BEFORE THE POWER
SITING BOARD OF THE STATE OF OHIO

In the Matter of the Application of Hardin Wind Energy, LLC for the Relinquishment and Withdrawal of its Certificate to Install and Operate a Wind-Powered Electric Generation Facility in Hardin County, Ohio.	**)**	**09-0479-EL-BGN**
	)	**11-3446-EL-BGA**
	)	**Case Nos. 16-0469-EL-BGA**
	)	**16-2404-EL-BGA**
	)	**18-0677-EL-BGA**

Members of the Board:

Chairman, Public Utilities Commission
Director, Development Services Agency
Director, Department of Health
Director, Department of Agriculture
Director, Environmental Protection Agency
Director, Department of Natural Resources
Public Member
Ohio House of Representatives
Ohio Senate

To the Honorable Power Siting Board:

Within the Ohio Power Siting Board's (Board) orders granting Hardin Wind Energy, LLC (Applicant) a Certificate of Environmental Compatibility and Public Need for the Hardin Wind Farm, the Board required the Applicant to perform certain decommissioning activities at the conclusion of the facility's operation.

On July 17, 2020, the Applicant filed a Notice of Relinquishment and Withdrawal of the Certificate issued by the Board in these cases. Due to limited construction activities that had begun at the wind farm, Board staff (Staff) reviewed the matter to determine if the Applicant decommissioned the facility in compliance with the terms of its certificate. Staff herein submits to the Board for its review and consideration this Decommissioning Staff Report of Investigation.

Sincerely,

Theresa White
Executive Director
Ohio Power Siting Board

OPSB DECOMMISSIONING STAFF REPORT OF INVESTIGATION

Case Number:	09-479-EL-BGN (associated with case nos. 11-3446-EL-BGA, 14-1030-EL-BGA, 16-0469-EL-BGA, 16-2404-EL-BGA, and 18-0677-EL-BGA)
Project Name:	Hardin Wind Farm
Project Location:	Hardin County
Applicant:	Hardin Wind Energy, LLC
Notice Filing Date:	July 17, 2020
Inspection Date:	August 5, 2020
Report Date:	October 27, 2020
Applicant's Waiver Requests:	None
Staff Assigned:	A. Conway, J. Pawley, G. Zeto

Project Background

In Case No. 09-0479-EL-BGN, the Ohio Power Siting Board (Board) authorized Hardin Wind Energy, LLC (Applicant) to construct a major utility facility, specifically a wind-powered electric generating facility consisting of up to 200 turbine sites with a combined generation capacity of up to 300 megawatts (MW). The facility is located in Hardin County. The Applicant filed the original Application for a Certificate of Environmental Compatibility and Public Need on July 10, 2009. The Applicant filed a revised application on September 18, 2009, and the Board issued an Opinion, Order and Certificate (the Original Certificate) on March 22, 2010 for the construction of the wind farm (Hardin Wind Farm).

On June 3, 2011, the Applicant filed an application, in Case No. 11-3446-EL-BGA (11-3446), which the Board approved on August 29, 2011. In the 11-3446 application, the Applicant proposed to construct the Hardin Wind Farm in three phases, using taller turbine models and relocating turbine layouts, collection lines, access roads, and associated facilities.

On June 5, 2014, the Applicant filed Case No. 14-1030-EL-BGA (14-1030), which the Applicant later withdrew. The Board issued an Entry to dismiss 14-1030 on November 12, 2015.

On March 24, 2016, the Applicant filed Case No. 16-0469-EL-BGA (16-0469). The Applicant proposed adding the GE 2.3-116 80-meter hub height (2.3 MW) turbine model for use in this project. On April 27, 2016, the Applicant filed a supplement seeking consideration of the GE 2.3--116 turbine model with a hub height of 94 meters. On December 16, 2016, the Applicant filed another supplement seeking to remove specified turbine locations from consideration in this project and express its commitment to additional provisions. On February 2, 2017, the Board approved 16-0469 subject to all conditions currently existing for this project.

On December 19, 2016, the Applicant filed Case No. 16-2404-EL-BGA (16-2404). The Applicant proposed increasing the capacity from 2.3 MW to 2.5 MW by changing the turbine model from the GE 2.3-116 turbine model with a hub height of 94 meters to the GE 2.5-116 with a hub height of 90 meters. On March 2, 2017, the Board approved that application.

On April 25, 2018, the Applicant filed Case No. 18-0677-EL-BGA seeking to increase the capacity of the GE 2.5-116 turbine model from 2.5 MW to 2.7 MW (with a new model number of GE 2.7-116) using the previously approved 90-meter hub height. The Applicant also requested approval to use the GE 2.5-127 turbine model with a hub height of 89 meters for use at this project. The turbine locations and location of the project's associated facilities remained unchanged. On June 21, 2018, the Board approved that application.

Pending Request

On July 17, 2020, the Applicant filed a Notice of Relinquishment and Withdrawal of the Certificate issued by the Board in these cases (Relinquishment Request). However, since limited construction activities had begun at the wind farm, Staff inspected the site, coordinated with Ohio Environmental Protection Agency (Ohio EPA) storm water inspectors and geology program staff, contacted an Ohio Department of Agriculture (ODA) soil scientist, contacted affected parties, and reviewed document submittals to determine if the Applicant decommissioned the site in accordance with the decommissioning condition of its Original Certificate, specifically Condition 51.[1] Staff submits to the Board for its review and consideration this Decommissioning Staff Report of Investigation.

Wind Farm Construction to Date

The Applicant planned four phases of construction. The first phase was limited excavation of nine foundation sites as part of the Applicant's qualification efforts for a federal production tax credit. This excavation work began on November 21, 2016. The Applicant excavated each turbine location. The approximate dimensions of each excavation site were 120 feet in diameter to a depth of 10 feet below ground surface. The Applicant then installed a mud mat (an approximately 2-inch thick layer of concrete) at the bottom of each excavation site at approximately 63 feet in diameter. To the extent any drain tiles were damaged, the Applicant stated it repaired and re-routed the tile, which it evidenced in photographs docketed on August 7, 2020. Next, the Applicant backfilled each excavation site with soil, stabilized the soil cover, and finally cordoned off the perimeter (approximately 120 feet in diameter) of each excavated site with construction fencing. This work was performed at turbine locations T2, T16, T17, T19, T20, T21, T33, T37, and T38.

In November 2016, the Applicant also excavated turbine location T18 but encountered elevated groundwater during the excavation process and did not pursue further construction or pour a mud mat at turbine location T18. The Applicant backfilled excavation site T18 with soil, stabilized the soil cover, and finally cordoned off the perimeter (approximately 120 feet in diameter) with construction fencing. This site is currently actively farmed with corn.

During the second phase of construction, the Applicant built the project substation and point of interconnection facilities. The Applicant began construction January 29, 2018 and then transferred this interconnection substation facility to AEP Ohio Transmission Company, Inc. (AEP Ohio Transco) on October 11, 2018 in accordance with a Board entry in the present case.

1. Staff notes that in Case No. 20-1321-EL-BGA, Hardin Solar Energy II, LLC (also a subsidiary of Hardin Wind Energy LLC's parent company, Invenergy) has submitted to the Board a pending amendment to expand the solar farm project area for which it obtained a certificate in case number 18-1360-EL-BGN. This expanded project area overlaps the parcels for turbine locations T33, T37, and T38. A separate staff report analyzing the use of this land for solar facility purposes will be submitted in Case No. 20-1321-EL-BGA.

For the third and fourth construction phases, the Applicant held a preconstruction conference on July 16, 2019. The third phase was intended to construct turbine foundations and access roads, however only one access road improvement was ultimately constructed. In August 2019, the Applicant improved County Road 95 by adding a layer of asphalt for approximately one mile from State Route 309 to Township Road 100. The fourth phase was intended to erect wind turbines and associated facilities, which did not occur. Construction of the Hardin Wind Farm was halted after the improvement to County Road 95 was made.

Decommissioning activities then began April 2020.

Staff Review and Recommendation

Within the Original Certificate, the Board included Condition 51, which detailed the required decommissioning activities for this project. Among other things, the Board reiterated the Staff Report's finding that "[u]pon decommissioning, the site must be restored and reclaimed to the same general topography that existed prior to the beginning of the construction of the commercial facility." While each subrequirement of Condition 51 details specific requirements for the Applicant to achieve, Staff notes the overall goal is to ensure the land is useable in the same manner to which it was prior to the start of construction activities. Therefore, Staff reviewed the Applicant's compliance with the condition subrequirements particularly in relation to its activities regarding backfill of topsoil, subsoil decompaction, and grading, as well as the effects of disturbance to the underlying geological subsurface conditions of the area.

Staff Review of Condition 51(a) – Ohio EPA Stormwater Permit

Condition 51(a) states:

> Prior to any decommissioning activities that involve the disturbance of one or more acres, if applicable, Hardin shall obtain and comply with an NPDES [National Pollutant Discharge Elimination System] permit authorizing such activities.

On June 17, 2019, the Applicant submitted a copy of an Ohio EPA letter approving the Applicant's NPDES Notice of Intent (NOI) for coverage under the Construction Stormwater General Permit application to Staff, which covered decommissioning activities. Those activities include disturbance of one or more acres and restoration to agricultural land use.

The Applicant also submitted photographs to Staff of the completed decommissioning activities for the nine turbine excavation sites and associated paperwork. Staff reviewed these photographs with the Ohio EPA stormwater inspector. The Applicant also filed a Notice of Termination of its coverage under Ohio EPA-issued NPDES Construction Stormwater General Permit (No. 2GC05647) on May 20, 2020. Ohio EPA reviewed the site photographs for compliance with the post-construction best management practices and requirements contained in the Applicant's Construction Stormwater General Permit. That permit may be terminated by returning the turbine excavation sites to their previous use as agricultural land. By email dated July 24, 2020, Ohio EPA sent notice to the Applicant that:

- only one poor quality photo was provided for T2.
- there appears to be orange debris (i.e. construction fencing) visible at location T20, and
- there appears to be a dry area that shows erosion to the north of the T21.

Ohio EPA and Staff requested that the Applicant remove and properly dispose of construction fencing at T20, provide an explanation for the potential erosion area near T21, and provide additional photographs (or drone footage) for T2.

Staff performed a site visit on August 5, 2020 and found that all turbine excavation sites were actively farmed with either corn or soybeans. Staff also confirmed that the orange debris (i.e. construction fencing) previously visible at turbine location T20 was removed. The Applicant explained that the potential erosion area north of turbine location T21 was likely crop waste (chaff) from last year's harvest. Staff also received and reviewed additional aerial drone photographs of locations T2, T20, and T21.

Ohio EPA stormwater inspectors and Staff concluded that the turbine sites look acceptable and were fully returned to agricultural land use allowing the stormwater permit to be terminated.

Staff recommends the Board find the Applicant complied with the requirements of Original Certificate, Condition 51(a).

Staff Review of Condition 51(b) – Decommissioning Program

Condition 51(b) states:

> Pursuant to Rule 4906-17-08 (E)(6), O.A.C., Hardin shall provide a decommissioning program to staff and the Hardin County Engineer for review and for staff approval, at least 30 days prior to the preconstruction conference. In this plan, the applicant shall:
>
> i. Identify lands in the application that a reconnaissance inspection suggests may be prime farmlands, a soil survey shall be made or obtained according to standards established by the Secretary of the U.S. Department of Agriculture and /or Ohio Department of Agriculture in order to confirm the exact location of the prime farmlands, if any. The results of this study shall be submitted to staff for review and approval. Any confirmed prime farmlands should be reclaimed to such standards after site decommissioning.
> ii. Indicate the future use that is proposed to be made of the land following reclamation.
> iii. Describe the engineering techniques proposed to be used in decommissioning and reclamation and a description of the major equipment; a plan for the control of surface water drainage and of water accumulation; and a plan, where appropriate, for backfilling, soil stabilization, compacting and grading. This plan shall be subject to review and approval by staff.
> iv. Describe how Hardin will implement BMPs [best management practices] to control impacts to surface or ground water resources. If necessary, applicant will obtain permits from the Ohio EPA and/or the U.S. Army Corps of Engineers.
> v. Provide a detailed timetable for the accomplishment of each major step in the decommissioning plan; the steps to be taken to comply with applicable air and water quality laws and regulations and any applicable health and safety standards; and a description of the degree to which the

> decommissioning plan is consistent with the local physical, environmental, and climatological conditions. This timetable shall be subject to staff review and approval.

On June 17, 2019, the Applicant submitted its decommissioning plan, which: (i) identified prime farmlands in the area (Decommissioning Plan at p. 7, Section 2.9 - *Soils and Prime Farmland*), (ii) indicated future land use following reclamation (Decommissioning Plan at p. 7, Section 2.10 - *Restoration and Revegetation*), (iii) described the engineering techniques for decommissioning (Decommissioning Plan at p. 2, Section 1.3 - *Decommissioning Sequence* and Section 2.0 - *Decommissioning Components and Activities*) and included a plan for the control of surface water drainage and of water accumulation (Decommissioning Plan at p. 7, Section 2.11 - *Surface Water Drainage and Control*) as well as a plan for backfilling, soil stabilization, compacting and grading (Decommissioning Plan at p.7, Section 2.9 – *Soils and Prime Farmlands)*, (iv) described how the Applicant would implement best management practices to control impacts to surface or ground water resources (Decommissioning Plan at p. 7, Section 2.11 - *Surface Water Drainage and Control*), and (v) provided a timetable for decommissioning activities with required steps to comply with applicable law (Decommissioning Plan at p. 2, Section 1.3 - *Decommissioning Sequence*). Staff reviewed and accepted this plan at the preconstruction conference held July 16, 2019.

The Applicant implemented its decommissioning plan. The decommissioning plan identified the turbine excavation sites as "prime farmland if drained." These were preserved during construction by segregation of the topsoil and subsoil. The Applicant stated that "the sites were then backfilled with native soils placed to a 95 percent standard compaction which is common practice for backfill over foundations."[2] To the extent any drain tiles were damaged, the Applicant stated it repaired and re-routed the tile, which it evidenced in photographs docketed on August 7, 2020.

Staff confirmed and observed on its August 5, 2020 site inspection that each site was currently actively farmed with corn or soybeans; Staff expects this agricultural land use can continue into the future.

Staff confirmed that the Applicant implemented the applicable engineering techniques described in Section 1.3 of the decommissioning plan. Specifically, the Applicant compacted/de-compacted subsoils, restored and revegetated disturbed land to pre-construction conditions to the extent practicable.

Staff confirmed that the Applicant had NPDES permit coverage for these decommissioning activities with an NOI application. Ohio EPA reviewed the site photographs for compliance with the post-construction best management practices and requirements contained in the Applicant's Construction Stormwater General Permit.

The decommissioning plan anticipated a 12-month timeframe. The Applicant began decommissioning activities in April 2020 and finished them in May 2020.

Staff recommends the Board find the Applicant complied with the requirements of Original Certificate, Condition 51(b).

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2. *Response to the Third Data Request from Staff, Attachment 1,* filed September 28, 2020.

Staff Review of Condition 51(c) – Wind Turbines at the End of the Facility Useful Life

Condition 51(c) states:

> At the end of the project's life, the wind turbines may either be "re-powered" with new nacelles, towers, and/or blades; or, the facility shall be decommissioned at the expense of the facility owner or operator. In the event that the facility or individual wind turbines are decommissioned, such decommissioning shall be completed within 12 months after the end of the useful life of the facility or individual wind turbines. If no electricity is generated for a continuous period of 12 months, or if staff deems the facility or turbine to be in a state of disrepair warranting decommissioning, the facility or individual wind turbine will be decommissioned.

Due to the status of the facility upon the Applicant's Relinquishment Request (i.e. no wind turbines had yet been constructed), Staff found this condition subpart to be inapplicable to the present situation. To the extent the Board determines that the condition subpart is applicable in the present situation, Staff recommends the Board find the condition subpart to be adequately resolved.

Staff Review of Condition 51(d) – Decommissioning Activities Performed

Condition 51(d) states:

> Decommissioning shall include the removal of all physical material pertaining to the facility to a depth of at least 36 inches beneath the soil surface and restoration of the disturbed area to a condition reasonably similar to the same physical condition that existed before erection of the facility. For nonriparian areas that were forested prior to construction, restoration shall include returning such land to a condition where trees can be planted; provided, however, that in no event shall applicant be obligated to plant trees on the property, except in riparian areas or subject to landowner agreement. The foundation for each wind turbine shall be removed to the depth of 36 inches or to the top of the foundation spread footing, whichever depth is greater. Decommissioning shall include the restoration of roads and bridges to substantially the same physical condition that existed before decommissioning; the removal and transportation of the wind turbines off-site; and removal of buildings, cabling, electrical components, access roads, and any other associated facilities. Disturbed earth shall be regraded, reseeded, and restored to substantially the same physical condition that existed immediately before erection of the facility. Damaged field tile systems shall be repaired to at least original conditions. The participating landowner may request that Hardin not decommission access roads.

Through its review of Condition 51(d), Staff categorized the requirements of this condition subpart into the following categories: (1) turbine excavation sites; (2) geological and subsurface conditions; (3) roads and bridges; (4) field tile systems; and (5) inapplicable condition requirements.

(1) Turbine Excavation Sites

For turbine locations T2, T16, T17, T19, T20, T21, and T33, the landowners preferred to perform decommissioning activities themselves to prepare for a spring planting. The decommissioning activities at these locations consisted of removal of the construction fencing, decompacting topsoil/re-seeding the land as necessary, and returning the site to agricultural use. According to the

Applicant's August 7, 2020 Response to the First Data Request from the Staff, "documents from each property owner of those locations is included in Attachments 1 through 7 evidencing that decommissioning has been addressed to their satisfaction."

For turbine location T18, the Applicant stated, "[n]o construction was done at the T18 site, because during excavation water sprouted up. The area was immediately backfilled. Therefore, decommissioning was not necessary." In Applicant's September 28, 2020 Response to the Third Data Request from the Staff, the Applicant provided an analysis of subsurface conditions from its geotechnical consultant who concluded that it is "not aware of any reasons that the placement of the concrete pads would modify the geological or geotechnical subsurface conditions that would alter or reduce the ability for use as agricultural land."

Staff jointly investigated and analyzed the relevant geotechnical engineering reports with Ohio EPA geology program staff who are familiar with the Hardin County area. Ohio EPA reviewed the log of adjacent soil boring T-19 contained in the Barr 2012 Geotechnical Engineering Report.[3] At 17 feet below ground surface (bgs), a 10-foot thickness of sandy clay to clayey sand was encountered. This unit contained fine-coarse grained sand, cobbles and was saturated. This unit could have easily transmitted the amount of shallow ground water observed into the neighboring T18 excavation pit.

Ohio EPA concurs with Barr that the shallow ground water observed in the former pit at T18 originated from the sandy clay/ clayey sand unit described above. Staff and Ohio EPA geology program staff concur with the Applicant's analysis and conclusion of subsurface conditions. Furthermore, Staff observed that site T18 site is currently actively farmed with corn, and Staff concludes that T18 has been returned to its prior agricultural use.

For turbine locations T37 and T38, the Applicant contracted with RES (a renewable energy contractor who is currently constructing the Hardin Solar facility, detailed in Case Nos. 17-0773-EL-BGN and 18-1360-EL-BGN), to perform decommissioning activities. The decommissioning activities at these locations consisted of removal of construction fencing, repair of drain tiles, backfill of soil, verification that subsoil is compacted and graded to allow for farming activities, compacting of subsoil and grading where necessary. Staff observed that sites T37 and T38 are currently actively farmed with corn and soybeans respectively. Staff also concludes that sites T37 and T38 have been returned to their prior agricultural use and are satisfactorily decommissioned.

(2) Geological and Subsurface Conditions

In Applicant's September 28, 2020 Response to the Third Data Request from the Staff, the Applicant provided an analysis of subsurface conditions from its geotechnical consultant who concluded that it is "not aware of any reasons that the placement of the concrete pads would modify the geological or geotechnical subsurface conditions that would alter or reduce the ability for use as agricultural land."

While the Applicant provided Staff with agreements from certain landowners confirming their satisfaction that Hardin Wind Energy, LLC has completed all requirements, Staff was concerned

3. Barr 2012 Geotechnical Engineering Report, Appendix D, Boring Log T-19, filed in Case No. 09-0479-EL-BGN on October 17, 2016.

that excavation of turbine sites may have altered subsurface conditions that could potentially affect nonparticipants. The Applicant's consultant, Terracon, indicated that the turbine excavations, after backfilling, will have similar or better engineering characteristics compared to surrounding native ground.

Staff investigated the relevant geotechnical engineering reports and consulted with Ohio EPA geology program staff. Ohio EPA geology program staff does not dispute that conclusion based on its review of the Terracon and Barr Geotechnical Engineering Reports referenced above.

(3) Roads and Bridges

The only road or bridge impacted by the Applicant was County Road 95.[4] The Applicant will leave the improvements to County Road 95 in place. Staff contacted the Hardin County Engineer's office. In an email to Staff dated July 29, 2020, that office indicated that it is content to leave the County Road 95 improvements in place and has no problem with relinquishment of the Hardin Wind Farm certificate. Further, in a letter dated August 11, 2020, the Hardin County Commissioners stated they have no objection to the relinquishment of the Hardin Wind Farm certificate.

(4) Field Tile Systems

On August 7, 2020, the Applicant evidenced photographs on the docket demonstrating that its contractor, RES, repaired and re-routed the damaged drain tiles, which were located at turbine locations T37 and T38. Staff found no issues with the repairs performed on these drain tiles. In the other locations, where the landowner reclaimed the land, the landowner did the work to ensure the draining is correct. In all locations, the landowners confirmed that the land was returned to preconstruction conditions.

(5) Inapplicable Condition Requirements

Staff confirmed that no tree clearing occurred for this project, and therefore forested nonriparian areas were not impacted by construction or decommissioning activities.

Additionally, due to the status of the facility upon the Applicant's Relinquishment Request (i.e. no wind turbines or other facility components had yet been constructed), Staff found certain condition subpart to be inapplicable to the present situation. Specifically, the "removal and transportation of the wind turbines off-site" and the "removal of buildings, cabling, electrical components, access roads, and any other associated facilities" are inapplicable obligations at this phase. Furthermore, the Applicant coordinated the decommissioning efforts with Staff to comply with all applicable Certificate conditions regarding decommissioning, as well as the provision of the decommissioning plan. Therefore, Staff finds no concerns with these remaining condition subparts.

4. One access road to the substation was built and will be operated and maintained by AEP Ohio Transco for its portion of the certificate, as described below. No access roads have been constructed for the portion of the facility related to the wind turbines.

Staff Review of Condition 51(e) – Decommissioning Period

Condition 51(e) states:

> If the owner of the facility does not complete decommissioning within the period prescribed in these conditions, the Board may require forfeiture of financial securities. The entry into a participating landowner agreement constitutes agreement and consent of the parties to the agreement, their respective heirs, successors and assigns, that the Board may take action that may be necessary to implement the decommissioning plan, including the exercise by the Board, staff, and contractors, of the right of ingress and egress for the purpose of decommissioning the facility.

As detailed in this Decommissioning Staff Report of Investigation, Staff recommends the Board find the Applicant complied with the requirements of Original Certificate, Condition 51. Therefore, Staff recommends that the Board not enact the forfeiture provided within Condition 51(e).

Staff Review of Condition 51(f) – Release of Decommissioning Bond Escrow Fund

Condition 51(f) states:

> The escrow agent shall release the decommissioning funds when the facility owner has demonstrated, and the Board concurs, that decommissioning has been satisfactorily completed; or upon written approval of the Board in order to implement the decommissioning plan.

The Applicant holds a decommissioning bond in the amount of $11,027,200, which expires on November 20, 2020, unless renewed. While the Applicant provided Staff with agreements from landowners confirming their satisfaction that the Applicant has completed all requirements, the Applicant concludes that if sometime in the future something unforeseen arises regarding the agreements with the landowners, those issues would be subject to review by a court of competent jurisdiction.

Staff recommends that the Board find the Applicant has demonstrated that decommissioning has been satisfactorily completed. Staff recommends that the Board allow the decommissioning bond to be released to the Applicant.

Staff Review of Condition 51(g) – Disposal of Material

Condition 51(g) states:

> During decommissioning, all recyclable materials salvaged and nonsalvaged shall be recycled to the furthest extent possible. All other nonrecyclable waste materials shall be disposed of in accordance with state and federal law.

Due to the limited construction activities that occurred, the Applicant evidenced that waste materials, both recyclable and nonrecyclable, were comprised primarily of construction fencing. During Staff's August 5, 2020 site inspection, Staff confirmed that the orange debris (i.e. construction fencing) previously visible at turbine location T20 was removed. Staff also confirmed during Staff's August 5, 2020 site inspection, via photographs docketed on August 7, 2020, and

the construction proposal from subcontractor, RES, that the Applicant had disposed of construction fencing material.

Staff Review of Condition 51(h) - Interconnection Substation

Condition 51(h) states:

> Hardin shall leave intact any improvements made to the electrical infrastructure, pending approval by the concerned utility.

The Relinquishment Request does not include the portion of the Certificate pertaining to the interconnection substation that was transferred to AEP Ohio Transco in accordance with the Board's September 20, 2018 entry in the present case.

AEP Ohio Transco currently operates and maintains ownership of the interconnection substation and associated tap/tie line. This substation is intended to serve local area electricity needs including the Hardin Solar farms which are currently under construction in accordance with the Board certificates for OPSB Case Nos. 17-0773-EL-BGN and 18-1360-EL-BGN. Staff contacted AEP Ohio Transco who indicated that it has no problem with the Hardin Wind Farm certificate relinquishment. AEP Ohio Transco further stated that the substation is in operation and currently back-feeding power to the collector substation used for the solar farms. Regarding cost allocation, AEP Ohio Transco stated that Hardin Wind Energy LLC bore the construction costs of the substation and transferred ownership to AEP Ohio Transco. Because of this, there are no costs related to construction of the substation to recover from ratepayers through AEP Ohio Transco's formula rates.

In the event the Board grants the Applicant's Relinquishment Request, Staff recommends that the Board or Administrative Law Judge open a new case number for the portion of Case No. 09-0479-EL-BGN related to the AEP Ohio Transco interconnection substation so that AEP Ohio Transco may continue to operate and maintain this interconnection substation.

Staff Review of Condition 51(i) – Bond Amount

Condition 51(i) states:

> Subject to approval by staff, and within five years after the start date of commercial operation, an independent and registered Professional Engineer, licensed to practice engineering in the state of Ohio, shall be retained by the facility owner to estimate the total cost of decommissioning in current dollars (decommissioning costs*),* without regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment (net decommissioning costs). Said estimate shall include: an analysis of the physical activities necessary to implement the approved reclamation plan, with physical construction and demolition costs based on OOOT's Procedure for Budget Estimating and RS Means material and labor cost indices; the number of units required to perform each of the activities; and an amount to cover contingency costs, not to exceed 10 percent of the above-calculated reclamation cost. Said estimate should be on a per-turbine basis and shall be submitted for staff review and approval, after five years of facility operation, and every fifth year thereafter. Hardin shall post and maintain decommissioning funds in an amount equal to the following schedule: from years one through five, $5,000 per constructed wind turbine; and from year six through the end of the life of the project, the greater of $10,000

per constructed wind turbine, 15 percent of the decommissioning costs, or 120 percent of the net decommissioning costs.

The form of financial assurance will be a financial instrument mutually agreed upon by staff and the applicant and conditioned on the faithful performance of all requirements and conditions of the application's approved decommissioning and reclamation plan. Once the financial assurance is provided, the applicant shall maintain such funds throughout the remainder of the applicable term and shall adjust the amount of the assurance, if necessary, to offset any increase in the decommissioning costs at the end of the applicable term. The value of salvaged steel and copper, at the end of the five-year term and for any other revisions of this report thereafter, shall be calculated based on the five-year annual average for the years preceding the anniversary of such reports.

Hardin Wind Energy, LLC holds a decommissioning bond in the amount of $11,027,200. This amount was calculated in accordance with an earlier version of the Applicant's Decommissioning Plan that was filed in this docket on January 10, 2018. The bond is set to expire on November 20, 2020, unless renewed.

Conclusion

Staff recommends that the Board find that the Hardin Wind Farm has been satisfactorily decommissioned in accordance with Original Certificate Condition 51.

Additionally, in the event the Board grants the Applicant's request to relinquish the certificate, Staff recommends that the Board or Administrative Law Judge open a new case number for the portion of case number 09-0479-EL-BGN related to the AEP Ohio Transco interconnection substation.

Case No(s). 09-0479-EL-BGN, 11-3446-EL-BGA, 16-0469-EL-BGA, 16-2404-EL-BGA, 18-0677-EL-BGA

Summary: Staff Report of Investigation regarding decommissioning electronically filed by Mr. Matt Butler on behalf of Staff of OPSB