-quality standard.

- a. **Compliance Demonstration and Exhaust Stack Height.** Confirmation of the exhaust stack height, diameter, configuration, and other stack parameters used in the preliminary air-quality modeling. If additional modeling or permitting requirements indicate that a different stack height or configuration may be necessary to achieve compliance, identify the potential Material Changes to the Project, including any proposed increase in stack height, and provide the basis for determining the required stack dimensions.

IPL Response: The July 21, 2026 PSD air construction permit application models three combustion-turbine stacks, each with a height of 161 feet, an inside diameter of 21.3 feet, and vertical discharge. These parameters remain subject to confirmation as equipment selection and agency review of the air-permit application are completed. If refined modeling or permitting review indicates that a different stack height or configuration is needed to demonstrate compliance, IPL will evaluate the change through final engineering and identify any resulting Material Change to the Project. Any revised stack dimensions would be based on the final engineering requirements, building-downwash analyses, and refined dispersion modeling rather than on the Significant Monitoring Concentration results alone. For more information, see PSD Application § 6.2 and Table 6-1 (model inputs); §§ 6.3.14, 6.5–6.7, and 6.9 (compliance modeling and conclusions).

- b. **Building Downwash and Material Changes.** Identification of any potential Material Changes to the Project resulting from building downwash or aerodynamic turbulence, including changes to the location, height, configuration, or dimensions of nearby structures that could affect the dispersion of exhaust emissions and modeled ground-level concentrations. The response should identify the structures evaluated in the downwash analysis and explain whether any changes to the current Major Site Plan may be necessary as a result.

IPL Response: The submitted air permit application identifies the stack parameters, facility configuration, structures evaluated for building downwash, and emission controls incorporated into the Project. The application demonstrates compliance with all applicable National Ambient Air Quality Standards (NAAQS) and PSD Class II Increment requirements. Based on the design evaluated in the application, no potential Material Changes to the Project have been identified; the current design satisfies applicable air quality requirements. For more information, see PSD Application Section 6.3.6 (Building Wake Effect/Downwash).

- c. **Emission Controls.** Identification of any additional emission-control equipment, systems, or operating requirements that may be necessary to address the preliminary modeled impacts for PM_{2.5}, NO_x, or other regulated pollutants. If additional controls may be required, identify the type of control technology, anticipated physical footprint, location, auxiliary equipment, operational requirements, and any resulting Material Changes to the Project or 55-acre facility footprint.

IPL Response: The need for emission-control equipment or operating limitations will be determined through air-permitting analysis, including the Best Available Control Technology (BACT) evaluation, final emissions calculations, and air-quality modeling. The preliminary modeled impacts do not, by themselves, establish that an additional control device is required. If the permitting agencies identify a need for additional physical control equipment (e.g., an alternative BACT determination), IPL will identify the location, footprint, auxiliary systems, and operating requirements and will evaluate whether the change affects the Major Site Plan or constitutes a Material Change. No expansion beyond the proposed 55-acre facility footprint has been identified for air-emission controls. For more information, see PSD Application § 2.1 (combustion turbines and emission controls), § 5.0 (BACT analyses), including § 5.1 (NOx BACT for the simple-cycle turbines), and §§ 6.5–6.7 (modeled air-quality results).

IPL respectfully recognizes the Planning & Zoning Department's role in reviewing the Project under Linn County's land-use authorities. The technical review of air-quality modeling, emission controls, stack parameters, permit limits, and compliance with state and federal air-quality requirements, however, rests with the Iowa Department of Natural Resources under Iowa Code chapter 455B and the Department's implementing rules. Iowa law does not authorize Linn County to use its zoning or site-plan process to establish or enforce air-permitting standards or conditions that are more stringent than, or additional to, the requirements administered by the Iowa DNR. Accordingly, the air-permitting determinations addressed above—including whether the Project's modeling, stack design, emission controls, and operating limitations satisfy applicable requirements—must be made by Linn County Public Health and the Iowa DNR through the PSD permitting process and should not be independently reconsidered or supplemented through the County's land-use review.