Midwest Generation, LLC Will County Generating Station Ponds 1 North, 1 South, 2 South, and 3 South Proposed Closure Construction Project Public Meeting General Summary

INTRODUCTION

In accordance with Title 35 of the Illinois Administrative Code ("35 IAC") Section 845.240, Midwest Generation, LLC (MWG) posted the public meeting notice on the Closure Plans for Will County Generating Station's Ponds 1 North, 1 South, 2 South, and 3 South on its publicly available website and provided a copy of such notice to the Illinois Environmental Protection Agency (Illinois EPA or Agency) to email to its listserv for this facility. The bilingual public meeting notice was mailed to all residents within at least 2 miles of the facility on May 5, 2023, which totaled 7,399 residential mailing addresses. The notice was also posted in 18 public locations within 10 miles of the facility boundary.

The public meetings for Will County Generating Station's Ponds 1 North, 1 South, 2 South, and 3 South were held on June 7, 2023 from 5:30 p.m. to 7:00 p.m. and on June 8, 2023 from 10:00 a.m. to 11:30 a.m. The meetings were held in person. Thirty-eight members of the public attended the meetings on June 7th and 8th (the remaining attendees were MWG affiliate employees and consultants). At least four members of the public attended both meetings. Attendees who wished to sign up for a copy of the meeting summary and/or be added to Illinois EPA's listserv for the facility were asked to sign up via a form provided at the meeting. Thirty-four attendees requested a copy of the meeting summary and thirty-four requested transmittal of their email address to the Agency to be added to the Agency's listserv for the facility. After an introduction and approximately 30-minute presentation on the proposed closure construction plan, the public was given approximately 1 hour during each meeting to ask questions and provide comments. Two letters addressed to MWG and Illinois EPA were presented at the June 7th meeting. These letters are attached to this summary. The letters raise concerns with closure in place methods, transporting ash through nearby communities, and groundwater contamination. Midwest Generation, LLC is fully committed to complying with environmental laws and regulations and will close the ponds in a way that provides both short- and long-term protection to groundwater and surface water resources along with ensuring overall protection to public health, welfare, and safety.

This document serves as a summary of the issues and questions raised during the meeting.

MWG proposes to close Ponds 1 North, 1 South, 2 South, and 3 South in place by installing an alternate final cover system (ClosureTurf[®]).

SUMMARY OF ISSUES AND QUESTIONS RAISED DURING THE MEETING

<u>Landfill</u>

Several comments and questions were raised about the availability of landfill space in nearby Laraway Landfill and Prairie View Landfill specifically, and other landfills in the area. During development of the Closure Alternatives Analysis, discussions were held with landfill representatives who indicated limited ability to accept new waste streams due to current contractual obligations and reluctance to accept CCR materials due to potential adverse reactions with municipal solid wastes and leachate quality. An onsite landfill was considered and ultimately ruled out because of the lack of available space vertically and horizontally.

Several comments and questions were raised about truck traffic arising from transporting CCR off site, some were concerned about the truck traffic and others were less concerned. High volumes of truck traffic would occur if a closure by removal option is selected. Approximately 10,000 truckloads would be required to complete Option 1 -Closure by Removal; this includes approximately 8,000 truckloads for removal activities and 2,000 truckloads of clean fill to regrade the area for stormwater drainage. The trucking route would depend on the final disposal location but is expected to travel through some portions of residential neighborhoods. Removing the ash by truck would increase the risk of vehicle accidents and would result in increased diesel exhaust emissions. Under the preferred closure scenario only the trucking of the final cap materials and clean fill to regrade the area for stormwater drainage would be needed.

Questions were raised about using rail or barge to transport ash. Transportation by rail and barge are not common methods of managing coal ash and would require the design and construction of new or temporary infrastructure at Will County Station and at the receiving facility. Neither the rail or barge systems at Will County are currently in a usable condition and would need either extensive refurbishment or replacement altogether. The current rail unloading system was designed to transfer coal in one direction, from a railcar to the generating station. It was not designed to transfer CCR (a different material than coal) nor to move material from the station to railcars. To use the rail system at Will County Station for transport of CCR, restoration of the power system, conveyor belt replacement, and new handling equipment would be needed, which could require extensive environmental permitting. Necessary permits may include NPDES, stormwater, and air construction permits. A barge loading system is currently present at Will County Station, but like the rail system it is currently only designed to offload coal, not load CCR material. Like the rail system, a new system could also require extensive environmental permitting, such as NPDES, stormwater, air construction permits, and permits from the Illinois Department of Natural Resources and the Army Corp of Engineers. The bigger issue, however, is that barge and rail unloading facilities are not currently located at landfills, so the material would need to be unloaded at terminal or similar location and then be loaded into trucks for final disposal at the landfill which again raises the truck traffic issue.

Questions were raised regarding beneficial use of the ash within the ponds. The process of evaluating the market for beneficial use of ash is done by MWG's commercial marketing team. MWG routinely evaluates

the market for sources that would accept ash for beneficial use and at this time, MWG has not identified any sources.

Groundwater

There was one question about groundwater monitoring results. Ponds 1N and 1S are subject to the Illinois CCR Rule. The most recently completed groundwater monitoring results show that calcium, sulfate, and total dissolved solids are above the proposed groundwater protection standards (GWPS) in monitoring wells downgradient of Pond 1N. Molybdenum is above the proposed GWPS in monitoring wells downgradient of Pond 1S.

Ponds 2S and 3S are subject to both the Illinois and Federal CCR Rules. Under the Illinois CCR Rule, arsenic and chloride have been detected above the proposed GWPS in some downgradient wells in the most recently completed groundwater monitoring results. Under the Federal CCR Rule, selenium and arsenic were detected above the GWPS in the fourth quarter 2022. Selenium was detected above the GWPS in an upgradient well; there have never been and continue to be no detections of selenium in any of the downgradient wells above the GWPS. An Assessment of Corrective Measures was initiated to prevent further releases, remediate any releases, and restore the affected area to original conditions. The Assessment of Corrective Measures was presented during the public meetings and the corrective measure proposed is closure in place with a final cover system.

The proposed GWPS were submitted to Illinois EPA for review and approval as part of the Application for Initial Operating Permit. These standards will remain "proposed" until approved by the Illinois EPA. Per the Illinois CCR Rule, GWPS are the higher of background values measured and calculated from monitoring well sampling or the standards found in 35 Ill. Admin. Code 845.600(a).

Groundwater Modeling

Multiple attendees questioned or commented upon the groundwater modeling. The model allows for a mathematical representation of the groundwater flow system. Actual groundwater level data collected from site monitoring wells over many years is used within the model to replicate the flow conditions within the aquifer that currently exist. Once the computer model can sufficiently replicate actual existing field conditions, a hypothetical, worst-case release was simulated assuming the ponds were filled with ash and sluice water with no liners. The hypothetical case was then used as a baseline for assisting in evaluation of the effectiveness of the various engineering alternatives being considered. The various alternatives were overlaid on the hypothetical release scenario and the model was run through establishment of a new steady state to evaluate the associated improvements in groundwater quality to assess future short- and long-term effects of a proposed engineering option on changes in groundwater quality and flow conditions.

The purpose of groundwater modeling for the proposed construction permit application was to provide feedback to the engineering team to show the effectiveness of each closure scenario. The modeling was

done for the overall concepts – complete removal of ash, closure in place with final cover, closure in place with in-situ stabilization, and closure in place with consolidation and final cover. The modeling showed that each of the four scenarios are similarly protective of groundwater and that no constituents would be detected above the proposed site-specific groundwater protection standards in any scenario after approximately ten to fifteen years. This is because under each scenario, the source of the hypothetical release is removed or isolated from the underlying groundwater. In the closure by removal scenario the ash is removed from the impoundments. In the closure in-place scenarios, the liner is in place, the impoundment is dewatered, and an impermeable cap is placed over the CCR precluding any precipitation infiltration though the CCR materials, thereby eliminating any connection of the hypothetical source materials with the underlying groundwater.

The full groundwater modeling report will be included with the construction permit application that will be submitted to Illinois EPA by August 1, 2023. The permit application will be posted to MWG's website within 14 days of submittal to the Illinois EPA.

Closure Method

Several attendees expressed their desire for Option 1 – Closure by Removal due to concerns with potential future groundwater contamination and adverse effects to private drinking water wells. MWG did not identify any private drinking water wells within 2,500 feet of the ponds and no private wells have been impacted by the ponds at Will County. The Des Plaines River and the Chicago Sanitary Ship Canal, which are adjacent to the Will County Station to the west and east respectively, act as hydrogeologic barriers to the groundwater underlying the Station. Under Illinois EPA oversight, MWG will be required to inspect and monitor any CCR surface impoundment that is closed in place for at least 30 years after the closure construction is complete. Post-closure care includes continued groundwater monitoring, impoundment inspections, as-needed repairs to the final cover system, and corrective actions as necessary. While MWG cannot predict future events, the Illinois EPA will continue to have oversight for CCR surface impoundments until the Agency agrees that its oversight is no longer necessary.

Financial Assurance

A question was asked about what financial systems are in place to ensure long-term monitoring is completed after closure. Owners and operators of CCR surface impoundments are required to financially assure the costs of closure and post-closure care through the end of the post-closure care period. Financial assurance would be used only in the case of owner insolvency; otherwise, costs for closure, post-closure care, and any necessary remedial activities are paid by the surface impoundment owner and/or operator. Pursuant to the Illinois CCR rule, MWG has provided financial assurance in the form of a performance bond to Illinois EPA.

Closure Costs

Questions were asked about estimated closure costs. While MWG did not use cost as a determinative factor in selecting the closure methods, the estimated costs for each closure method were provided in the Closure Alternatives Analysis (CAA) posted on MWG's website. The estimated cost for Option 1 - Closure by Removal was \$26,807,089. The estimated cost for Option 2 - Closure in Place with Final Cover System was \$2,974,859. The estimated cost for Option 3 - In-site Stabilization with Final Cover System was \$13,320,061. The estimated cost for Option 4 - Closure in Place with Consolidation and Final Cover System was \$3,789,953.

Status of Plant and Future Use

Several members of the public commented upon or questioned the status and future use of Will County Station. All electric generating units at Will County Station have been retired, with the most recent being Unit 4 which retired in June of 2022. Decommissioning activities are in progress on the property. MWG has taken initial steps to consider the potential for sustainable redevelopment related to battery storage. The passage of the "Coal-to-Solar" program by the Illinois legislature under the Energy Transition Act in September 2021 is a positive outcome in support of pursuing a meaningful battery storage project at Will County and has the potential to jumpstart the beneficial reuse of this site.

Other Environmental Concerns

A couple of questions were raised about nearby quarrying activities and how that might affect the integrity of the ponds after they are closed in place. The Heidelberg Materials quarry has been operating in that area for decades and MWG has not observed any evidence of adverse effects from their operations. In addition, the Illinois CCR Rule requires annual structural stability assessments and routine (weekly) inspections of operating CCR surface impoundments. After closure, MWG will be required to inspect and monitor any CCR surface impoundment that is closed in place for at least 30 years after the closure construction is complete. Post-closure care includes continued groundwater monitoring, impoundment inspections, as-needed repairs to the final cover system, and corrective actions as necessary.

A question was raised about the status of the Compliance Commitment Agreement (CCA) signed between MWG and the Illinois EPA. The CCA was an agreement between the Illinois EPA and MWG for when the CCR surface impoundments were operating and before there were any regulations applicable to CCR surface impoundments. Now that the Federal CCR Rule and Illinois CCR Rule have passed, MWG is complying with the rules as they apply to the Will County CCR surface impoundments.

One attendee requested information on air quality and groundwater monitoring plans as well as a copy of the watershed map. The fugitive dust plan and groundwater monitoring plan are available in the Operating Permit Application that was submitted to Illinois EPA in October 2021 for Ponds 2S and 3S and March 2022 for Ponds 1N and 1S. The full application, which includes both plans, as well as the Fugitive

Dust Plan independently, are also posted on our public website: <u>www.midwestgenerationllc.com</u>. A copy of the watershed map is attached to this summary.

There was a question raised about PFAS levels in the current high-density polyethylene (HDPE) geomembrane liners in the ponds. According to data provided by the manufacturers of the HDPE liners, the liners do not contain PFAS.

A question was raised about stormwater collection and treatment. Stormwater from the site is collected and treated at our wastewater treatment plant before being discharged to Chicago Sanitary and Ship Canal via our NPDES permit issued by the Illinois EPA. The NPDES permit specifies sampling requirements of the treated stormwater before it's discharged.

An attendee stated that Will County Station and Romeoville are areas of Environmental Justice (EJ) concern. Under the Illinois CCR regulations (see 35 IAC 845.700(g)(6)), the facility must fall within one mile of a census block group identified as low-income or minority as those are defined in the regulations. Will County Station is more than two miles from the nearest EJ area using the Agency's tool and is therefore not in an area of EJ concern. A print-out of Illinois EPA's EJ Start map for Will County Station and Romeoville is attached. Because MWG is aware of the large population of Spanish speakers in Romeoville, Spanish translation was offered at both meetings.

A question was asked about other areas of the property that may have been impacted by former station processes. Station decommissioning activities are ongoing and impacted areas will be addressed as needed.

Correction

Slide 12 of the presentation had an error in the statement of the amount of time the modelling predicted it would take to achieve compliance with the 35 IAC 845.600(a) groundwater standards for the Closure by Removal Scenario. The corrected slide is attached – it will take 50 years to achieve compliance in with the 35 IAC 845.600(a) groundwater standards, the same amount of time it would take in the Closure in Place Scenario. The information is presented correctly in the Closure Alternatives Analysis (see Figure 32).

SUMMARY OF REVISIONS, CHANGES, AND CONSIDERATIONS

Public engagement is an important part of the permitting process. Midwest Generation valued the opportunity to hear and consider the comments of individual community members and others who participated in the public meetings. Taking public comments into consideration, and with additional deliberations after the public meetings, our full analysis indicates that our proposed plan – which remains subject to regulatory review and approval – prioritizes the environment and community well-being.

ATTACHMENTS

June 07, 2023

Midwest Generation, LLC Attn: Thoedore Craver (CEO) 235 Remington Boulevard, Suite A Bolingbrook, Illinois

Midwest Generation, LLC Attn: John Pardo (CPO) 235 Remington Boulevard, Suite A Bolingbrook, Illinois

Illinois EPA Headquarters Attn: John J. Kim (Director) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794

Dear Mr. Craver, Mr. Pardo, and Mr. Kim,

We support the residents of Romeoville and the surrounding areas who are currently petitioning for the clean closure of the Will County Generating Station's coal ash ponds by excavation and complete removal of the ash from the waste ponds. We resoundingly reject the proposal by Midwest Generation to close the coal ash ponds by capping in place. We were elected to represent these residents and stand with them in demanding their community be protected from further contamination to their groundwater and other water sources.

The groundwater near the Will County Generating Station is reported as contaminated from coal ash at a magnitude that exceeds federal health-based guidelines. Soil testing showed that Arsenic and Molybdenum contaminants were twice as high as safe levels recommended by the EPA. Cap-in-place closure does not prevent leaching by groundwater contact with coal ash underneath the cap, and if coal ash is left in contact with groundwater, toxic contaminants will continue to leach into drinking water in perpetuity. Cap-in-place also leaves coal ash surface impoundments permanently vulnerable to catastrophic failure due to floods or cap failure during extreme storms.

Romeoville relies on a deep sandstone aquifer for a portion of its water supply, and a shallow dolomite aquifer for the other portion. Recent studies have revealed that both aquifers are not viable long term sources for the Village's potable water supply. Midwest Generations LLC should not be allowed to potentially put people's water supply at risk as Romeoville will soon

need a new source of clean water. It's critical for Romeoville, where water is such a precious resource, to make sure that water is left as clean as possible for future generations.

A clean closure approach includes excavation and removal of coal ash either to a landfill compliant with federal regulations or for beneficial reuse as a raw material in products such as concrete or drywall. Removal of coal ash mitigates both the source of groundwater pollution and the risk of catastrophic spills from impoundment failures due to floods or other extreme weather events. Clean closure removes coal ash from contact with groundwater, thereby protecting drinking water, and moves it away from water bodies, which is a permanent solution to water pollution and which allows restoration of wetlands, rivers, streams, and lakes. Clean closure of coal ash ponds is a more thorough process that employs more people and therefore leads to greater wages and spending in the community.

While the coal power industry has shown a preference for cap-in-place closure of coal ash waste ponds, because it is easier and cheaper to implement, the community chooses effective coal ash pond closures that protect the environment and public health while also creating jobs and benefiting our local economy. We demand Midwest Generation to reconsider their proposal to cap in place, and instead excavate and remove the ash from the ponds to a federally regulated lined landfill away from water sources.

Illinois General Assembly: Rachel Ventura State – Senator Illinois 43rd District

Will County Board:

Judy Ogalla (County Board Chair, District 2) Steve Balich (Republican Leader, District 4) Sherry Williams (Democratic Whip, District 5) Destinee Ortiz (District 9) Raquel Mitchell (District 9) Janet Diaz (District 6) Mica Freeman (District 8) Julie Berkowicz (District 10)

Joliet City Council:

Suzanna Ibarra (District 5) Cesar D. Cardenas (District 4) Cesar Guerrero (At-Large) Jan Quillman (At-Large)

Joliet Township:

Angel Contreras (Supervisor) Alicia Morales (Clerk) Cesar Escutia (Trustee) Vince Alessio (Highway Commissioner)

Joliet School Board:

Sandra Aguirre (Dist. 86)



June 7, 2023

Illinois EPA Headquarters Attn: John J. Kim (Director) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794

<u>MAYOR</u> John Noak

CLERK Dr. Bernice E. Holloway

TRUSTEES

Linda S. Palmiter Jose (Joe) Chavez Brian A. Clancy Sr. Dave Richards Ken Griffin Lourdes Aguirre

VILLAGE MANAGER Dawn Caldwell Dear Director Kim,

This letter is regarding the ongoing process of decommissioning NRG's Will County Generating Station, which is primarily located outside of the Village of Romeoville in unincorporated Will County, Illinois. While there are many aspects to this process, this correspondence is focused on the coal ash ponds located on the southern portion of the property outside of the village. The Village of Romeoville appreciates the ongoing dialogue that NRG, our current and former state officials and the Will County Executive's office has engaged in during this process.

The Village of Romeoville strongly feels that the Illinois Environmental Protection Agency (IEPA), which is in the process of enforcing federal coal ash rules, should require the NRG facility at the Will County Generating Station to safely close its existing coal ash ponds 1N, 1S, 2S, and 3S and remediate any surrounding contamination. We believe that NRG's proposal to close each pond through capping and long-term monitoring will create long-term environmental uncertainty, limit the potential for future redevelopment of the property and is not appropriate given its proximity to the Des Plaines River, as well as several environmentally sensitive areas of unincorporated Will County.

Further, the Village of Romeoville requests that the IEPA require NRG to remove the ash entirely and transport it to an appropriate landfill. However, the Village only requests this if the IEPA can determine that doing so does not create a greater environmental danger than the alternative of capping in place. If the IEPA agrees to this request, the Village would additionally ask that all removal be conducted with enhanced considerations to environmental impact during the process. Also, no material should be removed from the site by truck, rail or any other land path that takes it through the Village's jurisdictional boundaries. The Village is concerned about the transportation of any material from these ponds through our community or any surrounding communities and the potential for adverse environmental impact that transportation could have in addition to increased truck traffic.

With respect to the Village's drinking water system, the nearest shallow wells are near the intersection of Normantown Road and Dalhart Ave (1.5 miles northwest) and near Lake Strini (1.8 miles west). These wells are between 200 and 300 feet deep and screened in the

Limestone and Silurian Dolomite. Since the Will County Generation Station opened in 1955, we have no evidence that leaching from the coal ash ponds has impacted any municipal wells and our engineers have limited concerns moving forward as the Village is in the process of moving to a new Lake Michigan water source by 2030. However, the Village cannot speak for nearby municipal wells in other jurisdictions or any private wells.

The IEPA needs to ensure that the final cleanup approach to this site takes the surrounding ecological habitat into consideration as well as the multiple recreational uses that also occur in this area including the Isle a la Cache center, fishing, kayaking, biking, bird watching, and hiking. If the EPA determines that the safest environmental solution is to cap in place, the Village respectfully requests that all current technology be used to safeguard these sensitive areas as well as long term monitoring. Finally, we respectfully request that a special fund be set up to ensure that they are properly maintained.

Thank you for your consideration and ongoing dialogue regarding the decommissioning of this site and the potential redevelopment of the site. If you have any further questions please contact Village Manager, Dawn Caldwell at 815-886-5778 or dcaldwell@romeoville.org.

Respectfully,

h.D. Mak

Mayor

c: Village of Romeoville Board of Trustees Jennifer Bertino-Tarrant, Will County Executive Meg Loughran Cappel, Senator 49th District Dagmara Avelar, State Representative 85th District Rachel Ventura, State Senator 43rd District Natalie Manley, State Representative Leader 98th District Melville Nickerson, NRG Director Government Affairs Dawn Caldwell, Village Manager







Closure by Removal Details

- Remove all material from basin and haul off site.
- Remove existing liner system and haul off site.
- Grade exposed base to manage stormwater.
- Limited local landfill capacity and CCR acceptance is prohibitive.
- Onsite space for a new landfill is limited, and citing would add multiple years to the project.
- Estimated quantities:
 - Area ≈ 9.5 acres
 - CCR/material to remove ≈ 161,000 CY
 - Subgrade fill ≈ 40,000 CY
- Modeled concentrations are reduced by 80% within 25 years at downgradient wells. All constituents compliant with proposed GWPS with approx. 10 years or less and below the 845.600(a) standards within approx. *20 50 yrs. *A

GW Modeling (25 years after removal)



*After the June 7th public meeting, MWG identified a typo on this slide. All constituents will be below the 845.600(a) standards within approx. 50 years (See Figure 32, MW-12 of the Closure Alternatives Analysis posted on MWG's website on May 9, 2023).



Detalles del cierre por extracción

- Extraer todos los materiales de la cuenca y transportarlos fuera del sitio.
- Extraer el sistema de revestimiento existente y transportarlo fuera del sitio.
- Nivelar la base expuesta para manejar el agua de lluvia.
- La capacidad limitada de los rellenos sanitarios locales y la aceptación de CCR la hacen prohibitiva.
- El espacio en el sitio para un nuevo relleno sanitario es limitado, y su designación prolongaría el proyecto durante varios años.
- Cantidades estimadas:
 - Área ≈ 9.5 acres
 - CCR y material a extraer ≈ 161,000 yd³
 - Relleno con subrasante ≈ 40,000 yd³
- Las concentraciones modeladas se reducen en un 80% en un plazo de 25 años en los pozos situados aguas abajo. Todos los constituyentes en cumplimiento con las normas para la protección de las aguas subterráneas propuestas en unos 10 años o menos, y por debajo de las normas de la Sección 845.600(a) en un plazo de aproximadamente *20 50 años.

Modelado de aguas subterráneas (25 años después de la extracción)



* Después de la reunión pública del 7 de junio, MWG identificó un error en esta diapositiva. Todos los ciudadanos quedarán bajo las normas de la Sección 845.600(a) en un plazo de aproximadamente 50 años (consulte la Figura 32, MW-12 del informe sobre el Análisis de las alternativas de cierre, que se publicó en el sitio web de MWG el 9 de mayo de 2023).

CONCENTRACIONES SUSTITUTAS A 25 AÑOS