Statement of Justification

Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield
Madison County, New York

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INTRODUCTION

This Statement of Justification is based upon the exhibits in the Application, which have been prepared by qualified experts in their fields (i.e., sound and engineering) and upon the experience of Hoffman Falls Wind. The Applicant is requesting waivers of certain sections of local laws identified below. The waivers requested are the minimum necessary and, where possible, the Applicant has limited its request for waivers to only certain portions of the Facility where those provisions are unreasonably burdensome. As applied to those portions of the Facility, these provisions impose additional costs which are unnecessary and more restrictive than the state standards that have already been determined to protect public health and the environment. The burdens imposed on the community if a waiver is granted in these limited circumstances are minor to nonexistent, and the costs of applying these provisions outweigh any benefits which may be achieved. Waiving these provisions ensures renewable energy facilities such as the proposed Facility can continue to help the state achieve its climate energy goals without the costs of these requirements.

As a general matter, Exhibits 17 and 19 of the Application provide an extensive overview of the Facility's environmental benefits, consistency with the state's energy policy, and contribution toward the Climate Leadership and Community Protection Act (CLCPA) mandates; those discussions are incorporated by reference here to support waiver of the provisions identified below. In adopting the CLCPA, the legislature characterized climate change as an existential threat to the "economic well-being, public health, natural resources, and the environment of New York" (CLCPA §1(1)). The environmental and social harms posed by global climate change have long motivated the state's aggressive clean energy policies, as have the potential economic harms, which have gained recent attention in the New York Department of Environmental Conservation's (NYSDEC's) efforts to estimate the value of carbon as part of the agency's implementation of the CLCPA. Experts estimate that air pollution and climate change cost each American on average $2,500 per year in health care, the burden of which fall disproportionately on vulnerable communities. As demonstrated in this Application, renewable energy facilities such as the Hoffman Falls Wind Project offer significant environmental, public health, and community benefits, and will aid the state in transitioning from carbon-emitting electric generation which has negative impacts on wildlife, birds, and human health, toward a carbon-free energy future. The Facility's load profile will displace 217,320,000 kWh of fossil fuel generation in the New York Region over the course of a year (EPA, 2023). For reference, according to the EPA's AVERT Web Edition, this equals the annual electricity consumed by 17,968 average homes in the United States. See Exhibit 17 for further information regarding the proposed Facility's consistency with energy planning objectives.

Pursuant to 19 New York Codes, Rules, and Regulations (NYCRR) 900-2.25(c), an Applicant seeking a waiver of local laws must justify, with facts and analysis, that the burden imposed on the Facility by the substantive provision of local law is unreasonably burdensome. This justification requires a discussion of the degree of burden caused, why the burden should not be borne by the Applicant, that the request cannot reasonably be obviated by design changes to the Facility, that the request is the minimum necessary, and that the adverse impacts of granting the request are mitigated to the maximum extent practicable. Requests may

be based on existing technology, factors of costs or economics and/or the needs of consumers for the Facility.

A statement of justification for each local substantive requirement requiring a waiver identified by the Applicant is provided below. The statements of justification demonstrate the degree of burden caused by the requirement, why the burden should not reasonably be borne by the Applicant, that the request cannot reasonably be obviated by design changes to the facility, that the request is the minimum necessary, and that the adverse impacts of granting the request are mitigated to the maximum extent practicable consistent with applicable requirements set forth in the Office of Renewable Energy Siting's (the Office's or ORES') regulations.

The Applicant submits that the provisions identified below are unreasonably burdensome in view of the CLCPA targets and environmental benefits of the proposed Facility – some provisions would threaten the feasibility of the Project, while others impose additional costs which are unnecessary and not in line or in conflict with state standards. By contrast, the burdens imposed on the community if a waiver were granted for these provisions are minor to nonexistent, as described more fully below. Overall, the main waivers requested include waivers of local law provisions pertaining to setbacks, land use prohibitions, height limits, decommissioning, sound, lot dimensions, and construction hours. For these reasons, ORES should grant the waivers requested herein.

A. Setbacks (Eaton, Fenner, Nelson, Smithfield)

The Towns of Eaton, Fenner, Nelson and Smithfield each have adopted setback requirements that differ from the setback requirements contained in the 94-c regulations. Below is a table of setbacks by Town compared to the setbacks required under 94-c. The setbacks highlighted in red are those setbacks that the Applicant is requesting a waiver. The setbacks highlighted in green are those setbacks that the Applicant complies with.

Table 24-1. Local Law Setback Requirements

Structure Type	94-c	Eaton	Fenner	Nelson	Smithfield
Substation	1.5 Times Total Height	N/A	N/A	N/A	N/A
Above-Ground Transmission	1.5 Times Total Height	2.0 Times Total Height	1.5 Times Total Height	1.5 Times Total Height	2.0 Times Total Height
Public Roads	1.1 Times Total Height	2.0 Times Total Height	1.5 Times Total Height	1.5 Times Total Height	2.0 Times Total Height
Non-Participating Property Lines	1.1 Times Total Height from	2.0 Times Total Height	1.5 Times Total Height	1.5 Times Total Height	2.0 Times Total Height
Non-Participating Non-Residential Structures	1.5 Times Total Height from	N/A	N/A	N/A	N/A
Non- Participating Residences	2.0 Times Total Height from	N/A	1.5 Times Total Height	1.5 Times Total Height	N/A
Meteorological Towers	N/A	N/A	1.5 Times Total Height	1.5 Times Total Height	N/A
Other Turbines	N/A	2.0 Times Total Height	1.5 Times Total Height	1.5 Times Total Height	2.0 Times Total Height

Request

As can be seen in the Table 24-1, the Applicant has designed the Facility to meet the majority of the setbacks required within the towns. However, for the reasons set below, the Applicant seeks a waiver of the local property line setback requirements within each of the four towns that the Project is sited within, as well as the 2.0 times setback from public roads, specifically within the Town of Eaton.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

Overall, the Applicant is requesting waivers of these local setbacks as siting constraints make it such that the turbines cannot be placed in a location that complies with these local setback requirements. The turbines have been sited in the least impactful locations and achieve compliance to the maximum extent practicable. In addition, the turbine tip heights under consideration for the Project are between 600 and 656 feet. Using shorter turbines would not allow the Facility to take advantage of the available wind resource and the best most efficient turbine technology on the market for the conditions at the Facility Site. Given recent trends in onshore wind technologies, there are few to no turbine models available that are also suitable for the Facility site conditions below 600 feet.

Waiver Requests within the Town of Fenner

The Applicant seeks a waiver from the following provision listed in Section V. Land Use Schedule within the Town of Fenner's Land Use Regulations for the Hoffman Falls Wind Project:

> *"The minimum setback distance between each production line commercial wind power electricity generation unit (wind turbine tower) and: all surrounding property lines … shall be equal to no less than 1.5 times the proposed structure height plus the rotor radius."*[1]

This waiver is being requested with respect to the following turbines:

Wind Turbine #1

Wind Turbine #1 is currently sited in a high wind location, and has been sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 1).[2] This turbine is surrounded by several non-participating parcels along South Road and Cody Road (located to the east and north, respectively) in a way that any relocation away from one non-participating parcel to achieve local law compliance will encroach upon another non-participating parcel, resulting in non-compliance with this local law requirement. Additionally, shifts in either of these directions would likely result in an increase of sound and shadow flicker output on residences located along these roads. Additionally, the Fenner-Cortland transmission line is located just southeast of Wind Turbine #2 (this line runs southwest to northeast through the Facility Site). Shifting the turbine in this direction to pivot away from non-participating properties would result in non-compliance with the 1.5 times setback associated with this existing 115 kilovolt (kV) above-ground bulk electric system. In summary, this turbine has been sited in the least impactful location and achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location the turbine would have to have maximum tip height of approximately 453 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #2

[1] Note, the Applicant has limited the waiver request to non-participating property lines as the Fenner local law allows for the reduction of the setback for participating parcels.

[2] Wind Turbine #1 will need three Good Neighbor Agreements (GNAs) for a 1.1 times setback from non-participating parcels, and the Applicant is currently conducting landowner negotiations for these required GNAs.

Wind Turbine #2 is currently sited in a high wind location and has been sited to comply with 94-c setback requirements. (see Figure 24-1, Sheet 2)[3]. While complying with the restrictions outlined in the 94-c regulations, it is not possible to relocate Wind Turbine #2 to comply with a 1.5 times setback. This turbine is surrounded by several non-participating parcels along South Road and Wyss Road (located to the east and south, respectively) in a way that any relocation away from one non-participating parcel to achieve compliance will encroach upon another non-participating parcel, resulting in non-compliance with this local law requirement. In addition, the Fenner-Cortland transmission line is located just northwest of Wind Turbine #2 (this line runs southwest to northeast through the Facility Site). Therefore, shifting this turbine away from the non-participating properties along South and Wyss Road would result in non-compliance with the 1.5 times setback associated with this existing 115 kV above-ground bulk electric system. In summary, this turbine has been sited in the least impactful location and achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location the turbine would have to have maximum tip height of approximately 507 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #4

Wind Turbine #4 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1 –, Sheet 4). This turbine is subject to landowner siting restrictions within the parcel, which limit its relocation options (see Appendix 5-A for details regarding landowner siting restrictions). Additionally, this turbine is sited atop a prominent hill, and shifting it to the north will not only diminish it's productivity, but it will also result in the turbine being located in too close proximity to Wind Turbine #3. This would cause an increase in turbulence and wake loss associated with both turbines. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location the turbine would have to have maximum tip height of approximately 491 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #5

Wind Turbine #5 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 5). This turbine is currently located atop a prominent hill, which slopes to the north and east. Therefore, moving the turbine in either direction will decrease its productivity. Additionally, Wind Turbine #5 was carefully sited to maintain sufficient separation for minimizing waking effects between it and Wind Turbine #6, and in a way that avoids impacts to the forested wetlands located between these two turbines. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location the turbine would have to have maximum tip height of approximately 502 feet rendering it uneconomic (see discussion on turbine height above).

[3] Wind Turbine #2 will require a single GNA with respect to the 2.0 times setback from non-participating residences and the Applicant is currently conducting landowner negotiations for this GNA.

Wind Turbine #6

Wind Turbine #6 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 6). This turbine is currently located atop a prominent hill, which quickly slopes to the east. Therefore, moving the turbine in this direction will quickly decrease its productivity. Additionally, Wind Turbine #6 was carefully sited in a way to maintain sufficient separation to minimize waking effects between it and Wind Turbine #5, and in a way that avoids impacts to the forested wetlands located between these two turbines. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable.

Wind Turbine #7

Wind Turbine #7 is currently sited in a high wind location and will be sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 9).[4]. Wind Turbine #7 is currently sited in close proximity to a Class IV New York State Department of Environmental Conservation (NYSDEC) protected wetland complex, with wetlands located to the east, south, and immediate southeast of its current location. However, the Applicant has achieved complete avoidance of impacts to all wetlands (federal and state protected) surrounding Wind Turbine #7, along with the associated infrastructure (i.e., collection line and access road). Shifting this turbine to the southeast in an effort to comply with the 1.5 times setback would result in impacts to this state protected resource and would further bring mitigation requirements as described in Table 1 of the 94-c regulations. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location, the turbine would have to have maximum tip height of approximately 576 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #8

Wind Turbine #8 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 7). This turbine is currently located nearly atop a prominent hill, which quickly slopes to the west. Therefore, moving the turbine further in this direction will quickly decrease its productivity. Additionally, a private driveway leading to a year-round veterinary practice is located to the northwest of Wind Turbine #8, which is regularly used by the landowner and their customers. While this driveway may not fall within the definition of a public roadway (which would require 1.1 times setback under 94-c), the Applicant has sited Wind Turbine #8 to accommodate a 1.1 times setback due to the regular traffic on this driveway. Additionally, Wind Turbine #8 was carefully sited in a way to maintain sufficient separation to minimize waking effects between it and the four nearby turbines (Wind Turbines #6, 7, 9, and 10). Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location, the turbine would have to have maximum tip height of approximately 504 feet rendering it uneconomic (see discussion on turbine height above).

[4] Wind Turbine #7 will require one GNA to the south for a 1.1 times non-participating parcel setback, and the Applicant is currently conducting landowner negotiations for this GNA. The parcel requiring the GNA is owned by the same landowner as the parcel hosting the turbine.

Wind Turbine #9

Wind Turbine #9 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 8). This turbine is sited at the top of a very prominent hill, which quickly slopes to the north. Shifting the turbine in this direction would quickly decrease productivity. Similarly, turbine shifts to the west are unfeasible, as this would result in an increase in sound and shadow flicker output to the veterinary practice located approximately 1,200 feet to the west. Wind Turbine #9 has also been carefully sited in a way to maintain sufficient separation to minimize waking effects between it and the three turbines nearby (Wind Turbines #5, 6, and 8). In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location, the turbine would have to have maximum tip height of approximately 560 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #10

Wind Turbine #10 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 10). Wind Turbine #10 is sited just south of an unmapped NYSDEC protected wetland. The Applicant has achieved complete avoidance of impacts to this state protected resource through careful site design considerations, while also maintaining efficient energy production of this turbine. Shifting this turbine to the north in an effort to comply with the 1.5 times setback would result in impacts to this state protected wetland. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location, the turbine would have to have maximum tip height of approximately 580 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #11

Wind Turbine #11 is currently sited in a high wind location and will be sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 11).[5]. Wind Turbine #11 is currently sited towards the top of a prominent hill that slopes to the north. For this reason, moving the turbine north to remain in compliance with a 1.5 times property line setback will result in a decrease in elevation of Wind Turbine #11 and negatively affect its productivity. Additionally, shifting Wind Turbine #11 to the north would result in an increase in waking effects between it and Wind Turbine #12. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location, the turbine would need to have a maximum tip height of approximately 543 feet rendering it uneconomic (see discussion on turbine height above).

[5] Wind Turbine #11 will require two GNAs for 1.1 times non-participating parcel setbacks, and the Applicant is currently conducting landowner negotiations for these GNAs.

Waiver Requests within the Town of Nelson

The Applicant seeks a waiver from Section 512.1 (E) Setbacks within the Town of Nelson's Land Use and Development Law for the Hoffman Falls Wind Project:

> *"(1) The minimum setback distance between each production line commercial wind power electricity generation unit (wind turbine tower) and all surrounding … property lines … shall be equal to no less than 1.5 times the proposed structure height plus the rotor radius."*[6]

A waiver from this provision is being requested with respect to the following turbines:

Wind Turbine #13

Wind Turbine #13 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 13). Wind Turbine #13 is currently sited atop a prominent hill, that quickly slopes to the north. Therefore, any shifts in this direction would rapidly decrease the productivity of this turbine. Additionally, this turbine is surrounded by several non-participating parcels in such a fashion that any relocation away from one non-participating parcel to achieve compliance with the local law regulation will encroach upon another non-participating parcel. Therefore, there is no method to site this turbine in a way where compliance with the local law setback can be achieved. This turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 1.5 times setback at this location, the turbine would have to have maximum tip height of approximately 491 feet rendering it uneconomic (see discussion on turbine height above).

Waiver Requests within the Town of Smithfield

The Applicant seeks a waiver from Section 1100-5 (G) Setbacks and Noise Standards for WECS within the Town of Smithfield's Building and Development Control Law for the Hoffman Falls Wind Project:

> *"(1)(a) From property lines. A minimum distance of 2.0 times the Total Height of turbine (including blades) from any non-participant's property line, excluding adjoining lot lines of the project participants."*

A waiver from this provision is being requested with respect to the following turbines:

Wind Turbine #14

Wind Turbine #14 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 14). Wind Turbine #14 is sited nearly atop a prominent hill and shifting it to the south will not only diminish its productivity but will also result in the turbine being located in too close proximity to Wind Turbine #15. This would result in increased turbulence and wake loss associated with both turbines. Additionally, shifting the turbine further southwest into the agricultural field is not only viewed as unfavorable by the landowner, but it would also increase the overall agricultural impacts

[6] Note, the Applicant has limited the waiver request to non-participating property lines as the Nelson local law allows for the reduction of the setback for participating parcels.

associated with Wind Turbine #14. The field in which Wind Turbine #14 is currently sited is utilized by the students of SUNY Morrisville in their agricultural education program. The intent is for this field to continue to be utilized by this program, which would be achieved in the current placement of this turbine. Additionally, the proposed placement of Wind Turbine #14 will not only allow for this continued agricultural education, but it will also add an educational opportunity for students of SUNY Morrisville's renewable energy program. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times setback at this location, the turbine would have to have maximum tip height of approximately 382 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #15

Wind Turbine #15 is currently sited in a high wind location and will be sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 15).[7]. Wetlands are currently located to the north, east, and west of Wind Turbine #15, with one of these wetlands falling under federal jurisdiction. In an effort to avoid these environmental resources, the limits of disturbance associated with this turbine and its applicable infrastructure (i.e., access roads and collection lines) were designed to minimize disturbance to all wetlands surrounding the turbine to the maximum extent practicable. Additionally, no impacts to the nearby federally protected wetland are proposed. If Wind Turbine #15 were to be relocated to achieve compliance with the 2.0 times setback within the Town of Smithfield, it is likely that wetland impacts would increase. Additionally, Wind Turbine #15 was carefully sited in a way to maintain sufficient separation to minimize waking effects between it and Wind Turbine #14. If Wind Turbine #15 was to shift north to achieve compliance with a 2.0 times non-participating property line setback, it will not only dimmish it's productivity, but it will also result in the turbine being located in too close proximity to Wind Turbine #14. This would cause an increase in turbulence and wake loss associated with both turbines. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times setback at this location, the turbine would have to have maximum tip height of approximately 420 feet rendering it uneconomic (see discussion on turbine height above).

Waiver Requests within the Town of Eaton

The Applicant seeks a waiver from Section 120-23.15 (G) Setbacks and Noise Standards for WECS within the Town of Eaton's Town Code for the Hoffman Falls Wind Project:

> *"(1)(a) From property lines. A minimum distance of 2.0 times the Total Height of turbine (including blades) from any non-participant's property line, excluding adjoining lot lines of the project participants."*

[7] Wind Turbine #15 will require one GNA for 1.1 times non-participating parcel setback, and the Applicant is currently conducting landowner negotiations for this GNA.

"(1)(b) From public road and highways. A minimum distance of 2.0 times the Total Height of turbine (including blades), from any public road and highway."

A waiver from these provisions is being requested with respect to the following turbines:

Wind Turbine #16

Wind Turbine #16 is currently sited in a high wind location and will be sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 17)[8]. This turbine is currently sited towards the top of a prominent hill, which quickly slopes to the east and north. Therefore, shifts in the location of Wind Turbine #16 in either of these directions would be unfeasible, as this would result in a decrease of productivity of this turbine. Similarly, shifting this turbine to the south is unfeasible, as it would result in the turbine being sited within the towns 2.0 times setback from public roads, and would still not resolve in the need of a waiver from the 2.0 times non-participating property setback. In addition, due to shape of the parcel hosting Wind Turbine #16 and the non-participating parcels surrounding it, any shifts from the turbines current location would not resolve the need for a waiver from the town's non-participating property setback law. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times setback at this location, the turbine would have to have maximum tip height of approximately 376 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #17

Wind Turbine #17 is currently sited in a high wind location and will be sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 18)[9]. Wind Turbine #17 is currently sited atop a prominent hill that slopes to the west, therefore shifting this turbine's current location to the west will result in a decrease of productivity. Additionally, Wind Turbine #17 was carefully sited in a way to maintain sufficient separation to minimize waking effects between it and Wind Turbine #18 to the south, thereby making shifts to the south unfeasible. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times setback at this location, the turbine would have to have maximum tip height of approximately 362 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #18

Wind Turbine #18 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 19). Wind Turbine #18 is currently sited atop a hill, which slopes to the south, therefore shifting the turbine in this direction would not only decrease its productivity but would also result

[8] Wind Turbine #16 will require one GNA to the north for a 1.1 times non-participating parcel setback and the Applicant is currently conducting landowner negotiations for this GNA. The parcel requiring the GNA is owned by the same landowner as the parcel hosting the turbine.

[9] Wind Turbine #17 will require three GNAs for a 1.1 times non-participating parcel setback and the Applicant is currently conducting landowner negotiations for these GNAs.

in it being within a 1.1 times setback from a public road, and non-participating property to the south. This turbine is surrounded by several non-participating parcels in such a fashion that any relocation away from one non-participating parcel to achieve compliance will encroach upon another non-participating parcel causing non-compliance. Additionally, Wind Turbine #18 was carefully sited in a way to maintain sufficient separation to minimize waking effects between it and Wind Turbine #17 to the north, thereby making shifts to the north unfeasible. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times non-participating property line setback at this location, the turbine would have to have maximum tip height of approximately 365 feet rendering it uneconomic (see discussion on turbine height above).

In addition to the request for a waiver from the 2.0 times non-participating property line setback within the Town of Eaton, Wind Turbine #18 will also require a waiver from the 2.0 times public road setback within the town law. As mentioned previously, this turbine complies with all setbacks discussed in 94-c, which includes the 1.1 times setback from public roads. Due to the nature of the parcel that this turbine is currently sited on, shifting its location away from one public road to achieve compliance will result in the encroachment of a 1.1 times non-participating parcel setback to the north causing non-compliance. Additionally, as mentioned above, shifting Wind Turbine #18 to the north outside of a 2.0 times setback from public roads is unfeasible, as the turbine will be within too close proximity to Wind Turbine #17 resulting in increased waking effects and non-compliance with the Town of Eaton's 2.0 times setback from other WECS towers (Section 120-23.15 (G)(1)(d) of the towns wind law). Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times public road setback at this location, the turbine would have to have maximum tip height of approximately 437 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #19

Wind Turbine #19 is currently sited in a high wind location and will be sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 20)[10]. Wind Turbine #19 is sited atop a prominent hill that quickly slopes to the west. Shifting Wind Turbine #19 in this direction will decrease the productivity of this turbine and move it closer to non-participating properties and public roads, therefore making this unfeasible. Additionally, the northern portion of the parcel that this turbine is currently sited on is shaped in such a way that shifts to the north and east are unfeasible, as it would still result in non-compliance with the 2.0 times non-participating parcel setback. Additionally, Wind Turbine #19 was carefully sited in a way to maintain sufficient separation to minimize waking effects between it and Wind Turbine #21 to the south, thereby making shifts to the south unfeasible. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times non-participating property line

[10] Wind Turbine #19 will require one GNA to the east for a 1.1 times non-participating parcel setback and the Applicant is currently conducting landowner negotiations for this GNA. The parcel requiring the GNA is owned by an already participating landowner.

setback at this location, the turbine would have to have maximum tip height of approximately 433 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #20

Wind Turbine #20 is currently sited in a high wind location and has been sited to comply with 94-c setback requirements (see Figure 24-1, Sheet 22)[11]. Wind Turbine #20 is located atop a prominent hill, which slopes sharply to the west and moderately to the south. Shifting this turbine in either of these directions will not only decrease the turbines productivity but will also not resolve the need for a GNA within the 2.0 times non-participating property line setback. Therefore, shifting this turbine either to the west or to the south is unfeasible. Additionally, shifting Wind Turbine #20 to the east is not preferred by the Applicant, as it will result in tree clearing and more substantial grading due to the slopes present in this direction. Tree clearing and grading activities have largely been avoided due to the current location of Wind Turbine #20. This turbine was also carefully sited in a way to maintain sufficient separation to minimize waking effects between it and Wind Turbine #21 to the north, thereby making shifts to the north unfeasible. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times non-participating property line setback at this location, the turbine would have to have maximum tip height of approximately 525 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #22

Wind Turbine #22 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 24). Wind Turbine #22 is sited atop a prominent hill, which quickly slopes to the north. Therefore, shifting this turbine in this direction is not feasible, as it would result in a decrease of production, and would increase the waking and turbulence effects between it and Wind Turbine #23, which is also located to the north. Shifting the location of Wind Turbine #22 to the east is also not feasible, as shifts in this direction to achieve compliance with non-participating parcels to the south will encroach upon other non-participating parcels causing non-compliance. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable. In addition, other design changes such as using a shorter turbine are not feasible, as to fully comply with the 2.0 times setback at this location, the turbine would have to have maximum tip height of approximately 390 feet rendering it uneconomic (see discussion on turbine height above).

Wind Turbine #23

Wind Turbine #23 is currently sited in a high wind location and complies with 94-c setback requirements (see Figure 24-1, Sheet 23). Wind Turbine #23 is sited atop a prominent hill, which quickly slopes to the north and south. In its current location, grading and tree clearing surrounding this turbine is relatively minimal, as the turbine is sited atop a large plateau that provides adequate space for the required

[11] Wind Turbine #20 will require one GNA to the west for a 1.1 times non-participating parcel setback and the Applicant is currently conducting landowner negotiations for this GNA.

disturbance associated with the turbine pad. Therefore, shifting this turbine to the south to comply with the 2.0 times non-participating property line setback will result in a significant increase of grading and tree clearing activities during the construction of this turbine due to the steep slopes in this direction. Additionally, there is an active shale mining pit approximately 300 feet east of the current location of Wind Turbine #23, which the landowner has requested the Applicant to avoid during construction and operation activities. In its current location, there are no construction activities or disturbance proposed within this quarry. However, if the turbine was to shift to the east to achieve compliance with the 2.0 times non-participating property line setback, impacts to the active shale mining pit may become unavoidable. Therefore, this turbine has been sited in the least impactful location that achieves compliance to the maximum extent practicable.

2) <u>Burden Should Not Reasonably be Borne by the Applicant</u>

This requirement cannot reasonably be borne by the Applicant because it is technically infeasible to shift the turbines at these parcels. In the decision-making process for turbine placement, the Applicant initially conducted a comprehensive site assessment, starting with a preliminary screening to pinpoint areas within each of the four Towns that included favorable wind conditions, making them conducive to wind energy generation.

Following this initial screening, the Applicant conducted a feasibility assessment, gathering data on wind speeds, wind directions, turbulence, and various climatic factors over an extended timeframe. Once the potential parcels within each Town were identified and rigorously evaluated, the Applicant initiated negotiations with landowners for the acquisition of necessary land rights through leasing or purchase agreements.

Upon securing participation from a sufficient number of landowners throughout the Facility Site, the Applicant then proceeded to conduct a more intricate assessment of the identified parcels. This phase encompassed the positioning of individual wind turbines, development of access roads, locations of collection lines, and other essential infrastructure considerations.

The design process was highly comprehensive, taking into account factors such as turbine spacing, terrain characteristics, the need to avoid environmentally and culturally sensitive resources, adherence to local regulations, avoidance of landowner exclusion areas, avoidance of identified broadcast communication sources, and the stringent requirements of 94-c compliance. The ultimate goal was to design an optimal layout that would maximize energy production efficiency while balancing these factors.

At this juncture, the Applicant also identified the necessity for agreements with neighboring parcels to align with local laws. The Applicant approached adjacent landowners to ascertain their willingness to enter into these agreements. However, not every landowner agreed to participate in the Project.

In cases where such agreements could not be reached, the Applicant underwent a thorough review of the design. In some instances, they successfully adjusted turbine placements to ensure compliance with local laws. However, it is crucial to acknowledge that not every turbine could be relocated due to the diverse range of environmental and technical constraints that dictated their initial placements.

In light of these complex technical and environmental considerations, the Applicant asserts that the following local law setbacks are beyond reasonable feasibility, given the limitations inherent in the relocation of turbines within the specified parcels:

- the 1.5 times setback to non-participating parcel lot boundary lines in the Towns of Fenner and Nelson;
- the 2.0 times setback to non-participating parcel lot boundary lines within the Towns of Smithfield and Eaton; and
- the 2.0 times setback from public roads within the Town of Eaton.

In addition, if these turbines are not granted setback waivers and need to be eliminated from the Project, the associated loss of the Project's annual energy production would jeopardize the economic feasibility of the Project and jeopardize clean renewable energy for the energy consumers of New York.

3) Request Cannot Reasonably be Obviated by Design Changes

As outlined above, this request cannot be obviated by design changes to the Facility, as many constraints must be considered in arriving at a viable turbine layout. In total these constraints constrict the available footprint within which a turbine may be placed. In addition to physical constraints such as the shape and size of the parcels hosting turbines, terrain, wetlands and streams, participating landowner land use restrictions, the location of existing utilities and other similar limitations, sound and shadow flicker minimization at nearby receptors and parcel boundaries must also be accounted for. The turbine layout must also be optimized with respect to the available wind resource, maximizing the expected production while minimizing the effects of wind turbulence intensity and the waking effects that may occur between turbines, both of which increase the cost of turbine maintenance over the life of the Facility. Additionally, high turbulence intensity and waking adversely impact the ability for turbine suppliers to grant a turbine site suitable for consideration without onerous and uneconomic operational requirements. The overall combination of these constraints requires that the setback to non-participating parcel boundaries within each of the four towns that the Project is sited within, and the setback to public roads specifically within the Town of Eaton be waived as the Applicant cannot reasonably design the Facility to meet these local setback requirements.

4) Request is the Minimum Necessary

As can be seen in the Table 24-1, the Applicant has designed the Facility to meet the majority of the setbacks in the Towns and has limited this request to just the setbacks from non-participating property lines within each of the four towns that the Facility is sited within, and public roads within the Town of Eaton. The Applicant has therefore limited this request to the minimum necessary as the only waiver for setbacks is for public road setbacks within the Town of Eaton and non-participating parcel boundary setbacks. In addition, the Applicant endeavored to place the turbines in locations that would meet the setbacks to the maximum extent practicable given the siting constraints discussed above.

5) Adverse Impacts of Waiver Have Been Mitigated

The adverse impacts of granting this request will be mitigated to the maximum extent practicable because in no event will turbines be constructed closer than 1.1 times the turbine height to non-participating parcel

lot boundary lines or public roads described above as required under 94-c (see Figure 24-2). These setbacks were based on careful consideration of the best practices for siting renewable energy projects, engineering guidelines, past precedents for Article 10 cases and other local law requirements throughout the state. The Application does not identify any unique or different circumstances in the Towns which would dictate greater setbacks to non-participating parcel lot boundary lines (See Exhibits 5 and 6 for an analysis of setbacks and public health and safety). The 94-c setbacks are sufficient to minimize and mitigate potential adverse impacts.

Conclusion

The turbines at the Facility have been sited in the least impactful location that achieves compliance to the maximum extent practicable with local and ORES setback requirements. The proposed locations and spacing of wind turbines are directly related to several factors including landowner participation, wind resource assessment, topography, existing infrastructure, accessibility, environmental resource impacts, and the consideration of zoning constraints to the extent feasible.

This request cannot be obviated by design changes to the Facility, as many constraints must be considered in arriving at a viable turbine layout. In aggregate, these constraints constrict the available footprint within which a turbine may be placed. Moreover, this requirement cannot reasonably be borne by the Applicant because if the turbines identified above are not granted setback waivers and need to be eliminated from the Project, the associated loss of the Project's annual energy production would jeopardize the economic feasibility of the Project and jeopardize clean renewable energy for the energy consumers of New York.

These constraints restrict the available footprint within which a turbine may be placed. For all the reasons discussed above, and in light of the CLCPA goals, the Applicant requests that ORES waive the non-participating parcel boundary line setback in the Towns of Eaton, Fenner, Nelson and Smithfield, and the public road setback within the Town of Eaton.

B. Land Use Prohibition Fenner (Turbines)

In 2000 the Town of Fenner passed Local Law No. 2000-1 amending the Town's Land Use Regulations (Local Law 1997-1) to establish a new zoning district, District C, to define an area of the Town where commercial wind-powered electricity generation and transmission facilities may be developed. In addition, Local Law 2000-1 also established standards for commercial wind power electricity generation and/or transmission facilities in the Town. District C was updated in 2001 (Local Law No. 2001-1) and again in 2005 (Local Law No. 1 of 2005) to add additional parcels.

District C corresponds directly with those parcels hosting wind turbines and associated infrastructure for the Fenner Wind Farm which was developed in the Town in 2001. The Hoffman Falls Facility is proposed south of the Fenner Wind Farm (south of County Route 28) in the southeast portion of the Town (See Figure 3-4). The Applicant requested that the Town of Fenner expand District C to include those parcels proposed in the Hoffman Falls Wind Project, however, the Town has not to-date expanded the district to include the currently proposed Facility parcels.

Request

Since the wind turbines proposed within the Town of Fenner are not proposed to be located in District C, the Facility is not a permissible use in the district where it is currently proposed. Therefore, the Applicant is seeking a waiver of the use prohibition. As explained further below, the Project cannot comply with the prohibition as the prohibition would prevent the Project from being constructed. The Applicant therefore requests ORES waive the Town's use prohibition as the prohibition is unreasonably burdensome in view of the CLCPA targets and environmental benefits of the proposed Facility.

Previous Article 10 precedent is instructive. The New York State board on Electric Generation Siting and the Environment ("Siting Board") has stated that local laws which would prevent a project from being constructed would be unreasonably burdensome *per se*, and similar prohibitions and limitations inconsistent with state law and policy have been considered unreasonably burdensome. See Application of *High River Energy Center*, Case 17-F-0597, Order Granting Certificate of Environmental Compatibility and Public Need, with Condition, Issued and Effective March 11, 2021, pg. 110; Application of *Flint Mine Solar*, Case 18-F-0087, Order Granting Certificate of Environmental Compatibility and Public Need, with Condition, Issued and Effective August 4, 2021, pg. 70; Application of *Hecate Green*, Case 17-F-0619, Order Granting Certificate of Environmental Compatibility and Public Need, with Condition, Issued and Effective September 28, 2021, pg. 16.

In the *High River* proceeding the applicant sought eleven waivers of local laws including a local law requiring 500-foot setbacks from neighboring properties and a local law restricting development to certain districts. The Siting Board found the laws to be unreasonably burdensome and stated, "In certain respects, High River's Application Exhibit 31 goes even further, showing that local zoning requirements for setbacks would prevent the Project from being constructed, a result which would be unreasonably burdensome per se."

In the *Flint Mine Solar* proceeding, utility scale solar collector systems were only a permitted use within the Town's Commercial District and its Industrial District. Under Flint Mine's proposed layout, the Project was wholly within the Town's Residential Agricultural-2 district and therefore was not a permitted use under local law. The Siting Board found that requiring compliance with the local laws identified in the Application and the settlement materials would be unreasonably burdensome, as it would frustrate the purpose of Article 10 and the siting of renewable energy projects.

Similar to the Flint Mine proceeding, according to the Siting Board's Order in the *Hecate Green* proceeding, "[t]he Siting Board must balance the interests of the local community and the interests of the State's renewable energy goals and the benefits that will accrue to ratepayers." In *Hecate Green*, the Town of Coxsackie's Solar Energy Collection Systems law limited utility-scale solar generation facilities to the commercial and industrial districts. The Applicant requested a waiver because the Rural Residential Zoning District, in which the Facility would be located, only allowed for agricultural uses, low-density residential development, and limited rural commercial and institutional uses. In waiving the local zoning restrictions, the Siting Board stated, "we must… consider the positive contributions the renewable Facility will have on the State, how it will help achieve the goals of the Legislature in establishing renewable energy thresholds

for the purpose of reducing greenhouse gas emissions in an effort to combat climate change and its adverse impacts. Achieving these renewable energy goals will benefit all ratepayers."

ORES should make a similar finding here. Reasonable local regulations are one matter, but local laws which prohibit renewable development outright, particularly in communities which host existing high-voltage transmission infrastructure near available vacant land, is per se unreasonably burdensome.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

Wind energy facilities such as the proposed Facility are not permitted outside of District C. District C already consists of the Fenner Wind Farm. Hoffman Falls Wind cannot be built on the same parcels as the currently existing Fenner project. This is in large part due to the fact that existing land leases for the Fenner project prohibit turbines from another developer on these parcels. In addition, turbines need to be spaced appropriately to minimize wake effects and turbulence. Turbines that are too close together will experience higher wake-induced energy losses, increased loading as a result of turbulent airflow, and a shorter operational lifespan overall. Placing new turbines on parcels in close proximity to the existing Fenner Wind turbines would not provide sufficient spacing to meet the site suitability requirements of most turbine manufacturers. Therefore, the Facility cannot comply with the Town's use restriction. In other words, without a waiver, the Facility cannot be built in the Town. In essence, the Town's use restriction prohibits any other wind facility from being built in the Town and amounts to a ban on new facilities.

2) Burden Should Not Reasonably be Borne by the Applicant

This requirement cannot reasonably be borne by the Applicant because it is not technically feasible to place turbines on parcels within District C. If wind turbines were precluded in the Town of Fenner, the Project would lose half of its proposed capacity (+/- 50 MW).

3) Request Cannot Reasonably be Obviated by Design Changes

As outlined above, this request cannot be obviated by design changes to the Facility, as the use restriction does not allow the Facility to be built in any other areas of the Town. Currently, the only area of the Town where turbines are permitted already hosts the Fenner Wind Farm, which prevents any other wind facility from being built in the Town. Therefore, there are no design changes that the Applicant can make to the Facility to comply with the law.

4) Request is the Minimum Necessary

This request is the minimum necessary as without the waiver the Project cannot be constructed or operated.

5) Adverse Impacts of Waiver Have Been Mitigated

The adverse impacts of granting this request will be mitigated to the maximum extent practicable as the Facility has been designed to avoid, minimize and mitigate environmental and cultural impacts to the maximum extent practicable in accordance with the 94-c requirements. See Exhibit 2(a)(1); Exhibit 4(c); Exhibit 9(a)(1); Exhibit 11(c), 11(f); Exhibit 12(d); Exhibit 14(e), 14(f); Exhibit 15(a)(9).

Conclusion

As demonstrated above, the Applicant is requesting to construct Facility components within the Town of Fenner outside of District C, which is defined as an area of the Town where commercial wind-powered electricity generation and transmission facilities may be developed. Constructing Facility components within District C is not feasible due to the fact that existing land leases for the Fenner Wind project prohibit turbines from another developer on parcels within this District. In addition, turbines need to be spaced appropriately to minimize wake effects and turbulence. Placing new turbines within District C parcels in close proximity to the existing Fenner Wind turbines would not provide sufficient spacing to meet the site suitability requirements of most turbine manufacturers. Therefore, the Facility cannot comply with the Town's use restriction. In other words, without a waiver, the Facility cannot be built in the Town. In essence, the Town's use restriction prohibits any other wind facility from being built in the Town and amounts to a ban on new facilities.

Given that the Facility cannot be built in District C and therefore cannot be constructed or operated without a waiver, for all the reasons discussed above, and considering the CLCPA goals, the Applicant requests that ORES waive the Town of Fenner's use restriction, permitting the Facility to be constructed on parcels outside of District C.

C. Minimum Road Frontage (Nelson)

Section 512 of the Town of Nelson Land Use Development and Zoning Law Code regulates wind energy facilities. Commercial Wind Energy Facilities are defined as a principal land use comprised of structures and equipment for the conversion of wind energy into electricity which is transmitted directly into the State's electrical grid for commercial sale. Wind Energy System is further defined as a machine or combination of machines and appurtenant equipment that converts the kinetic energy in the wind in a usable form commonly known as a wind turbine or windmill.

Section 512.1 contains lot size, dimensions, and construction standards for commercial wind energy facilities. Section 512.1(B) specifically states the minimum road frontage of a parcel participating in a commercial wind energy facility shall be 450 feet.

Request

The parcel which currently hosts the proposed turbine location in the Town of Nelson does not have existing road frontage (see Figure 4-1 Sheet 7 of 11). Therefore, Hoffman Falls Wind is seeking a waiver for this requirement.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

As stated, the proposed turbine location in the Town of Nelson (Wind Turbine #13) is located on a parcel that does not have existing road frontage. In other words, all boundaries of this parcel are bordered by contiguous forested and agricultural lands. The nearest public roadways from this property include Pleasant Valley Road (approximately 1,050 feet west), Stone Bridge Road (approximately 930 feet north), Route 20 (approximately 1,200 feet south), and Roberts Road (approximately 136 feet southeast). The Applicant cannot meet the 450 feet minimum road frontage standard, as there is no road frontage along the parcel which Wind Turbine #13 is currently located. Wind Turbine #13 is the sole turbine proposed within the Town of Nelson, and in its current location, this turbine complies with all 94-c setback requirements (see Figure 4-1 Property Boundaries Sheet 7 of 11) In addition to complying with state required setbacks, Wind Turbine #13 also complies with the Town of Nelson's 1.5 times setback from public roadways (see Table 24-1). Furthermore, as described earlier in this report, Wind Turbine #13 is sited in a high-wind location, atop a prominent hill that quickly slopes to the north. For this reason, relocating this turbine would result in a decrease in productivity. Therefore, Wind Turbine #13 has been sited in the least impactful location that achieves compliance to the maximum extent practicable. Other design changes such as shifting this turbine to a nearby parcel with adequate road frontage is not feasible, as this turbine is surrounded by several non-participating parcels, which prevents the relocation of Facility components to an adjacent parcel which may have existing road frontage in Nelson.

2) Burden Should Not Reasonably be Borne by the Applicant

Adhering to the Town of Nelson's minimum road frontage standard is not practical due to the above-mentioned constraints, nor does there appear to be a substantive need. Per the Facility design, the Applicant proposes to construct an access road from Route 20 leading north to Wind Turbine #13. The Applicant has worked diligently to site this turbine location to be the least impactful and technically feasible, while also maximizing its production, in light of all land and siting constraints.

3) Request Cannot Reasonably be Obviated by Design Changes

The request cannot reasonably be obviated by design changes due to the previously mentioned constraints. Seeking an alternative turbine location within the Town of Nelson that has existing road frontage is highly unlikely, if not impossible, based upon landowner participation, 94-c and Town setback requirements, and other siting considerations.

4) Request is the Minimum Necessary

This request is the minimum necessary as the Applicant is requesting a waiver because no road frontage currently exists along the boundaries of the property. The one remaining Facility Site parcels within the

Town of Nelson hosting other components (i.e. collection line and access road) adhere to the 450-foot minimum standard for road frontage.

5) Adverse Impacts of Waiver Have Been Mitigated

The adverse impacts of granting this request will be mitigated to the maximum extent possible. Wind Turbine #13 is sited to adhere to all 94-c setback requirements, which are based on careful consideration of the best practices for siting renewable energy projects of this scale, current engineering guidelines, and other local law requirements throughout New York. Wind Turbine #13 further meets the Town of Nelson's 1.5 times setback from public roadways (See Table 24-1).

Conclusion

Given that Wind Turbine #13 is located on a parcel without existing road frontage and would likely not be constructed or operated without a waiver, for all the reasons discussed above, and considering the CLCPA targets, the Applicant requests that ORES waive the Town of Nelson's road frontage requirement.

D. Structure Height (POI Switchyard and Project Collection Substation)

Request

Fenner Local Law No. 2000-1 and Section III of Local Law No. 2001-1 include substantive requirements for commercial wind-powered electricity generation facilities in the Town. Section V includes Table 1, Land Use Schedule. Table 1 also includes notes (a-h). Only note H applies to commercial wind power electricity generation units (wind turbine towers). However, since the Interconnection Facilities are proposed to be located in the Town of Fenner, the Applicant seeks a determination that the height limitation in Table 1 of 35 feet is not applicable to the structures within the Interconnection Facilities (point of interconnection switchyard, project collection substation, overhead gen-tie line between stations and associated pole structure, and the high-voltage loop-in and loop-out lines) and/or seeks a waiver of the height limit as it applies to these structures.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

To the extent that the height limitation would apply to the structures within the Interconnection Facilities, the Applicant seeks a waiver of such height limitation, as compliance with the limitation is technically impossible and impracticable. The height requirements for these components are dictated by engineering and electrical codes and are necessary for the safety and protection of both people and equipment. The point of interconnection station, the project collection substation, overhead gen-tie line and interconnection loop transmission lines were designed to National Grid Standards as per their standard

document ST.02.00.002 - Electric Station Clearances and industry standard IEEE Std. 1427-2006 Guide for Recommended Electrical Clearances and Insulation Levels in Air Insulated Electrical Power Substations.

Per these standards, in the point of interconnection station the minimum acceptable vertical clearance over ground for the lowest overhead conductor, after accounting for line sag on the 115kV dead-end structures, is 45 feet 6 inches. This height allows for vehicular traffic under the 115kV lines for maintenance purposes. Additional lightning protection spires are added to the top of the dead-end structures to protect the incoming line from lightning strikes per industry standard IEEE 998-2012 Guide for Direct Lightning Stroke Shielding of Substations. Two freestanding lightning protection masts taller than 35 feet are also required to provide required protection per IEEE 998-2012 for the National Grid point of interconnection station equipment.

Due to the relatively steep terrain, a retaining wall will be built between the National Grid point of interconnection station and the existing transmission line. The point of interconnection switchyard dead-end structure take-off points will be higher than the existing transmission line. Therefore, the new steel pole structures needed for the line loop into the new point of interconnection station will be designed by National Grid to be tall enough to match the height of the point of interconnection station dead-end conductor takeoff heights.

The single structure needed to construct the 115kV generation tie line between the National Grid point of interconnection station and the project collection station is designed with the lowest conductor mounting height at the same height as required at the substation dead-ends to allow for vehicle traffic for maintenance under the lines. This line is located over the access road. The other two conductors are mounted at the required separation heights of 11 feet between phases. The pole height is designed to accommodate for these National Grid electrical clearance requirements.

The height of the 115kV dead-end takeoff structure in the project collection station is designed to match the height of the lowest conductor at the single turning pole on the gen-tie line between the stations. The height of the conductor takeoff points is about 40 feet. Additional lighting mast spires mounted on the dead-end structure and two freestanding lightning protection masts taller than 35 feet are also required to provide required protection per IEEE 998-2012 for the project collection substation equipment.

2) <u>Burden Should Not Reasonably be Borne by the Applicant</u>

This request cannot be borne by the Applicant or be avoided by design changes, as again the components must be at a height above 35 feet to comply with National Grid design standards, industry standards for electrical clearances and lightning protection and to ensure the safety and protection of both people and components.

3) <u>Request Cannot be Obviated by Design Changes</u>

The Facility cannot be designed to avoid the need for this waiver, as certain structures within the Interconnection Facilities must be designed at a height above 35 feet.

4) Request is the Minimum Necessary

This request for a waiver is the minimum necessary, as it is limited to only those components which must be designed at a height above 35 feet.

5) Adverse Impacts of Waiver Have Been Mitigated

Adverse impacts associated with the request have been mitigated to the maximum extent practicable as demonstrated throughout the Application including Exhibits 5 and 6, visual impacts, in Exhibit 8, and cultural impacts in Exhibit 9. Therefore, there are no increased environmental impacts associated with the waiver request and the Applicant has demonstrated in the Application that the impacts have been minimized and mitigated to the maximum extent practicable.

Conclusion

As demonstrated above, compliance with the Town of Fenner's 35-foot height limitation is impractical or otherwise unreasonable as certain structures within the Interconnection Facilities must be designed at a height above 35 feet. This request cannot be borne by the Applicant or be avoided by design changes, as again the components must be at a height above 35 feet per National Grid standards. For all the reasons discussed above, and in light of the CLCPA, the Applicant requests that ORES find that the height limitation is not applicable or waive the height limitation with respect to the Interconnection Facilities.

E. Lot Dimensions and Subdivision Requirements for Interconnection Facilities (Fenner)

As outlined in Exhibit 24, the collection substation and point of interconnect (POI) switchyard (hereinafter referred to as the Interconnection Facilities) are proposed to be located in the Town of Fenner, District C.[12] To accommodate these Facility components, Hoffman Falls Wind intends to subdivide the parcel that contains the substation to create three separate parcels: one parcel will remain with the current landowner, one parcel will include the POI switchyard, which will be transferred to National Grid after Facility construction, and one parcel will include collection substation with the 3 breaker ring bus, which will be owned by Liberty Renewables. See Figure 24-3 attached, which shows the three proposed parcels.

The Town of Fenner Subdivision Regulations requires that all lots shall abut by their full frontage on roads built to the Town's road specifications (Article 6 Section 640.1), the lot size, width, depth, shape, and area shall comply with the Town's Land Use Ordinance (Article 6 Section 640.2) which for District C lots must comply with the following: minimum lot size of one acre, a minimum lot frontage of 200 feet, and minimum lot depth of 200 feet; and a 35 foot maximum structure height[13] (Section V, Table I Land Use Schedule), the provision of the Town's Land Use Ordinance shall apply regarding setback lines (Article 6 Section 640.5), which for In District C, lots must comply with the following setbacks; a minimum 50 foot front yard, 50 foot rear yard, and 40 foot side yards (Section V, Table I Land Use Schedule), and side lot lines shall be

[12] These parcels are also within District A which extends 500 feet of each side of the center line of Cody Road. The Applicant has used District C in this request as District C has requirements for business, professional or industrial uses, whereas District A does not have any applicable uses listed in the Land Use Schedule.

[13] The Applicant is seeking a waiver of this height restriction as well, see Section D of this Statement of Justification.

approximately at right angles to the road, or radial to curved roads (Article 6 Section 640.6). Finally, Article 6 Section 645, in addition to other requirements, requires that "[a]ll surfaces must be graded and restored within six (6) months of completion of subdivision, so no unnatural mounds or depressions are left."

Request

As can be seen on Figure 24-3 the proposed subdivided parcels will not meet the above criteria, and therefore the Applicant is requesting a waiver with respect to these requirements with respect to the Interconnection Facilities.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) **Degree of Burden**

As can be seen in Table 24-2, the 2 proposed parcels do not meet all the Town's subdivision requirements:

Table 24-2. Compliance with Town of Fenner Subdivision Requirements.

Town Requirement	Collection Substation	POI Switchyard
All lots shall abut by their full frontage on roads built to the Town's road specifications. (Article 6 Section 640.1)	The Collection Substation parcel fully abuts CR 28 and complies with this requirement	Due to the landowner preferences, the POI Switchyard parcel only partially abuts CR 28, and the landowner has retained a portion of his parcel to the southwest of this parcel.
Minimum lot size of one acre. (Article 6 Section 640.2 ; Section V, Table I Land Use Schedule)	The Collection Substation parcel is approximately 1.88 ac and complies with this requirement.	The POI Switchyard parcel is approximately 3.10 ac and complies with this requirement.
Minimum lot frontage of 200 feet. (Article 6 Section 640.2 ; Section V, Table I Land Use Schedule)	The Collection Substation parcel frontage is over 200 feet and complies with this requirement.	Under 200 feet, given the landowner retained portion, this parcel only has 92 feet of road frontage
Lot depth of 200 feet. (Article 6 Section 640.2; Section V, Table I Land Use Schedule)	The Collection Substation parcel lot depth is over 200 feet and complies with this requirement.	The POI Switchyard parcel lot depth is over 200 feet and complies with this requirement.
35-foot maximum structure height. (Article 6	See Section D	See Section D

Town Requirement	Collection Substation	POI Switchyard
Section 640.2; Section V, Table I Land Use Schedule)		
Minimum 50-foot front yard. (Article 6 Section 640.5; Section V, Table I Land Use Schedule)	The Collection Substation parcel front yard is 50 feet and complies with this requirement.	The POI Switchyard parcel front yard is over 50 feet and complies with this requirement.
50-foot rear yard. (Article 6 Section 640.5; Section V, Table I Land Use Schedule)	The Collection Substation parcel rear yard is over 50 feet and complies with this requirement.	The POI Switchyard parcel rear yard is over 50 feet and complies with this requirement.
40-foot side yards. (Article 6 Section 640.5; Section V, Table I Land Use Schedule)	The Collection Substation parcel side yards are under 40 feet. Given the design of the Interconnect Facilities which are required to be connected to each other and the National Grid Cortland to Fenner Wind 115 kV line, the Applicant has designed the parcels to be as closed together as possible to avoid unnecessary environmental impacts associated with larger lots and to comply with National Grid design standards.	The POI Switchyard parcel side yards are under 40 feet. Given the design of the Interconnect Facilities which are required to be connected to each other and the National Grid Cortland to Fenner Wind 115 kV line, the Applicant has designed the parcels to be as closed together as possible to avoid unnecessary environmental impacts associated with larger lots and to comply with National Grid design standards.
Side lot lines shall be approximately at right angles to the road, or radial to curved roads. (Article 6 Section 640.6)	The site lot line is radial to CR 28 along the collection substation parcel.	The Applicant has created a square parcel to the extent practicable, while accommodating the request for the portion of the southwest parcel to remain with the landowner.

The size and shape of the proposed parcels is a function of landowner preference and the location of the Interconnection Facilities which have been sited to reduce overall environmental impacts while maintaining proximity to the National Grid Cortland to Fenner Wind 115 kV line. Moreover, the collection substation and POI switchyard need to be connected. As described in Exhibit 21(a)(2), three short 115 kV overhead lines (gen-tie and cut-in/out, with a total length of less than 500 feet), will connect the new 115/34.5 kV collection substation to the new 115 kV POI switchyard then to the existing National Grid 115 kV transmission line. Through the POI switchyard, the Facility will connect to the existing Cortland to Fenner Wind 115 kV transmission line owned and operated by National Grid, allowing power to be delivered from the Facility to the grid.

2) Burden Should Not Reasonably be Borne by the Applicant

This requirement cannot reasonably be borne by the Applicant because it is technically infeasible to create parcels that comply with the Subdivision Regulations. For example, meeting the setback requirements between the POI and collection substation is infeasible given that they need to be connected. Therefore, it is technically impossible to design the two components and meet the setbacks.

In addition, the Applicant is seeking a waiver of the requirement to restore and regrade the site within 6 months of completion of the subdivision as construction of the Interconnection Facilities are anticipated to take at least 7 to 10 months to complete and will be done in accordance with the 94-c Permit and conditions and may be constructed in sequence with other portions of the Facility. It will be impossible to comply with the requirement to restore the site within six months of completion of the subdivision, as the subdivision of the parcel may be completed prior to the start of construction, and construction will take at least 7 to 10 months once commenced. Temporary erosion control measures will be applied to stabilize disturbed soils in accordance with the SPDES General Permit. Thus, any adverse impacts of granting this request are mitigated to the greatest extent possible.

3) Request Cannot be Obviated by Design Changes

As explained above the location and configuration of the Interconnection Facilities is largely a function of the location of the existing National Grid 115 kV transmission line and the shape of the existing parcel for the placement of the components. Furthermore, design changes would not obviate the need for this request as the POI and collection substation need to be connected. In addition, the design of the Interconnection Facilities is dictated by National Grid's requirements.

In addition, the location and shape of the Interconnection Facility parcels is dictated by landowner requirements and preferences. As can be seen in Figure 24-3, the landowner wishes to retain portions of their property along County Route 28 and to the north of the Interconnection Facilities as part of his parcel's participation in the 480-a forestry program. Therefore, the Applicant designed the Interconnection Facility parcels to meet the requests of the landowner.

4) Request is the Minimum Necessary

This request for a waiver is the minimum necessary, as the Applicant has designed the Interconnection Facilities to comply with the Subdivision Regulations to the maximum extent practicable, while also considering the landowner's preferences and the design requirements for the Interconnection Facilities.

5) Adverse Impacts of Waiver Have Been Mitigated

As demonstrated throughout the Application, the Interconnection Facilities have been sited to avoid and minimize environmental impacts to the maximum extent practicable. Therefore, there are no increased environmental impacts associated with the waiver request and the Applicant has demonstrated in the Application that the impacts have been minimized and mitigated to the maximum extent practicable.

Conclusion

As demonstrated above, compliance with the Town of Fenner's Lot Dimensions and Subdivision Regulation requirements is impractical or otherwise unreasonable as the Interconnection Facilities must be located in the current configuration. This request cannot be borne by the Applicant or be avoided by design changes, as again the components must be located in proximity to the existing National Grid 115 kV transmission line. For all the reasons discussed above, and in light of the CLCPA, the Applicant requests that waive the Subdivision Requirements and Lot Dimension requirements with respect to the Interconnection Facilities.

F. Scenic Overlay (Nelson)

The turbine proposed to be located in the Town of Nelson (Wind Turbine #13) is located within the Scenic Vista I Scenic Overlay District (the Scenic Overlay District) in addition to the Rural (R) District.

While there is no explicit prohibition in the Town of Nelson Land Use Development law to turbines being located in the Scenic Vista I Scenic Overlay District, the intent and development standards for the Scenic Vista I Scenic Overlay District could effectively prohibit turbines from being developed in this Scenic Overlay District.

The stated intent of the Scenic Overlay District is to avoid "overly obtrusive development" which may result from any of the following conditions:

(a) The color of the structure(s) may not blend with the surrounding vegetation or structures;
(b) Construction materials may reflect light (e.g. large un-shaded windows, light colored and metal roofs);
(c) Decorative or other lighting that brightens otherwise dark skies;
(d) Structures that are bulky or out of scale with other background features, natural or man-made;
(e) Structures with tall elements that protrude from their surroundings and are difficult to hide;
(f) Landscaping that is inadequate to mute the visual impact of the structure(s);
(g) Construction of buildings and/or structures that impair the view of a scenic vista from a scenic public highway.

Given that turbines are tall white structures that cannot be screened by landscaping, wind turbines could be considered overly obtrusive development. Moreover, the development standards for the Scenic Overlay District state that structures can "not have a substantial adverse effect upon the scenic vista as viewed from any public highway". § 404.2(2)(a). As explained in the Visual Impact Assessment (VIA; see Appendix 8-A), Wind Turbine #13 will be viewable from State Route 20. See Section 5.2.2 of the VIA; see also Viewpoint 40 in Attachment D of the VIA, this viewpoint shows a sim along Route 20 in the Town of Eaton, which includes T-16 (located in Eaton) and T-13 (located in Nelson).

Finally, Section 512.2(D) of the Town of Nelson Wind Energy Facilities regulations states, "No individual tower facility shall be installed in any location that would substantially detract from or block view of a portion of a recognized scenic viewshed, as viewed from any public road right-of-way or publicly owned

land within the Town of Nelson, or that extends beyond the border of the Town of Nelson." Again, Wind Turbine #13 is located in the Scenic Vista I Scenic Overlay District and will be viewable from State Route 20.

In summary, the Town of Nelson prohibits "overly obtrusive development" which has "a substantial adverse effect upon the scenic vista as viewed from any public highway", and further prohibits turbines in locations that "would substantially detract from or block view of a portion of a recognized scenic viewshed, as viewed from any public road right-of-way or publicly owned land". These requirements could prohibit the location of T-13 which is viewable from State Route 20.

Request

Although the VIA conducted by the Applicant, only indicates that Wind Turbine #13 will have a minimal to moderate contrast with the existing landscape, given the subjective language of the Town's standards and the intent of the Scenic Vista I Scenic Overlay District, the Applicant is seeking a waiver of these standards to the extent that they would prohibit the construction of Wind Turbine #13 as proposed. The potential visibility and visual effects associated with the Facility are summarized in Section 5.2.2 of the VIA (included as Appendix 8-A of the 94-c Application).

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

The Nelson Scenic Vista I Scenic Overlay District was created in 2011 and includes parcels along Route 20 as well as other similar high-elevation areas within the town that have long-distance views (see Figure 3-6). Wind Turbine #13 is located within the Scenic Vista I Scenic Overlay District along Route 20. Relocating Wind Turbine #13 to another location outside of the Scenic Overlay District would not be feasible, as many areas in the Town of Nelson that are located outside the Scenic Overlay District are lower elevation sites that would not be suitable. More importantly, the Applicant does not have land control of any parcels outside the Scenic Overlay District that would be suitable. The one parcel within the Facility Site that is outside the Scenic Overlay District in the Town of Nelson lacks the required elevation to host a productive turbine, hosts portions of a Class II NYSDEC protected wetland, and any turbine located within this parcel would not be compliant with 94-c setback requirements.

The purpose of the Town of Nelson Scenic Vista I Scenic Overlay District is "…to preserve the Town's significant viewsheds and their corresponding viewing locations from designated scenic public highways…" (Section 404.2 Town of Nelson Land Use Development Law). The VIA concludes that the siting of a single wind turbine within this area, as proposed, would not result in near-foreground visual impacts, as the closest designated scenic roadway, Route 20, would view this turbine from approximately 0.4 miles at its nearest

point. Sensitivity and potential impact to viewers/users of Route 20 will be highly variable and views of the wind turbine for those traveling only the roadway are likely to be fleeting and short in duration. However, residents traveling on public roadways, such as Route 20, within the Scenic Overlay District will likely have regular and repeated views of the proposed turbine and sensitivity to changes in the landscape. See VIA Section 5.2.2.

Again, Wind Turbine #13 is located in the Scenic Vista I Scenic Overlay District and will be viewable to the traveling public along Route 20. Therefore, Wind Turbine #13 will have an impact on the Town's designated scenic vista. While the Applicant does not believe that this wind turbine will have a substantial adverse effect upon the scenic vista or substantially detract from or block view of a portion of a recognized scenic viewshed, as viewed from any public road right-of-way or publicly owned land, the Applicant seeks a waiver of these requirements to the extent the Town or ORES find that the turbine does not comply with the intent of the Town's Scenic Vista I Scenic Overlay District.

2) <u>Burden Should Not Reasonably be Borne by the Applicant</u>

If Wind Turbine #13 does not comply with the intent of standards of the Scenic Vista I Scenic Overlay District given its visual impact, the Applicant will be required to remove the wind turbine location from the Facility. The removal of Wind Turbine #13 from the Facility will impact the Applicant's ability to meet its proposed 100 MW design goal, as it is a highly productive turbine with minimal wake loss and meets all 94-c setback requirements in its current location. In addition, Wind Turbine #13 has limited environmental impacts as it has one of the shortest access roads, and has favorable topography for a wind turbine resulting in minimal grading. Additionally, this wind turbine avoids all impacts to streams and has minimal impacts to a non-jurisdictional wetland (totaling approximately 0.05 acres). Further, Wind Turbine #13 is sited in an area that was not found to contain any threatened and/or endangered species habitat. As noted in the VIA, Wind Turbine #13 will only have a minimal to moderate contrast with the existing landscape, therefore the Applicant should not be forced to remove a highly productive turbine that has minimal environmental impacts just because the turbine can be seen from a public highway.

3) <u>Request Cannot Reasonably be Obviated by Design Change</u>

The request cannot be obviated by design changes as the height of the wind turbines will make it visible regardless of the Facility design. The Applicant cannot place Wind Turbine #13 in a location on the proposed parcel where the turbine will not be visible from Route 20. In addition, although the Applicant has land control of one parcel within the Town of Nelson that is outside of the Scenic Overlay District, it lacks the required elevation to host a productive turbine, hosts portions of a Class II NYSDEC protected wetland, and siting a turbine on this parcel would result in non-compliance with 94-c setback requirements.

Overall, the Facility has been sited in windy locations to take advantage of the energy production potential. There are a limited number of suitable alternative locations for wind turbines to allow for the energy production goals of the Facility to be met while also accommodating other environmental and design constraints (see Exhibit 2 for additional information on environmental and landowner constraints). Options to relocate/rearrange individual Facility components are unlikely to significantly reduce the overall visual impacts of the Facility, including those associated with Wind Turbine #13

4) Request is the Minimum Necessary

The Facility was designed to reduce visual impacts to the maximum extent practicable. The Applicant maintains that Wind Turbine #13 will not have a substantial adverse effect upon the scenic vista as viewed from any public highway, nor will it substantially detract from or block view of a portion of a recognized scenic viewshed, as viewed from any public road right-of-way or publicly owned land. (See VIA) The Applicant is limiting this request to waive the Town's Scenic Vista I Scenic Overlay District standards only to the extent the standards would prohibit the placement of Wind Turbine #13 as proposed.

5) Adverse Impacts of Waiver Have Been Mitigated

The Applicant has prepared a Visual Impact Minimization and Mitigation Plan (VIMMP; see Appendix 8-B) which has been designed to minimize and mitigate visual impacts to the maximum extent practicable in compliance with §900-2.9(d) of Section 94-c.

Conclusion

As described above, the intent and development standards for the Scenic Vista I Scenic Overlay District could effectively prohibit turbines from being developed in the Scenic Overlay District, and this would require that the Applicant remove a highly productive turbine with limited environmental impacts from the array, just because of visibility of the turbine from State Route 20. In addition, the removal of Wind Turbine #13 would not result in the absence of wind turbines that could be viewed along Route 20, as turbines proposed within the Towns of Fenner, Smithfield, and Eaton would still be within the viewshed along portions of this scenic highway that fall within the Town of Nelson. Therefore, Wind Turbine #13should not be required to be removed from the Facility, as the inclusion of this turbine will only have a minimal to moderate contrast with the existing landscape (see Appendix 8-A), and the removal of it would not result in the removal of wind turbines within the viewshed of Route 20 within the Town of Nelson.

The Facility has been designed to minimize and mitigate visual impacts to the maximum extent practicable in compliance with §900-2.9(d) of Section 94-c and requiring the removal of Wind Turbine #13 would be contrary to the goals of the CLCPA and the needs of consumers, who demand clean renewable energy.

G. Sound Limits (Fenner and Nelson)

The Towns of Fenner and Nelson each require that "Individual wind turbine towers shall be located with relation to property lines so that the level of noise produced during wind turbine operation shall not exceed 50 dBA, measured at the boundaries of all the closest parcels that are owned by non-site owners and that abut either the site parcel(s) or any other parcels adjacent to the site parcel held in common by the owner of the site parcel as those boundaries exist at the time of special use permit application." See Town of Fenner Land Use Regulations Section VII. 606.31(E) and Town of Nelson Land Use Development, Section 512.2.D.

Request

These local laws by the Towns of Fenner and Nelson set a do not exceed limit and fail to specify a metric or averaging time for the sound level limit. Moreover, monitoring and measuring sound at parcel boundaries

is incredibly difficult and costly, which is recognized by the 94-c regulations which only requires that properly line limits be demonstrated through the filing of noise contour drawings and sound levels at the worse-case discrete locations. See 900-2.8(b)(1)(vi). Therefore, the Applicant is requesting a waiver of this provision as compliance with such a requirement is unreasonably burdensome given the technical difficulties with implementing and monitoring such a requirement. A waiver is necessary due to the ambiguous and restrictive nature of this local law in the Towns of Fenner and Nelson.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) **Degree of Burden**

The 94-c regulations already set a reasonable design limit of 55 dBA Leq (8-hour) across any portion of a nonparticipating property except for portions delineated as NYS-regulated wetlands and utility ROW limits at non-participating and participating residences, which the applicant will comply with. This limit is to be demonstrated through contour drawings, not sound monitoring, as compared with the Towns' laws which require sound be measured at the boundaries of all the closest parcels. Moreover, 94-c also sets limits for non-participating and participating residences which will serve to protect specific locations where people reside in proximity to the turbines.

Imposing an additional property line limit of 50 dBA which is set as a "shall not exceed" and is not further defined is unnecessary. Setting monitoring limits at property lines where it is unlikely that people will actually reside does not protect against potential health impacts associated with sound impacts. If the Applicant were forced to comply with a not to exceed the 50 dBA limit at non-participating property lines, then the Applicant would need to remove all the turbines located in Fenner and Nelson. The term "not to exceed" is not a sound level metric, it only indicates that any metric applied shall not exceed that value. If the not to exceed language is interpreted to mean Lmax sound level metric, then most or all of the proposed wind turbines would not be able to be constructed. The Lmax is the maximum instantaneous sound level. Lmax is not typically used for evaluating sound regulations for several reasons including:

- Wind turbine manufacturers do not present sound level data using the Lmax metric. Wind turbine sound level data is presented in terms of Leq.
- The Lmax is a highly variable sound level metric that results in poor repeatability even when measured with laboratory calibrated instruments.
- The Lmax is a statistical anomaly that is not representative of long-term sound exposure. Background sound levels (produced by non-wind turbine sources) cannot be subtracted out of Lmax measured values because the Lmax is not an equivalent average sound level.

Even if the not to exceed value is interpreted to mean Leq, approximately twelve of the proposed wind turbines would need to be moved or removed from the Project in order to protect potentially uninhabited

property line locations. In some instances, moving turbines based solely on a property line limit would increase sound levels at inhabited residences.

2) Burden Should Not Reasonably be Borne by the Applicant

Sound monitoring equipment needs to be placed at discrete locations to measure sound and cannot be placed across all portions of a property line. It would take several dozen monitors to adequately monitor across all non-participating property boundaries in the Facility Site. In addition, sound monitoring equipment needs to be calibrated and maintained regularly to ensure accurate measurements, placing dozens of monitors across the site would result in costly and frequent site visits to ensure the equipment was working properly, assuming the Applicant could even find enough sound monitors to comply with this onerous requirement. A monitoring program of this scale would be extremely difficult to implement, and results of the monitoring would likely be inconclusive if the Lmax metric was utilized. Moreover, as described above depending on the metric used up to 13 turbines would need to be removed from the Facility to comply with this requirement, which does not provide any additional health or safety benefit as compared with the requirements under 94-c.

3) Request Cannot Reasonably be Obviated by Design Change

As outlined above the Towns' laws are ambiguous and onerous. Redesigning the Facility to comply with a 50 dBA sound limit that is set as a not to exceed limit is incredibly difficult. Even if it is assumed that the metric is the same are required by 94-c (Leq 8 hour) moving the turbines in the Towns of Fenner and Nelson to comply with this requirement is not possible given the siting constraints on the turbine parcels. Furthermore, moving the turbines does not address the difficulties with measuring sound limits at property boundaries as described above, and could lead to increased sound impacts at residences.

4) Request is the Minimum Necessary

The sound from the Facility will meet the 94-c requirements and will adequately minimize noise on adjacent properties. The Facility was designed to reduce sound impacts and the request to waive the Towns' local laws is the minimum necessary to ensure sound impacts are minimized and mitigated to the maximum extent practicable. See Exhibit 7 of the Application.

5) Adverse Impacts of Waiver Have Been Mitigated

The sound from the Facility will meet the 94-c requirements and will adequately minimize noise on adjacent properties and at specific locations where people reside. The Facility was designed to reduce sound impacts. See Exhibit 7 of the Application.

Conclusion

Considering the Towns' laws are ambiguous and do not define the metric needed to determine compliance, that the Facility has been designed in compliance with the noise thresholds established in Section 900-2.8(b)(2), that the Facility will minimize sound impacts, and that determining compliance with the Towns' laws is not feasible, the Applicant request ORES waive strict compliance with the Towns' 50 dBA property line limit. The property line design requirements in 94-c adequately minimize noise impacts from the Facility.

The Uniform Standards and Conditions (USCs) are designed to avoid or minimize, to the maximum extent practicable, any potential significant adverse environmental impacts related to the siting, design, construction, and operation of the Facility, including sound. ORES has already determined appropriate noise levels for wind facilities and there is no benefit to applying the local laws, considering the Facility complies with the design goals already contained in 94-c, and the fact that the local law applies to property lines not residences or other sensitive receptors where people are likely to be present. There is no basis to impose additional property line sound limits on the Facility, which ORES has already adjudged to be unnecessary. Moreover, applying local laws which conflict with the standards under 94-c creates unnecessary uncertainty for developers of renewable energy facilities and works to undermine the standards and conditions promulgated under the regulations, which is contrary to the goals of the CLCPA and the needs of consumers.

H. Construction Hours (Smithfield and Eaton)

The Town of Smithfield Building and Development Control Law Section 1100-1(D)(16) and Town of Eaton Local Law Amending Chapter 120 of the Town of Eaton Code to Regulate Commercial Wind Energy Facilities Section 120-23.15(D)(16) limits construction hours for wind facilities to 7 am to 7 pm Monday through Friday. This restriction precludes construction on weekends and does not contain any provisions for exceptions to these restrictions, which are necessary especially for wind turbine erection activities.

Request

The Applicant is seeking to have to the construction hour limits outlined under 94-c applied across all Towns. The Applicant also seeks to allow construction and delivery activities, to occur during extended hours beyond this schedule on an as-needed basis consistent with 19 NYCRR 900-6.4(a)(ii).

This request is consistent with construction hour waivers granted in prior Article 10 proceedings including Cassadaga Wind (Case No. 14-F-0490) and Baron Winds (Case No. 15-F-0122). The Applicant is seeking to have uniform construction hours applied across all the host Towns and is requesting that ORES waive any construction hour limits to the extent they unreasonably restrict construction and conflict with the construction hour limits in 19 NYCRR § 900-6.4(a). In both the Cassadaga Wind and Baron Winds case the applicants requested waivers of local law construction hour limits. In Cassadaga, the Siting Board granted a limited waiver which allowed for construction work hour between 7:00 a.m. to 8:00 p.m., on Monday through Saturday, and 8 a.m. to 8 p.m. on Sunday with the exception of wind turbine construction activities which may need to occur during extended hours beyond this schedule on an as-needed basis to address unusual circumstances.[14] These hours helped form the basis of the construction hours for the Uniform Standards and Conditions under Section 94-c. In Baron Winds, which is also located in Steuben County, the Siting Board found that Baron met its burden of demonstrating that local construction hours were unreasonably burdensome[15], finding that the burdens associated with enforcement of the law and the resulting

[14] Application of Cassadaga Wind, Case No. 14-F-0490, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions, pg 91.

[15] Application of Baron Winds, Case No 15-F-0122, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions pg 153-154.

construction delays are: increased project cost; extension of the overall construction schedule; and delay in the benefits associated with production of renewable, non-emitting power to be produced by the Facility.[16] Further, the Siting Board found that application of the local law would have limited benefits, and will likely increase overall impacts both inside of the Town and the surrounding community. Enforcement of the local law will also detract from the benefits of the facility by delaying its operational date.[17] Therefore the Local Law was found to be unreasonably burdensome and a waiver of the law was found to be likely to result in earlier operation of the facility, which was found to be in the public interest.[18] In addition, ORES recently granted a similar waiver request in the Prattsburgh Wind proceeding, Matter No. 21-00749, Draft Permit issued December 29, 2023. Consistent with this prior precedent, the Applicant is requesting that the construction hour limits in 19 NYCRR § 900-6.4(a) be applied uniformly across all of the host municipalities for the Facility. 19 NYCRR § 900-6.4(a) states:

> a) *Construction Hours*. Construction and routine maintenance activities on the facility shall be limited to 7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays, with the exception of construction and delivery activities, which may occur during extended hours beyond this schedule on an as-needed basis.
>
> > 1. Construction work hour limits apply to facility construction, maintenance, and to construction- related activities, including maintenance and repairs of construction equipment at outdoor locations, large vehicles idling for extended periods at roadside locations, and related disturbances. This condition shall not apply to vehicles used for transporting construction or maintenance workers, small equipment, and tools used at the facility site for construction or maintenance activities.
> >
> > 2. If, due to safety or continuous operation requirements, construction activities are required to occur beyond the allowable work hours, the permittee shall notify the NYSDPS, ORES, affected landowners and the municipalities. Such notice shall be given at least twenty-four (24) hours in advance, unless such construction activities are required to address emergency situations threatening personal injury, property, or severe adverse environmental impact that arise less than twenty-four (24) hours in advance. In such cases, as much advance notice as is practical shall be provided.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

[16] Baron Winds Order Granting Certificate pg 154.
[17] Baron Winds Order Granting Certificate pg 154.
[18] Baron Winds Order Granting Certificate pg 154.

1) Degree of Burden

Restricting the timing of construction activities to less than allowed under 94-c is unreasonably burdensome as it will delay construction, cause the construction of the Facility to disrupt the community for longer and may ultimately impact the Facility's ability to provide the energy needs of consumers. It is typical in the industry to conduct construction work at turbine sites during early morning and night hours to take advantage of cooler temperatures and low wind speeds. The low wind speeds are especially important when performing wind turbine erection activities (i.e., tower section, nacelle/hub, and blade installation) because, due to safety concerns, tower sections and blades cannot be installed during high wind conditions. In addition, pouring concrete is dependent on temperature, so this activity could be shifted to early morning depending on forecasted temperatures.

As required under Section 94-c (19 NYCRR § 900-6.4(a)), if such activities must occur outside the construction hours, the Applicant would notify the New York State Department of Public Service (NYSDPS), ORES, affected landowners, and the town(s) at least 24 hours in advance of such activities. As indicated above, the Towns of Eaton and Smithfield do not allow construction on weekends, which eliminates two workdays out of each week of construction. Projects such as Hoffman Falls can take 18 to 24 months to construct with 7 days a week of construction. Eliminating 2 days of construction could expand construction by up to approximately 9 months. This prohibition will unnecessarily create delays in construction activity not just in Smithfield and Eaton but in the adjoining towns as well. Delays in completing one stage of construction, such as delivery of turbine components, foundation installation or turbine erection, can delay not only the installation of that component but the remainder of the Project, creating a cascading delay. The longer the construction schedule, the longer construction related impacts will occur within the communities, including transportation impacts and construction noise impacts.

In addition, construction of wind energy projects is driven largely by the logistics associated with delivering materials and the turbine components to the Facility. Having consistent delivery availability (7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays) across each town will alleviate logistical confusion during high-volume delivery periods and ensure that turbine and material delivery can occur on schedule without the need for materials to be re-routed or delayed due to scheduling conflicts.

Wind turbine components cannot travel in New York between 7 a.m. and 9 a.m., as well as between 4 p.m. and 6 p.m. while crossing large cities, so they sit mid-journey in rest areas, exit ramps and alike. This usually limits the workday of travel to 8 hours with one stop in the afternoon during curfew. Therefore, it is highly likely trucks will arrive at the Facility Site in the late hours of the afternoon. Travel within the site to the laydown or access roads/pads is critical and cannot be restricted by a township ordinance or the truck will not make it until the next day.

In addition, turbine components are usually spread out roughly 1 hour apart, this already constrains the amount of equipment on the road at any given time of the day. Rarely a site will ever have more than 2 to 3 trucks in total travelling in different sections of the site. Being able to work until 8 p.m. is of paramount importance to keep to a schedule. In addition, Sundays tend to be the days with the least amount of traffic overall (i.e., safest). Therefore, in a project like Hoffman Falls Wind, where there are long on-site distances

that must be travelled at very low speeds, the use of Sunday should be available. It would also allow trucks on site to position so come Monday morning they are where they need to be for work to resume without delays/waiting on trucks. Turbine component trucks are long, wide, tall, and heavy. As a result, there are very few places for these pieces of equipment to stop and idle without disturbing residents. The purpose of these trucks is to haul from one point to another, non-stop.

As demonstrated above, compliance with Towns' construction hour limits is impractical or otherwise unreasonable as it would cause unnecessary delays in construction activities, including complicating scheduling of work for wind turbine delivery and erection for the Facility.

2) Burden Should Not Reasonably be Borne by the Applicant

This request should not be borne by the Applicant as it has environmental (i.e., transportation impacts and noise impacts), scheduling, and timing implications which will prolong project construction and delay the project from reaching commercial operations in a timely manner. Prolonging construction would unnecessarily delay renewable energy generation and having differing construction hours limitations across the Project could cause difficulties with coordinating with turbine vendors and delivering turbines throughout the Facility. Having consistent delivery availability across each town included in the Project will alleviate logistical confusion during high-volume delivery periods and ensure that turbine and material delivery can occur on schedule without the need for materials to be re-routed or delayed due to scheduling conflicts.

3) Request Cannot Reasonably be Obviated by Design Changes

The request cannot be obviated by design changes as the project design is not dependent on construction hours.

4) Request is the Minimum Necessary

The request is the minimum necessary as the Applicant is requesting to follow the limits set forth in the 94-c regulations and is not seeking to extend construction hours beyond those limits. As demonstrated above, the request is necessary to ensure project construction can proceed in a timely manner and turbine components can be delivered on schedule and efficiently.

5) Adverse Impacts of Waiver Have Been Mitigated

The adverse impacts of granting the request are mitigated to the maximum extent practicable as the Applicant will abide by the construction hour limits in 19 NYCRR § 900-6.4(a). The construction hour limits in 94-c are sufficient and reasonable to facilitate construction and set forth reasonable procedures for work beyond the established work hours if required due to safety or continuous work that requires work outside the established hours. The 94-c construction hour limits are typical for wind project development throughout the state and there is nothing unique about the Towns in this instance to require more restrictive construction hours. The construction hours set forth in 900-6.4(a) adequately mitigate impacts to the Towns and waiving the construction hour limitations reduces impacts on the community associated with a lengthier construction schedule and ensures the project can timely provide the benefits of renewable energy generation to New York State energy consumers.

Conclusion

As demonstrated above, compliance with Towns' construction hour limits are impractical or otherwise unreasonable as it would cause unnecessary delays in construction activities, including complicating scheduling of work for wind turbine delivery and erection for the Facility. This request should not be borne by the Applicant as it has environmental, scheduling, and timing implications which will prolong project construction and delay the project from reaching commercial operations in a timely manner. In addition, the request cannot be obviated by design changes as the project design is not dependent on construction hours, the adverse impacts of granting the request are mitigated to the maximum extent practicable as the Applicant will abide by the construction hour limits in 19 NYCRR § 900-6.4(a), and the request is the minimum necessary as the Applicant is requesting to follow the construction limits set forth in the regulations. For the reasons set forth above, the Applicant is seeking a waiver of local construction hour limitations to the extent such limitations conflict with the construction hour limits in 19 NYCRR § 900-6.4(a).

I. Decommissioning Security (Smithfield and Eaton)

The Town of Smithfield Building and Development Control Law Section 1100-1(I)(3)(d) and Town of Eaton Local Law Amending Chapter 120 of the Town of Eaton Code to Regulate Commercial Wind Energy Facilities Section 120-23.15(I)(3)(d)) requires the financial security for decommissioning to "be no less than 150% of the cost of full decommissioning (including salvage value) and restoration". This exceeds the ORES requirement for decommissioning contingency security by 35%, a costly difference over the life of the Facility for which the Applicant seeks a waiver. Imposition of this higher contingency would add approximately $660,868 in additional contingency requirements to the Project. See Exhibit 23, Appendix 23-A, Decommissioning Costs Analysis Report. ORES has determined that "a 15% contingency is reasonable based on careful consideration of the best practices for siting renewable energy projects."[19] There is no basis to require more for this Project. In addition, this requirement does not allow an offset for salvage value, however it is common industry practice to offset decommissioning with salvage value, as history shows that scrap metal always maintains some value.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

With respect to salvage value, many wind turbine and substation components of wind facilities have salvage and resale value and parts may be sold in the secondary market to other wind facilities for spare parts. Salvage materials involved in wind facility projects (including but not limited to steel, copper, and aluminum wiring) have historically trended upwards and these materials have long been reused, reclaimed and

[19] ORES Assessment of Public Comments on Title 19 of NYCRR Part 900 at page 102

repurposed in the salvage industry. Additionally, innovation in recycling and recovery technologies as well as innovative applications for use of composite waste are accelerating wind turbine blade circularity. For example, on average, nearly 90% of blade material, by weight can be reused as a repurposed engineered material for cement production, which enables a 27% net reduction in carbon dioxide emissions from cement production. Based on historical salvageability of certain component materials, and improvements in innovation and technology and applications of composite materials, there is no evidence to suggest that wind facility component materials will not be salvageable at the time of decommissioning.

Accounting for salvage value of materials is standard decommissioning practice across the industry. Furthermore, some of these materials are relatively easy to decommission, meaning the cost to decommission the materials and obtain value is not an impediment to realizing their value, and as sustainable processes for recycling composite materials in wind turbines continue to improve, recycling processes will improve in their cost competitiveness and availability. Since ORES has already determined that an offset for salvage value is appropriate, it is unclear to the Applicant what benefit compliance with this local law provision would produce, if any. Rather, it would result in an overestimate of decommissioning costs, which would cause the Applicant to incur additional financial costs for the Project which acts as a financial disincentive with no actual proven benefit to the host community. It should also be noted that the Applicant's net decommissioning/site restoration estimate, which pursuant to the ORES regulations, includes a 15% contingency, will be periodically reviewed to adjust for any estimated decommissioning cost increases and/or salvage value decreases. In addition, as mentioned above, many of the wind turbine and substation components will likely be sold in the secondary market upon Project decommissioning. The net resale value of these components is currently estimated to be almost $1.06 million between the towns of Smithfield and Eaton. Therefore, this contingency is more than sufficient to address any uncertainties related to future costs, including composite recycling costs. Applying these local law provisions, which conflicts with the standard set pursuant to Section 94-c (19 NYCRR §§ 900-6.6 and 900-2.24(c)), creates an unnecessary and unjustified financial hardship for developers of renewable energy facilities, and undermines the standards set in the regulations, effectively frustrating the achievement of the CLCPA goals.

The Decomissioning and Site Restoration Plan (see Appendix 23-A) demonstrates the costs between the local decommissioning requirements and ORES' decommissioning requirements and demonstrates that the Town's decommissioning requirements are overly conservative.

2) <u>Burden Should Not Reasonably be Borne by the Applicant</u>

The likelihood of the Towns of Smithfield and Eaton having to carry out decommissioning activities at the Facility are very low. Projects like Hoffman Falls are closely regulated by ORES and the NYSDPS. For example, the transfer of projects like Hoffman Falls to another entity requires thorough review under Section 94-c (19 NYCRR § 900-11.2). In addition, prior to construction and operation, Hoffman Falls must obtain a Certificate of Public Convenience and Necessity from the Public Service Commission, as outlined in Section 68 of the Public Service Law. Subsequent transfers of the Facility may also be subject to Section 70 review under the Public Service Law. These various requirements and reviews are in place to ensure that the Applicant possesses the necessary expertise to ensure that the Facility remains competitive and financially viable throughout its lifespan. In essence, the combination of regulatory scrutiny, permit and certification

requirements, and ongoing reviews helps to mitigate the risk of the Town having to undertake decommissioning activities, as these measures are designed to ensure the responsible management of large-scale projects like Hoffman Falls. Given that it is unlikely that the Towns will have to carry out any decommissioning activities, it is unreasonable for the Applicant to have to carry the costs of the decommissioning security at levels that are higher than it is likely to cost to decommission the Facility. Imposing high decommissioning security requirements places an undue burden on the Applicant, creating a financial obligation that surpasses the actual foreseeable costs associated with decommissioning activities.

Accounting for salvage value of materials is standard decommissioning practice across the industry. Excluding salvage value would result in an overestimate of decommissioning costs, which would cause the Applicant to incur additional financial costs for the Project which acts as a financial disincentive with no actual proven benefit to the host community. In addition, a 50% contingency is excessive. Typical industry practice is a 5 to 10% contingency and ORES requires 15%. As outlined above, see Appendix 23-A for further demonstration that the Town's decommissioning estimates are overly conservative and burdensome to the Project.

Given that ORES has already determined a reduction in salvage value and 15% contingency is appropriate, the benefits of applying these provisions are negligible, and should therefore not be borne by the Applicant or the State's energy consumers.

3) Request Cannot Reasonably be Obviated by Design Changes

The request cannot be obviated by design changes as the project design is not dependent on decommissioning costs.

4) Request is the Minimum Necessary

The request is the minimum necessary as the Applicant is requesting to follow the decommissioning requirements set forth in 94-c and there is no basis to require more than what the regulations set forth.

5) Adverse Impacts of Waiver Have Been Mitigated

The adverse impacts of granting the request are mitigated to the maximum extent practicable as the Applicant will follow the decommissioning requirements set forth in 94-c. The Applicant will be required to provide over $1.99 million in decommissioning financial security to protect the Towns in the very unlikely event that the Facility owner does not conduct decommissioning and site restoration on its own. In the very unlikely event that the Applicant does not decommission the Facility and the Towns must carry out decommissioning of the Facility, the Applicant would forfeit its Facility equipment and the Towns could use the value to offset decommissioning costs. Finally, the security will be reviewed by the Office and will be updated after one year of operation and every fifth year thereafter per §900-10.2(b)(2).

Conclusion

Overall, the cost of applying unnecessarily and unreasonably high decommissioning requirements will translate into higher energy costs for consumers as they will drive up the costs of building and operating renewable energy facilities over their lifetimes. Given that ORES has already determined a reduction in salvage value and a 15% contingency is appropriate, the benefits of applying stricter provisions are

negligible, and should therefore not be borne by the applicant or in turn the state's energy consumers. This is not the type of requirement which could be accommodated by design change to the Facility, nor is there a particular adverse effect of waiving this requirement on the community, as the Applicant will already be required to provide over $1.99 million in decommissioning financial security to protect the Towns in the event that the Facility owner does not conduct decommissioning and site restoration on its own, a contingency which is itself unlikely. In the very unlikely event that the Applicant does not decommission the Facility and the Towns must carry out decommissioning of the Facility, the Applicant would forfeit its facility equipment and the Towns could use this value to offset decommissioning costs. Furthermore, the security will be reviewed by the Office and will be updated after one year of operation and every fifth year thereafter. There is no basis to impose additional financial burdens on the Project by requiring more financial security, which ORES has already judged to be unnecessary. For the reasons set forth above, the Applicant is seeking a waiver of the Town of Smithfield's and the Town of Eaton's decommissioning security requirements to the extent it disallows salvage value and requires more than a 15% contingency.

J. Decommissioning Removal Requirements (Smithfield and Eaton)

The Town of Smithfield Building and Development Control Law Section 1100-5 I. (3) (b) and Town of Eaton Local Law Amending Chapter 120 of the Town of Eaton Code to Regulate Commercial Wind Energy Facilities Section 120-23.15 I. (3) (b) states that "The WECS shall be deemed abandoned if its operation is ceased for 12 consecutive months." In addition, the Town of Smithfield Building and Development Control Law Section 1100-5 I. (3)(f) and Town of Eaton Local Law Amending Chapter 120 of the Town of Eaton Code to Regulate Commercial Wind Energy Facilities Section 120-23.15 I. (3)(f) requires "Any non-functional or inoperative WECS, or any WECS for which the Permit has been revoked, shall be removed from the site and the site restored in accordance with the approved decommissioning and site restoration plan within 120 days of the date on which the facility becomes non-functional or inoperative, as defined above, and weather permitting, or of the revocation of the permit." Therefore, any turbine that is not in operation for 12 consecutive months must be removed and restored within 120 days.

The Applicant respectfully requests that these local law requirements be waived, to the extent that the local laws do not allow for continued operations with good cause after 12 months and to the extent that turbines must be removed and restored within 120 days, as such requirements are unreasonably burdensome considering the various circumstances that turbines could become inoperative and the time it takes to coordinate and ensure proper and safe removal of an inoperative turbine.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

The Towns' removal requirements are unnecessarily restrictive as they do not account for the various circumstances under which a wind turbine may become inoperative and how long it takes to remove a turbine, many of which include circumstances outside of the Applicant's control.

12-Month Timeline

There may be various valid reasons a turbine remains inoperable after 12 months, and the Applicant should be provided an opportunity to explain any delays and not be forced to remove a turbine that the Applicant intends to keep operational. For example, the New York State Independent System Operator or interconnecting utility could require the Applicant to suspend Facility operation for any given period to address any technical problems or for upgrades elsewhere in the electric system. Another similar example could include government-imposed curtailment regimes which could result in non-operation to address impacts to endangered species. A technical system wide failure, individual component failure, or severe weather event such as a lightning strike, could also render a turbine or turbine(s) within the Facility inoperable, and the necessary repairs and/or replacements could be delayed for a variety of reasons. These include, but are not limited to, delays in replacement component deliveries as a result of supply chain imbalances like cost inflation in components and logistics, shortages of materials, shipping delays, manufacturing delays and other related procurement issues. These types of delays have been exacerbated by recent shifts in freight and raw material costs. Repairing a wind turbine involves a complex logistical chain, from sourcing parts to coordinating skilled technicians. Efficiently managing the scheduling of personnel, equipment (e.g., cranes), and transportation can lead to delays, especially when dealing with unforeseen issues that can cascade down the repair timeline. The Applicant could also have a turbine or turbines shut down for a given period of time to attempt to address a complaint or resolve impacts or disputes with a neighboring landowner regarding television service interference, noise or other problems, which may take time to resolve before operation of the turbine or turbines can be resumed. Given the various factors that could impact turbine operation, the Applicant requests that the 12-month timeline include the ability for the Applicant to extend that timeframe for good cause.

Removal and Restoration

The Towns' law requires removal and restoration to be completed within 120 days. This period is unreasonably brief and may be infeasible or impossible to achieve, particularly depending upon the seasonal timing of decommissioning and site restoration activities. Although the local law states the deadline is "weather permitting" it is unclear exactly what is meant by this qualification and if it allows for decommissioning and site restoration activities to occur during the appropriate growing season. Moreover, 120 days is unreasonably short as it can take up to 18 months to decommission and restore a wind facility of this size.

As noted in Exhibit 23 and Appendix 23-A to this Application, the major portions of the decommissioning process are anticipated to take approximately up to 18 months, but this does not include the pre-decommissioning planning and logistical time frame and assumes there are no logistical challenges

impacting the 18-month timeline. As outlined in Exhibit 23 and Appendix 23-A the Applicant will carefully coordinate decommissioning activities to ensure proper environmental protections are in place (i.e. SWPPP/SPDES coverage), ensure appropriate weather conditions for removal and restoration (i.e., appropriate growing season for restoration), coordinate with transportation companies and salvage yards to ensure components can be safely transported and disposed of, coordinating with specialized contractors for decommissioning activities (i.e., crane operators), and coordinating with landowners to ensure work can proceed safely on their property. All this work must occur prior to full decommissioning activities commencing and can take several months in and of themselves to coordinate and complete.

2) Burden Should Not Reasonably be Borne by the Applicant

This request should not be borne by the Applicant or consumers who demand renewable energy. As demonstrated above, this request could unreasonably require the site to be decommissioned through no fault of the Applicants, and when the Facility could remain in operation. In addition, the timelines in the local law are unreasonably short and the Facility cannot be decommissioned and restored in 120 days. Such a requirement would be an impossible requirement to meet.

3) Request Cannot Reasonably be Obviated by Design Changes

The request cannot be obviated by design changes as the project design is not dependent on decommissioning costs.

4) Request is the Minimum Necessary

The request is the minimum necessary as the Applicant is requesting to follow the decommissioning requirements set forth in 94-c and there is no basis to require more than what the regulations set forth.

5) Adverse Impacts of Waiver Have Been Mitigated

The adverse impacts of granting the request are mitigated to the maximum extent practicable as the request would only extend the abandonment timeline for good cause, and the Applicant will follow the decommissioning requirements set forth in 94-c.

Conclusion

As demonstrated above the timeline requirements are unreasonably burdensome considering the various circumstances that turbines could become inoperative and the time it takes to coordinate and ensure proper and safe removal of an inoperative turbine. For these reasons and as further explained above the Towns' requirement should be waived.

K. Made in America (Smithfield and Eaton)

Request

The Town of Smithfield Building and Development Control Law Section 1100-1(S) and Town of Eaton Local Law Amending Chapter 120 of the Town of Eaton Code to Regulate Commercial Wind Energy Facilities Section 120-23.15(S) requires "all WECS shall be required to utilize components and materials made and manufactured in the United States of America." Although this local requirement does not specify that 100% of the components and materials must be made and manufactured in America, as

outlined below, such a requirement would be unreasonably burdensome in view of the CLCPA targets and environmental benefits of the proposed Facility, is technically infeasible, and would undoubtedly increase costs to the state's energy consumers. In addition, there are no turbines available in the United States that would be considered 100% Made in America. It would be extremely difficult if not impossible to procure and construct a turbine entirely made in America. All turbines, even those that have manufacturing facilities located in the United States, rely on global supply chains and depend upon certain components of wind turbines to be manufactured in countries outside of North America. Requiring the renewable energy facility to utilize parts made in America, without limitation, would be extremely burdensome on the Applicant. Therefore, the Applicant respectfully requests that this local law requirement be waived.

Analysis

Section 94-c requires that for each request that the Applicant show (1) the degree of burden caused by the requirement, (2) why the burden should not reasonably be borne by the applicant, (3) that the request cannot reasonably be obviated by design changes to the facility, (4) that the request is the minimum necessary, and (5) that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth 94-c.

1) Degree of Burden

The Towns of Smithfield and Eaton local laws require that turbines be made in America. There is no definition of what components *must* be made in America, and it is therefore assumed that all components of the wind turbine, including but not limited to the turbine tower, turbine foundation, nacelle, hub, rotor blades, transformer, power and braking systems, and all electrical equipment, must utilize parts made in America.

In 2022, NYSERDA conducted a preliminary assessment as to whether requiring U.S. structural iron and steel at renewable energy projects would be in the public interest. Public Service Law (PSL) § 66-r (the New York "Buy-American" law) requires that certain iron and steel used in certain state-supported renewable energy facilities be sourced domestically unless the head of the applicable state entity concludes that the requirement is not in the public interest for a particular procurement.[20] This initial NYSERDA study considered the implications of requiring turbine towers and foundations to be "made in America" and found that imposing this requirement would be expected to lead to incremental capital expenditure costs ranging from $55,000/MW to $221,000/MW for onshore wind. These incremental costs would ultimately be borne by the ratepayers of the State of New York. These costs also did not include the risk that proposers would be expected to add into their bids given the uncertainty of future pricing in a limited market or how developers would amortize these costs over the life of the project. Notably, NYSERDA's initial study showed significant price volatility in both the U.S. and global steel markets, highlighting great uncertainty regarding future steel prices and the ultimate impact of mandating the use of domestic steel. The costs associated

[20] ORECRFP22-1 Preliminary Determination Memorandum Public Service Law (PSL) § 66-r (the New York "Buy-American" law); NYSERDA Buy American Supplemental Study Onshore Wind, and Utility-Solar Component Analysis, September 2022, available at https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/Clean-Energy-Standard/NYSERDA-Buy-American-Supplemental-Study-Onshore-Wind-UtilityScale-Solar.pdf

with this additional capital expenditure and risk premium would be passed on to New York State ratepayers through higher REC prices. The study further found that due to limited manufacturing and increased demand, cutting off access to global markets would potentially jeopardize the viability of future renewable energy projects in New York, and potentially New York's nation leading CLCPA clean energy targets.[21]

Nevertheless, NYSERDA proposed the establishment of a minimum dollar requirement related to the use of U.S. iron and steel in the construction of renewable energy systems selling RECs to NYSERDA. For RESRFP22-1 this amounted to $54,000/MWac nameplate capacity for onshore wind. In addition, NYSERDA requires that developers use commercially reasonable efforts to (a) source and procure components, materials, equipment, spare parts and other items necessary to construct the Facility from manufacturing facilities located in New York State, and (b) utilize materials and equipment that uses iron and steel produced by steel mills within the United States.

The Applicant agrees that the NYSERDA requirements are reasonable and that following the NYSERDA requirements would be feasible for the Facility, unlike the Town's requirement that all components of the wind turbine including but not limited to the turbine tower, turbine foundation, nacelle, hub, rotor blades, transformer, power and braking systems, and all electrical equipment, must utilize parts made in America.

2) <u>Burden Should Not Reasonably be Borne by the Applicant</u>

As outlined above, requiring renewable energy facilities to utilize parts made in America, without limitation, would be extremely burdensome on the Applicant, state energy consumers and the State's CLCPA goals. The wind turbine industry relies on a global supply chain for components such as wind turbine blades, generators, and control systems. While some components may be manufactured in the United States, many of these components are specialized and require advanced manufacturing that is only available outside of the United States. As of 2022, only one of the top 10 wind turbine manufacturers in the world was headquartered in the United States, while the other nine are located throughout Europe and China. Although, some of these manufacturers also have manufacturing facilities in the United States, such as Vestas. Even GE, which is headquartered in Boston, relies on parts manufactured in other countries, and the choice of tower manufacturer is a manufacturer decision, not a decision made by the developer. It would be extremely difficult if not impossible to procure and construct a turbine entirely made in America. Moreover, the decision on where to precure parts is not a decision made by the Applicant but will be made by the turbine manufacturer. The Applicant cannot control the manufacturing process and must rely on the turbine manufacturers for supply chain decisions.

3) <u>Request Cannot be Obviated by Design Changes</u>

The request cannot be obviated by design changes as the project design is not dependent on where turbine components are manufactured.

[21] Appendix 3. RESRFI22-1 Preliminary Determination Memorandum Public Service Law (PSL) § 66-r (the New York "Buy-American" law)

4) Request is the Minimum Necessary

The Applicant agrees to follow any NYSERDA requirements related to utilizing materials and equipment manufactured in the United States, and the Applicant agrees to use commercially reasonable efforts to source and procure components, materials, equipment, spare parts and other items necessary to construct the Facility from manufacturing facilities located within the United States.

5) Adverse Impacts of Waiver Have Been Mitigated

There are no adverse environmental impacts associated with the Town's requirement or the Applicant's request for a waiver which could be mitigated, as the location of where Facility components are manufactured does not have a direct impact on environmental impacts associated with the Facility. Nevertheless, given that the Applicant agrees to follow any NYSERDA requirements related to utilizing materials and equipment manufactured in the United States, and the Applicant agrees to use commercially reasonable efforts to source and procure components, materials, equipment, spare parts and other items necessary to construct the Facility from manufacturing facilities located within the United States, the Applicant has mitigated the impacts of the waiver request.

Conclusion

The Towns' requirement that components of the wind turbine including but not limited to the turbine tower, turbine foundation, nacelle, hub, rotor blades, transformer, power and braking systems, and all electrical equipment, must utilize parts made in America is unreasonably burdensome and would threaten the Facility and the State's CLCPA goals. As NYSERDA found, due to limited manufacturing and increased demand, cutting off access to global markets would potentially jeopardize the viability of renewable energy projects in New York like the Facility, and potentially New York's nation leading CLCPA clean energy targets. For these reasons and as further explained above the Towns' requirement should be waived.