ORDER NO. 89622

Conditions Approved in 2017 * OF MARYLAND *	SSION
* Case No. 9629	

Issue Date: August 20, 2020

ORDER APPROVING TURBINE SELECTION

I. <u>Procedural History</u>

1. On May 11, 2017, pursuant to the provisions of the Maryland Offshore Wind Energy Act of 2013, the Commission issued Order No. 88192, which authorized the issuance of offshore wind renewable energy credits ("ORECs") for two offshore wind projects—the 248 MW U.S. Wind, Inc. project and the 120 MW Skipjack Offshore Energy, LLC ("Skipjack") project that is the subject of the present proceeding ("the Project").¹ In its November 30, 2016 Application for ORECs, Skipjack stated that it had selected the Siemens 8 MW offshore wind turbine for developing its Project's design basis.² However, Skipjack noted that its selection of a wind turbine was subject to

¹ Case No. 9431, In the Matter of the Application of U.S. Wind, Inc. and Skipjack Offshore Energy, LLC for a Proposed Offshore Wind Project(s) Pursuant to the Maryland Offshore Wind. Energy Act of 2013, Order No. 88192. On November 18, 2019, the Commission granted Skipjack's Motion to Bifurcate Case No. 9431 and established separate dockets for the Skipjack and U.S. Wind projects. Those new dockets are Case No. 9628, U.S. Wind, Inc.'s Qualified Offshore Wind Project's Compliance with Conditions Approved in 2017; and Case No. 9629, Skipjack Offshore Energy, LLC's Qualified Offshore Wind Project's Compliance with Conditions Approved in 2017.

² Likewise, in its application, U.S. Wind listed the 4 MW Siemens SWT 130 turbine as the turbine technology that the company had "preliminarily chosen" for its offshore wind project. Case No. 9431, U.S. Wind November 30, 2016 Application for Offshore Wind Project at 8, Mail Log No. 205809.

change due to continuing improvements in turbine design. By letter dated June 4, 2019,³ Skipjack notified the Commission through confidential correspondence that it had chosen the General Electric ("GE") Haliade-X 12 MW turbine ("Haliade-X") as its final selection for the Project.⁴ Skipjack filed with the Commission public correspondence noting the turbine selection shortly thereafter.⁵

2. On October 25, 2019, the Commission issued a Notice of Opportunity to Comment regarding the applicants' selection of larger wind turbines. Skipjack responded that its selection of the state-of-the-art Haliade-X turbine provides for "both increased output and efficiency," is consistent with the company's commitment to "incorporate advanced commercially available technology," and will "maintain the project's positive viewshed attributes" vis-à-vis the 8 MW turbine. Skipjack further stated that the "use of the 12 MW turbine does not change the annual OREC production cap of 455,482 MWh/year established in the Commission's May 11, 2017 Order."⁶

3. Comments were filed by the Town of Ocean City, Maryland ("Ocean City"), the Business Network for Offshore Wind (the "Business Network"), the Maryland Office of People's Counsel ("OPC"), the Commission's Technical Staff ("Staff"), Skipjack, and U.S. Wind.⁷ On December 13, 2019, the Commission issued Order No. 89395, which

³ Although dated June 4, 2019, Skipjack's letter was not filed with the Commission until July 17, 2019. Hr'g. Tr. at 272-73.

⁴ Maillog No. 226110. Similarly, U.S. Wind notified the Commission on October 1, 2019 that the 4 MW Siemens turbine is no longer commercially available and that the company is evaluating alternatives with higher megawatt ratings, ranging from 8 to 12 MW, including the 12 MW General Electric Haliade-X. Mail Log 226999.

⁵ See Skipjack's September 19, 2019 letter (Maillog No. 226897) and September 24 letter (Maillog No. 226953) at Exhibit A, referring to previously confidential June 4, 2019 correspondence.

⁶ Skipjack Nov. 15, 2019 Comments in Case No. 9431, Maillog No. 227517 at 2, 4, 6-7.

⁷ Party Comments can be found in the docket in Case No. 9431. Public comments were also filed by private citizens, legislators, labor organizations, and businesses. Those comments can be found by accessing the link below and searching for comments related to Case No. 9431: https://webapp.psc.state.md.us/newintranet/Comment/searchFrmuser.cfm.

found that the proposed changes in turbine models and size by U.S. Wind and Skipjack constituted material changes to both companies' qualified offshore wind projects for purposes of Code of Maryland Regulations ("COMAR") 20.61.06.18B7,⁸ such that further proceedings were required to consider the impacts.⁹ The order limited the proceeding to potential impacts related to a change in turbine size, and expressly excluded issues such as whether to grant ORECs.¹⁰ The order also set January 18, 2020 as a date for a public comment hearing regarding turbine selection. That hearing was held in Ocean City, Maryland, where members of the public as well as government officials and parties had an opportunity to testify.¹¹ Order No. 89395 also afforded members of the public the opportunity to submit written comments.¹²

4. Following the public comment hearing, Ocean City filed a request that the Commission hold evidentiary hearings to address the change in turbine size for the Skipjack and U.S. Wind projects.¹³ On February 13, 2020, in Order No. 89500, the Commission determined that an evidentiary hearing related to the change in turbine size selected for Skipjack's offshore wind project was necessary.¹⁴ Order No. 89500 specified

⁸ COMAR 20.61.06.18B requires that an offshore wind applicant report to the Commission within 30 days "[a]ny material change to the qualified offshore wind project," including any change to the turbine model, the capacity of the project, the design of the foundation or support structure, or the project's commercial operation date.

⁹ Order No. 89395 at 5-6. This order was entered in both Case No. 9628 (U.S. Wind) and Case No. 9629 (Skipjack).

¹⁰ Order 89395 also denied Ocean City's request to reopen the underlying proceeding in Case No. 9431 and to reconsider and revise Order No. 88192. Order No. 89395 at 7.

¹¹ The Commission's December 27, 2019 Notice specified that the location of the public comment hearing would be Ocean City's Roland E. Powell Convention Center.

¹² The Commission received several hundred written comments from members of the public, including property owners, elected officials, municipalities, government agencies, environmental and non-profit organizations, business interests, academic organizations, trade associations and labor unions. ¹³ Maillog No. 228413.

¹⁴ Order No. 89500 specified that the evidentiary hearing would be limited to Skipjack's final selection of the Haliade-X in Case No. 9629, and would not address U.S. Wind's turbine selection in Case No. 9628, which still awaits U.S. Wind's final turbine selection.

that the hearing's scope would be limited to potential impacts related to the change in turbine selection. On March 12, 2020, the Commission issued a procedural schedule providing for the filing of direct and rebuttal testimony and evidentiary hearing dates. On April 17, 2020, Skipjack filed the direct testimony of Jens Hieronymus Gravgaard and Gordon W. Perkins. Ocean City filed the direct testimony of Robert G. Sullivan, Dr. Laura O. Taylor, and Richard W. Meehan, the Mayor of the Town of Ocean City.¹⁵ The Maryland Energy Administration ("MEA") filed the direct testimony of Samuel Beirne and Staff filed the direct testimony of Christopher Lo. On May 22, 2020, rebuttal testimony was filed by Ocean City witness Robert G. Sullivan, MEA witness Samuel Beirne, OPC witness Maximilian Chang,¹⁶ and Skipjack witnesses Jens Hieronymus Gravgaard, Gordon W. Perkins, Dr. Corey Lang, Brady Walker, and Joy Weber. Evidentiary hearings to address the impacts of Skipjack's proposed turbine selection were held on June 4 and 5, 2020.¹⁷ The parties filed post-hearing briefs on July 15, 2020.

II. <u>Party Positions</u>

A. Ocean City

5. Ocean City asserts that Skipjack's selection of the Haliade-X fails to minimize viewshed impacts, as required by past Commission orders. Specifically, Ocean City

¹⁵ Because Dr. Taylor was not able to attend the hearing, her direct testimony was not marked as an exhibit or entered into evidence. Hr'g. Tr. at 380.

¹⁶ The Commission granted Skipjack's May 27, 2020 motion to strike portions of Mr. Chang's prefiled testimony as beyond the scope of the hearing. Hr'g. Tr. at 11.

¹⁷ Due to the Covid-19 pandemic, the evidentiary hearings were held virtually through video conference technology, with the public able to watch the hearings live or subsequently through recording via the Commission's YouTube channel, available at <u>https://www.youtube.com/c/MarylandPSC</u>. As with any Commission evidentiary hearing, witnesses testified under oath and subject to cross examination, with the proceeding transcribed by a court reporter. Additionally, to address the issue that physical exhibits depicting the size and appearance of wind turbines may appear differently on a computer screen than in person, the Commission ordered a process for parties to share physical exhibits and visual aids with other parties and the Commission. See Order No. 89561 at 3.

observes that Order No. 88192 requires that Skipjack use "best commercially-reasonable efforts to minimize the daytime and nighttime viewshed impacts" of its offshore wind project, and that the 12 MW turbines, which at their tip, are 212 feet taller than the 8 MW turbines originally planned, fail to meet that standard.¹⁸ Ocean City argues that the 12 MW turbines will impose a negative visual impact because they are three times taller than the highest building in Ocean City,¹⁹ and because they have "wider components, the blade is thicker, [and] the tower is bigger..." than the 8 MW turbine.²⁰ Ocean City notes that since the 12 MW turbines exceed 700 feet in height, they will require aerial hazard navigation lights, which is not the case for the 8 MW turbine.²¹ Ocean City further notes that the 12 MW turbines will require a U.S. Coast Guard marine navigation lighting system, which may be visible from the upper stories of the high-rise buildings in Ocean City.²² Overall, Ocean City claims that the 12 MW turbines will be more visible from shore.²³ Ocean City also questions the efficiency claims of the 12 MW turbine, noting that only one Haliade-X turbine has ever been built and that the turbine has not yet received certification from the International Electric Technical Commission.²⁴

6. Irrespective of what turbine is used, Ocean City claims that Project visibility will negatively affect the town's tourism and economy. Mayor Meehan testified that although

¹⁸ Ocean City Brief at 1, 13, citing Order No. 88192, at 45.

¹⁹ Meehan Direct at 5.

²⁰ Hr'g. Tr. at 370 (Sullivan). Mr. Sullivan also testified that "on many days the Project will be easily visible from many Oceanside locations in Ocean City, particularly from the northern sections of Ocean City, and especially so from the upper floors of buildings in Ocean City;" and that the turbines would "be seen most clearly in the early morning" when the sun is rising. Sullivan Direct at 4-6.

²¹ Ocean City Brief at 14.

²² Hr'g. Tr. at 193-94 (Perkins).

²³ Ocean City Brief at 14-15. *See also* Sullivan Rebuttal at 16 ("While some turbines in the 12 MW layout are farther from the shore than the turbines in the 8 MW layout, there is an overlap of the two layouts Since the 12 MW turbines are substantially larger than the 8 MW turbines, in the area of overlap of the two layouts, it is beyond question that the 12 MW turbines will be more noticeable from shore."

²⁴ Ocean City Brief at 14, citing Hr'g. Tr. at 39, 45.

the town supports renewable energy, "if the wind turbines are built within Ocean City's viewshed, this will have a significantly damaging effect on Ocean City's tourism and economy."²⁵ In particular, Mayor Meehan testified that Ocean City's iconic ocean view of the sunrise could be marred and negatively impact the experience of the 8 million tourists who visit Ocean City annually.²⁶ Mayor Meehan further argued that Skipjack's selection of the 12 MW turbines could have a negative effect on property value, because property is purchased in Ocean City for the view of the beach.²⁷

7. Ocean City contends that Skipjack should be required to consider other locations and layouts to minimize viewshed impacts and it criticizes Skipjack for failing to explore these possible configurations or discuss them with stakeholders.²⁸ For example, Ocean City asserts that the Skipjack Project could be modified from a two-row configuration to a three-row design, which would allow the entire Project to be shifted east by an additional two miles, reducing its visibility.²⁹ Ocean City also criticizes Skipjack for failing to consider a turbine layout that would be parallel to the shore.³⁰

8. In order to mitigate potential harms to tourism and property values, Ocean City urges the Commission to require Skipjack to move the turbines at least 33 miles from the town, noting that the South Fork Wind Farm in development in Long Island will consist of 15 turbines located 35 miles from Montauk Point, which will be out of sight from

²⁵ Meehan Direct at 5.

²⁶ See Hr'g. Tr. at 340-41 (Meehan), stating "you would be absolutely amazed at the thousands of people that are on the beach or on the balcony watching that sunrise over the Atlantic in the state of Maryland.

²⁷ Meehan Direct at 6.

 $^{^{28}}$ Ocean City Brief at 9, 13.

²⁹ See Hr'g. Tr. at 65-66 (Gravgaard).

³⁰ Ocean City Brief at 13; Hr'g. Tr. at 58 (Gravgaard).

Long Island beaches.³¹ In the alternative, Ocean City argues that the Commission should require the Skipjack turbines to be located in the part of the lease area that is the farthest from Ocean City's shore. Ocean City asserts that "the layout of the Skipjack project should be adjusted to minimize viewshed impact, even if that means a few of the turbines are expanded into the larger Ørsted lease area" and even if that requires amendment of Skipjack's Commercial Operation Plan ("COP") on file with the Department of Interior Bureau of Ocean Energy Management ("BOEM").³²

9. Ocean City criticizes Skipjack for failing to present to the Commission a final proposed turbine layout, noting that Skipjack has not confirmed whether the Project will be a 10- or 12-turbine layout or whether the closest turbine will be 21.5 or 22.7 miles from Ocean City. ³³ Ocean City also argues that Skipjack's simulations of the Haliade-X and the Project layout are misleading and unreliable.³⁴ First, Ocean City argues that photographs are "just a snapshot in time" and lack the contrast and sharpness that the facilities show when viewed in the field.³⁵ Additionally, Ocean City's witness Sullivan opined that the moving turbine blades would attract more visual attention than still photographs.³⁶ He likewise characterized the nighttime simulations as inaccurate because they depict the lights in a static "on" position rather than showing the blinking of the red lights. Mr. Sullivan criticized the simulations as "scientifically unsound" because

³¹ Ocean City Brief at 4, 7. Mayor Meehan testified that in order for the 12 MW turbines to be "beyond the visible horizon from any Ocean City residence," they must be located at least 33.2 statute miles from shore. Meehan Direct at 8.

³² Ocean City Brief at 7-8. Skipjack submitted its COP to BOEM in April 2019 and it is currently undergoing a sufficiency and completeness review. Gravgaard Direct at 10.

³³ Ocean City Brief at 21.

 $^{^{34}}$ *Id.* at 22-23.

³⁵ *Id.* at 23.

³⁶ Sullivan Rebuttal at 2.

distracting foreground elements such as people and boats were added to the pictures.³⁷ He also noted that no visual simulations were provided of the turbines at dawn, when they would be most visible, to show the effects on Ocean City's iconic sunrise.³⁸ Finally, Mr. Sullivan criticized the simulations for failing to reflect that the beach and conditions may change from season to season.

10. Mr. Sullivan stated that "by itself the Skipjack Project would not cause significant visual impacts to Ocean City…"³⁹ To the contrary, he indicated that "the 12 MW Project would be relatively less visible, on average, compared to the layout using 15 8 MW turbines as described in [Skipjack's] 2016 OREC application."⁴⁰ Nevertheless, Mr. Sullivan argued that "there is a high likelihood of significant cumulative visual impacts" if multiple offshore wind projects are built.⁴¹

11. If the Commission approves Skipjack's turbine selection, Ocean City urges the Commission to impose additional conditions for this Project. Namely, Ocean City asks that the Commission require that Skipjack not use a turbine larger than 12 MW, even if one becomes available on the market, and that Skipjack be limited to building no more than 12 turbines.⁴² Ocean City further requests that the Commission prohibit Skipjack from locating any turbine less than 33 miles from the closest point on Ocean City's shore.⁴³ In the alternative, Ocean City asks that the Project be built such that the turbines are located in the part of Skipjack's lease area that is the farthest from Ocean City's shore

³⁷ *Id*, at 5.

³⁸ *Id*, at 3; Hr'g. Tr. at 366-67 (Sullivan).

³⁹ Sullivan Direct at 14-15.

⁴⁰ Perkins Rebuttal at Ex. GWP-9 (Ocean City response to Skipjack DR 2-10).

⁴¹ Sullivan Direct at 15.

⁴² Ocean City Brief at 28-30.

 $^{^{43}}$ *Id*, at 40.

using a layout that minimizes viewshed impacts to Ocean City. At a minimum, Ocean City asks that the Project be bound by the location constraints that are consistent with what Skipjack has submitted to the Commission and to BOEM through Skipjack's COP. Ocean City also asks that Skipjack use aircraft detection lighting systems, if the technology is approved and available.

Finally, Ocean City claims that Skipjack failed to communicate with it about the 12. 12 MW turbines, their location, or their layout, in contravention of the outreach requirements of Order No. 88192.⁴⁴ Mayor Meehan testified that Skipjack did not provide routine outreach to Ocean City representatives or stakeholders for the past several years. He stated that after Skipjack attended a meeting that Ocean City had requested on July 15, 2019, "we had no interaction with Skipjack or any conversation or any dialogue with them until the public hearing that was held in January of 2020."45 Mayor Meehan testified that the January 18, 2020 public meeting was the first time Ocean City saw a rendering of Skipjack's current proposed Project, despite having asked for a depiction of the layout earlier.⁴⁶ Mayor Meehan further stated that Skipjack did not provide Ocean City with any information about the 12 MW turbines until the July 15, 2019 meeting, when Skipjack indicated that it was "considering" the larger turbine.⁴⁷ Nevertheless, Ocean City argues that Skipjack had already decided to use the Haliade-X at the time of that meeting, as evidenced by Skipjack's June 4, 2019 letter to the Commission informing the Commission of its selection.⁴⁸

⁴⁴ Ocean City Brief at 30.

⁴⁵ Hr'g. Tr. at 335 (Meehan).

⁴⁶ Meehan Direct at 4.

⁴⁷ *Id*, at 4.

⁴⁸ Ocean City Brief at 32, 33.

B. Skipjack

13. Skipjack contends that because the Haliade-X is a more technologically advanced and efficient turbine, it will enable Skipjack to more reliably deliver the renewable energy required by the Commission in Order No. 88192 and by the General Assembly through increasing Renewable Portfolio Standard ("RPS") goals.⁴⁹ In particular, Skipjack asserts that the Haliade-X is technologically superior to the 8 MW turbine used as the design basis proxy in its 2016 Application because (i) it will produce more power in medium-wind speeds that are frequent in the Delaware Wind Energy Area;⁵⁰ (ii) it will provide more clean energy to the grid; and (3) it will increase the Project's capacity factor.⁵¹ Skipjack also states that because the New Jersey Board of Public Utilities recently approved Skipjack's selection of the Haliade-X for use in its Ocean Wind Project, the use of the same model of turbine in the Maryland Project will "improve[] the operational effectiveness and efficiencies for these projects and for future projects."⁵² Skipjack contends that its selection of the Haliade-X is consistent with its representations to the Commission throughout the 2017 proceedings that it would incorporate advanced commercially available technology into the Skipjack Project.⁵³

14. Skipjack also argues that the 12 MW turbine will improve the viewshed attributes of the Project vis-à-vis the 8 MW turbine. First, Skipjack states that use of the Haliade-X will reduce the number of turbines necessary to produce the ORECs approved by Order

⁴⁹ Skipjack Brief at 1.

⁵⁰ The Delaware Wind Energy Area is the specific area of federal waters leased to Skipjack by BOEM. Skipjack's lease area has been designated by BOEM as area OCS-A 0519. Gravgaard Rebuttal at 2.

⁵¹ Skipjack Brief at 2.

⁵² Gravgaard Direct at 4.

⁵³ Skipjack Brief at 14.

No. 88192 from fifteen turbines to no more than twelve.⁵⁴ Second, use of the 12 MW turbine will enable the Project to be located, at its closest, approximately 21.5 to 22.7 miles from the Maryland coast, rather than 19.5 miles projected with use of the 8 MW turbine layout.⁵⁵ Third, Skipjack argues that fewer turbines will allow the Project to take up less of the visible horizon as compared to the original layout of the Project.

15. Although Skipjack concedes that the 12 MW turbines will be visible from Ocean City, it asserts that the 8 MW turbines would also have been visible and that the change in turbine selection may result in reduced visual impacts overall. Skipjack emphasizes that Mr. Perkins and Mr. Sullivan, the expert witnesses in visual analysis for Skipjack and Ocean City, respectively, as well as MEA witness Mr. Beirne, all concluded that selection of the 12 MW turbine, coupled with the corresponding layout design changes in the Project, will result in an overall reduction of the Project's visible impacts.⁵⁶ Skipjack argues that Ocean City's position that the Project be undetectable from the shore would force Skipjack "to construct an entirely different offshore wind project than the one it has been diligently developing in reliance on the 2017 OREC Order."⁵⁷ Skipjack further contends that Ocean City's advocacy of Project invisibility is inconsistent with the Maryland Offshore Wind Energy Act, Order No. 88192, and BOEM's selection of the federal lease area in which Skipjack must construct its Project. Skipjack concludes: "It is not possible to move the Skipjack Project 33.2 statute miles from the Maryland shore …

⁵⁴ Gravgaard Rebuttal at 6. During the hearing, Mr. Gravgaard committed Skipjack to using no more than twelve turbines for this Project. Hr'g. Tr. at 54 (Gravgaard). Similarly, Mr. Gravgaard committed to not using any turbine larger than 12 MW for this Project. Hr'g. Tr. at 47-48 (Gravgaard).

⁵⁵ Gravgaard Rebuttal at 6:18-20; Perkins Direct at 8-9.

⁵⁶ Skipjack Brief at 11-12, citing Perkins Rebuttal at 6; Hr'g. Tr. 369-70 (Sullivan); Sullivan Direct at 15; and Beirne Direct at 4.

⁵⁷ Skipjack Brief at 5.

and still comply with Maryland law and the restrictions of the federal offshore lease area."'58

Skipjack claims that it conducted outreach to Ocean City as well as other coastal 16. community stakeholders, as required by Order No. 88192.⁵⁹ Skipjack states that it employs a full-time stakeholder and community coordinator who has reached out to coastal community businesses, residents, and elected officials, "notwithstanding Ocean City's consistent opposition to the Project," including its support of a bill that would have required offshore wind turbines to be located at least 26 miles from shore.⁶⁰ Skipjack states that it met with Mayor Meehan on July 15, 2019, two days before Skipjack notified the Commission in a confidential filing that Skipjack was pursuing the 12 MW Turbine, and two months before the selection was made public. Skipjack concludes that its final decision to select the 12 MW turbine was not made until after it met with Mayor Meehan.⁶¹ Although it suspended direct communication during the present regulatory proceeding, Skipjack states that it "will resume its routine direct outreach with Ocean City's elected officials" as soon as this proceeding concludes.⁶²

C. MEA

MEA advocates for approval of the Haliade-X turbine, stating: "The selection of 17. the GE Haliade X 12 MW turbine results in a more efficient offshore wind project consistent with current industry trends."63 MEA contends that fewer turbines located

⁵⁸ *Id*, at 22. ⁵⁹ *Id*, at 25.

⁶⁰ *Id*, at 26.

⁶¹ Skipjack states that its letter of notification to the Commission, which was dated June 4, 2019, was not actually finalized and filed until July 17, 2019. Hr'g. Tr. at 272-73.

⁶² Skipjack Brief at 29.

⁶³ Beirne Direct at 3.

farther from shore will reduce the visual impact of the project in comparison to the original layout that utilized the 8 MW turbine.⁶⁴ However, MEA recommends additional steps to minimize nighttime visual impacts of the larger turbine, using the best commercially available technologies such as utilizing a radar-enabled Aircraft Detection Lighting System ("ADLS"). MEA also cautions against opening further proceedings at this time, arguing that they could cause unneeded delays and expenditure of administrative resources.

D. <u>OPC</u>

18. OPC contends that the more efficient Haliade-X turbine may reduce engineering, procurement, and construction ("EPC") costs for the Project, which may require a sharing of savings with ratepayers pursuant to past Commission orders. Specifically, OPC notes that Commitment 25 in Order No. 88192 requires Skipjack to engage a certified public accountant to conduct an assessment of actual EPC costs, and that Condition 24 requires that Skipjack flow through 80% of any realized savings to Maryland ratepayers.⁶⁵ OPC recommends that the Commission continue to require Skipjack to submit reports on its EPC costs, so that the Commission can implement savings when appropriate pursuant to the 80/20 cost-savings sharing mechanism required by the Commission in Order No. 88192.⁶⁶

⁶⁴ MEA Brief at 2.

⁶⁵ OPC Brief at 2-3.

⁶⁶ OPC observes that additional efficiencies may be available because Skipjack intends to use the Haliade-X in this Project as well as the project recently approved by the New Jersey Board of Public Utilities. *Id.* at 3.

E. Staff

19. Staff contends that the increase in the size of wind turbines for the Skipjack Project is consistent with the Maryland Offshore Wind Energy Act and Order No. 88192 because the turbine selection will reduce the impacts of the Project overall.⁶⁷ Staff argues that use of the Haliade-X will decrease the number of wind turbines needed for the 120 MW Project, which will in turn increase the distance between the Maryland shoreline and the nearest turbine. Overall, Staff contends that the increase in turbine size from 8 MW to 12 MW should not adversely affect viewshed because of the fewer number of turbines and greater distance from shore. Staff further asserts that the Haliade-X may reduce certain environmental impacts related to project construction.⁶⁸ Regarding impacts to the electric system, Staff concludes that the larger turbines do not raise any concerns regarding the reliability and stability of the electric system in Maryland.⁶⁹ Finally, Staff notes that Order No. 88192 contemplated the possibility that Skipjack would change the size and/or model of its turbine technology.

20. Regarding outreach, Staff asserts that Skipjack should increase its efforts to maintain adequate communication with the public and the City Council of Ocean City. In particular, Staff contends that Skipjack should communicate with stakeholders regarding any changes to the offshore wind project and the achievement of any milestones in its licensing and approval, construction, and operation.

⁶⁷ Staff Brief at 7-8.

⁶⁸ *Id.* at 10.

⁶⁹ Lo Direct at 7, referencing PJM System Impact Study.

III. <u>DECISION</u>

21. The Commission finds that Skipjack's selection of the Haliade-X 12 MW turbine is consistent with the Maryland Offshore Wind Energy Act, Order No. 88192, and the public interest. After an evidentiary proceeding and a public hearing, the Commission also finds, pursuant to COMAR 20.61.06.18(B), that no further action is necessary regarding Skipjack's turbine selection.

22. Order No. 88192 includes dozens of conditions whose purpose was to mitigate risk to ratepayers and maximize value to the State of Maryland. Included therein is the requirement that Skipjack utilize "best commercially-reasonable efforts to minimize the daytime and nighttime viewshed impacts" of its Project, "including through reliance on best commercially-available technology at the time of deployment."⁷⁰ When it filed its Application in 2016, Skipjack selected the Siemens Gamesa 8 MW turbine for developing its Project's design basis, as it was the state of the art at the time.⁷¹ Nevertheless, Order No. 88192 contemplated the possibility of larger, more advanced turbines. Given the long lead time to develop an offshore wind project and the ongoing improvements in offshore wind technology, the Commission did not require Skipjack to use a particular turbine, but instead provided Skipjack the flexibility to select a more technologically advanced turbine as the Project neared the construction phase.⁷²

23. Likewise, Skipjack advised the Commission throughout the Case No. 9431 proceeding that it would use the most advanced turbine, rather than the one referenced in

⁷⁰ Order No. 88192 at Appendix A, U.S. Wind Condition 7, and Appendix B, Skipjack Condition 7.

⁷¹ See Gravgaard Direct at 9, stating that three and a half years ago, the 8 MW turbine represented the most advanced turbine technology available to Skipjack when it filed its Application.

⁷² Instead of directing that Skipjack utilize a particular turbine model or size, Order No. 88192 requires "an ongoing dialogue with [] stakeholders regarding any changes to the siting and turbine model selection contemplated in the Applications pending before us." Order 88192 at 31.

its Application for purposes of design basis. Specifically, Skipjack stated that "the latest class of technology is what we want to deploy" and it noted that the turbine model ultimately selected could have a higher output than 8 MW.⁷³ The Commission agrees with Skipjack that utilizing the most advanced technology drives down costs, which, due to the sharing requirements of Order No. 88192, could ultimately benefit ratepayers.⁷⁴

24. Despite Ocean City's criticism that the Haliade-X has not been sufficiently tested,⁷⁵ Skipjack has demonstrated that the turbine will be reliable and that GE will make it available for the Project.⁷⁶ The Haliade-X received Prototype Certification in May 2019 and it was installed at the port of Rotterdam in the Netherlands in September 2019.⁷⁷ Additionally, GE will obtain certification from the International Electrotechnical Commission for the Haliade-X turbine in 2020, and a comprehensive test and verification program is currently underway in the United Kingdom.⁷⁸ Although it has not yet been deployed in New Jersey, on November 19, 2019, the NJBPU approved use of the Haliade-X for Skipjack's 1,100 MW Ocean Wind Project.⁷⁹ Skipjack indicated that there

⁷³ Case No. 9431, Hr'g. Tr. at 1021 (Grybowski). Indeed, Skipjack testified that given the long lead times to build offshore wind projects, and the competitive drive for efficiency, you cannot propose a project to be built years in advance "using yesterday's technology." *Id.* at 1018-1019 (Grybowski).

⁷⁴ Consistent with the requirements of Order No. 88192, Skipjack is required to assess and report to the Commission any EPC cost reductions and implement a mechanism for sharing them with ratepayers pursuant to the 80/20 cost-savings sharing mechanism required by Condition 24. Order No. 88192, Appendix B at 5-6.

⁷⁵ Ocean City Brief at 14, citing Hr'g. Tr. at 39, 45 (Gravgaard).

⁷⁶ Mr. Gravgaard testified that GE has confirmed its ability to provide the 12 MW turbine for the Skipjack Project. Gravgaard Direct at Ex. JHG-2.

 $^{^{77}}$ Id. at 5. As explained by Staff Witness Lo, "this is well in advance of the Skipjack Project's commercial operations date." Lo Direct at 3.

⁷⁸ Gravgaard Direct at 5.

⁷⁹ See NJBPU Docket No. Q018121289, In the Matter of the Board of Public Utilities Offshore Wind Solicitation for 1,100 MW – Evaluation of the Offshore Wind Applications, Order Authorizing Ocean Wind's Turbine Replacement or Update (Nov. 19, 2019).

may be significant economies of scale associated with deploying the 12 MW turbine in both the Maryland and New Jersey projects.⁸⁰

25. The Haliade-X provides several technological improvements over its predecessor. It is more energy efficient and has a higher capacity factor than the 8 MW turbines due to the use of larger turbine blades. Additionally, it will generate maximum energy yield more efficiently, deliver power at lower wind speeds, and have a higher annual energy production.⁸¹ The Haliade-X is also well-suited to the wind conditions in the Mid-Atlantic where low to medium-wind speeds predominate. Moreover, the 12 MW turbine is designed for low service and maintenance in offshore conditions and is expected to have the same high reliability as the 8 MW Turbine. Because of its heightened efficiency and elevated capacity factor, the Haliade-X will provide more clean energy to the grid on a per turbine basis.⁸² The turbine's greater efficiency will assist Maryland in reaching its ambitious renewable energy goals, which have been set by the General Assembly through annually-increasing RPS mandates.⁸³

26. The gravamen of Ocean City's objection to the Project (whether the 8 MW or 12 MW turbine is used) is that the turbines will be visible from the shore and may negatively impact tourism.⁸⁴ The Commission takes Ocean City's concerns seriously. Ocean City is

⁸⁰ Hr'g. Tr. at 93 (Gravgaard); Gravgaard Direct at 4.

⁸¹ Lo Direct at 7-8; Hr'g. Tr. at 40 (Gravgaard).

⁸² Gravgaard Direct Testimony at 3-4.

⁸³ In 2019, the General Assembly substantially increased Maryland's renewable energy goals through the passage of the Clean Energy Jobs Act of 2019, which expanded the requirements for offshore wind energy under Maryland's RPS program and increased the RPS to 50% by 2030. *See* 2019 Md. Laws, Chap. 757. In addition, offshore wind power must reach 400 MW by 2026 and a minimum of 1,200 MW by 2030. *Id.*

⁸⁴ Despite Ocean City's claim that tourism could diminish as a result of a visible offshore wind farm, Skipjack's expert witness, Dr. Lang, testified that "the Skipjack facility will likely have maybe muted positive impacts and certainly no adverse impacts to tourism in Ocean City." Hr'g. Tr. at 326 - 27. See also Lang Rebuttal at 4: "the change from an 8 MW turbine to a 12 MW turbine for the proposed Skipjack offshore wind farm will have little to no negative impact on tourism in Ocean City" and it "may have a positive impact."

an iconic coastal town that attracts over 8 million tourists per year.⁸⁵ And there is no dispute that the 12 MW turbine is larger than the 8 MW turbine it replaces. The record reflects that the turbine's rotor diameter will increase from 590 feet to 721 feet, that the hub height will increase from 374 feet to 492 feet, and that the tip height will increase from 641 feet to 853 feet.⁸⁶ Nevertheless, there are a number of viewshed benefits of using the larger turbine that lower the visual impact from the shore.⁸⁷

27. Skipjack's selection of the Haliade-X will reduce the number of wind turbines needed for the Project from 15 to 12 or fewer turbines.⁸⁸ The reduced number of turbines will facilitate an alternative turbine layout, which Skipjack indicated will likely consist of a grid pattern of two rows of five or six structures perpendicular to the Delaware coast, each oriented in an east-west manner.⁸⁹ The turbines will be spaced approximately one mile apart from each other. This alternative layout minimizes the visual impact of the Project.⁹⁰ While Skipjack witness Perkins testified that both the 8 and the 12 MW turbine scenarios "leave a vast majority of the seascape and horizon intact, the 12 MW Project occupies substantially less of the horizon."⁹¹ In particular, the 12 MW turbine layout will result in the Project taking up 7% of the visible horizon, in contrast to the 8 MW turbine

⁸⁵ Hr'g. Tr. at 340-41 (Meehan).

⁸⁶ Gravgaard Direct Testimony at 10. The tip height differential represents an increase of approximately 33%. Hr'g. Tr. at 38 (Gravgaard).

⁸⁷ See Perkins Direct at 8-12.

⁸⁸ Gravgaard Direct at 7; Hr'g. Tr. at 34-35, 54 (Gravgaard).

⁸⁹ Perkins Direct at 9, Figure 2.

⁹⁰ Hr'g. Tr. at 73-74 (Gravgaard). Regarding Ocean City's criticism of the accuracy of the visual simulations (*see* Ocean City Brief at 22-23), the Commission understands that Skipjack's renderings do not perfectly represent what the Project will look like when actually constructed and that moving turbines may attract attention in a different way than a static photograph. Nevertheless, the Commission finds that the visual simulations were helpful to this proceeding and the public hearings and notes that all parties were afforded an opportunity to present their own renderings of the Project.

⁹¹ Perkins Direct at 13.

configuration, which was anticipated to comprise 18% of the visible horizon.⁹² Mr. Perkins concluded that "in terms of noticeability, I believe that the presence of the 12-megawatt turbines in a cluster will be less noticeable because of its occupation on the horizon. And therefore, I think it presents minimization and reduction of the potential visual impacts associated with the project."⁹³

28. Another visual benefit arising from use of the Haliade-X is that the distance from the Maryland shoreline to the nearest turbine will increase from 19.5 to 21.5 or 22.7 miles.⁹⁴ In more detail, if the 12-turbine configuration is implemented, the closest turbine will be 21.5 miles from the nearest point on Maryland's coastline.⁹⁵ If the 10-turbine configuration is chosen, the distance from the closest turbine will increase to 22.7 miles.⁹⁶ The increased distance will help ameliorate the larger height of the Haliade-X.

29. Several environmental benefits stem from the reduced number of turbines. The 10- or 12-turbine configuration will reduce the number of turbine monopole structure foundations that will be required to construct the Project, mitigating impacts to the sea floor and potentially reducing the amount of seafloor cabling.⁹⁷ Additionally, the use of fewer turbines may result in a reduction in vessel activity related to Project construction, which may lower the risk of collision with other vessels during construction and

 $^{^{92}}$ *Id.* at 13. Mr. Perkins further testified that the Project would take up approximately 4% of the available seascape view with the 12 MW turbines, in contrast to the Project utilizing 8 MW turbines, which would comprise approximately 10% of the available seascape view. *Id.* at 12-13.

 $^{^{93}}$ *Id.* at 237.

⁹⁴ Lo Direct at 3.

⁹⁵ Perkins Direct at 7; Hr'g. Tr. at 34 (Gravgaard). The closest point between the Project and the Maryland shore is the Maryland-Delaware Border, at approximately 146th Street. Perkins Direct at 7; Hr'g. Tr. at 240-41 (Perkins).

⁹⁶ Perkins at 9, Figure 2.

⁹⁷ Beirne Direct at 3; Lo Direct at 5.

operation and maintenance activities.⁹⁸ In contrast, no hearing evidence indicates that the change in turbine selection will create additional adverse impacts to navigational safety, marine life, or the broader environment.

30. The witnesses in this proceeding largely agreed that Skipjack's decision to replace the 8 MW turbine with the 12 MW Haliade-X will not adversely impact Maryland's viewshed, and may even improve it. For example, Mayor Meehan opined that the 8 MW turbine Project would also have had an effect on the pristine views and tourism of Ocean City,⁹⁹ and MEA witness Beirne asserted that use of the 12 MW turbine "could reduce overall project visibility."100 Mr. Perkins testified that "Project visibility will occur regardless of whether a 12 MW or 8 MW turbine is used."¹⁰¹ He stated that irrespective of the turbine used, the turbines will be subordinate to foreground and middle ground landscape features and distractions, especially during the height of the tourism season, when the beaches are crowded and there is an abundance of activity both on the water and the shoreline. He concluded: "With the combined effects of distance, curvature of the earth, atmospheric diminishment, and user activity, the 12 MW turbines are not likely to result in a substantial change in the potential visual impact to onshore viewers/resources from the closest point to the Project in Ocean City as compared to the 8 MW turbines used for the design basis proxy."¹⁰²

⁹⁸ Gravgaard Direct at 7.

⁹⁹ Hr'g. Tr. at 344 (Meehan).

¹⁰⁰ Beirne Direct at 4.

¹⁰¹ Perkins Direct at 11. Mr. Gravgaard also noted that the 8 MW turbine layout would have been constructed within the visible horizon of the Ocean City shore just as the 12 MW turbines will be visible from Ocean City. Gravgaard Rebuttal at 6.

¹⁰² Perkins Direct at 11-12.

31. Ocean City's visual expert, Mr. Sullivan, testified that "by itself the Skipjack Project would not cause significant visual impacts to Ocean City[.]"¹⁰³ Instead, Mr. Sullivan asserted that significant impacts to Ocean City's viewshed could occur through the cumulative impacts of other offshore wind projects coupled with the Skipjack Project.¹⁰⁴ Even with respect to cumulative impacts, however, Mr. Sullivan indicated that Skipjack's use of the 12 MW turbine would improve or at least not exacerbate the visual impacts of the Project. "If Skipjack stuck with the current number of 12-megawatt turbines in the current configuration, I actually think the cumulative effects would be smaller. Because I believe the visual impacts of this project are not increased at all by moving to 12-megawatt turbines if Skipjack keeps them in the current configuration or improves it, which definitely could be done."¹⁰⁵ Indeed, Mr. Sullivan conceded that "the layout using twelve 12 MW turbines as depicted in Figure 2 of Mr. Perkins' direct testimony would be relatively less visible, on average, compared to the layout using 15 8 MW turbines as described in the 2016 OREC application."¹⁰⁶ Mr. Sullivan reached this conclusion based on the "longer average distance to the 12 MW turbines in the revised layout," the reduced number of turbines, and the fact that "the revised layout consisting of two rows of turbines aligned closer to perpendicular to the shore, substantially reduces

¹⁰³ Sullivan Direct at 14-15. Mr. Sullivan indicated that selection of the larger turbine would not materially change the visual impact of the Project. "[I]n informal terms I would say it's a wash-out. Hr'g. Tr. at 372 (Sullivan).

¹⁰⁴ Mr. Sullivan referred to the still-pending U.S. Wind project as well as other potential offshore wind projects that may apply for ORECs pursuant to Maryland law. *See* Hr'g. Tr. at 375-76(Sullivan), stating: "Orsted and other developers may eventually be putting other projects in here."

¹⁰⁵ Hr'g. Tr. at 373-74 (Sullivan). Mr. Sullivan additionally stated: "I do not think that there will be a significant difference in cumulative impacts from the Skipjack project whether it is 8 megawatts or 12." *Id.* at 377

¹⁰⁶ Perkins Rebuttal at Ex. GWP-9 (Ocean City response to Skipjack DR 2-10).

horizontal angle of view of the project, i.e., it would occupy less of the visible horizon."¹⁰⁷

32. Regardless of whether the 8 MW or 12 MW turbine is used, Ocean City has asked that the Commission require Skipjack to locate the Project at least 33 miles from the shore.¹⁰⁸ Ocean City argues that this is feasible because other offshore wind projects, including the South Fork Wind Farm in Long Island, will be sited beyond the range of view of people from the shore.¹⁰⁹ However, several constraints related to the Skipjack Project make Ocean City's request unworkable. First, the Maryland Offshore Wind Energy Act of 2013 requires that offshore wind turbines be placed between 10 and 30 miles off the coast of the State.¹¹⁰ If the Project is located beyond those geographical constraints, it is not eligible for ORECs approved by the Commission. Second, the Skipjack Project must also be located within the specific area of federal waters leased to Skipjack by BOEM.¹¹¹ BOEM determined the location of the Delaware Wind Energy through a multi-year research and review process, Area which included intergovernmental stakeholder input, including state and local governments along the Delmarva coast. BOEM also considered the location of shipping lanes and other existing

¹⁰⁷ Id.

¹⁰⁸ Ocean City Brief at 13, 40. Mayor Meehan explained that the goal of the Mayor and City Council of Ocean City is to "locate the wind turbines in an area where they would not be visible from the shoreline." $Hr^{2}g$. Tr. at 338 (Meehan).

¹⁰⁹ Meehan Direct at 8.

¹¹⁰ See Public Utilities Article ("PUA"), Annotated Code of Maryland § 7-701(p-1). With regard to Ocean City's economic argument that visible wind turbines could hurt tourism, it is important to recognize that in passing the Maryland Offshore Wind Energy Act of 2013, the General Assembly determined that "development of offshore wind energy is important to the economic well-being of the State." PUA § 7-704.1(a)(1)(i)).

¹¹¹ PUA § 7-701(k) requires that the Project be located in a BOEM lease area. Specifically, it states that a "Qualified Offshore Wind Project" must be "located on the outer continental shelf of the Atlantic Ocean in an area that the United States Department of the Interior designates for leasing after coordination and consultation with the State in accordance with § 388(a) of the Energy Policy Act of 2005").

uses of the federally-regulated outer continental shelf.¹¹² That multi-year endeavor should not be easily disregarded by the Commission.

33. Third, Ocean City's request is inconsistent with Order No. 88192 and the scope of the instant proceeding. Order No. 88192 provides that the Maryland Offshore Wind Energy Act of 2013 requires a Qualified Offshore Wind Project "to be located on the outer continental shelf of the Atlantic Ocean, between 10 and 30 miles off the coast of Maryland."¹¹³ That order did not approve ORECs for any offshore wind project more than 30 miles off Maryland's coast, nor could it have. Furthermore, the scope of the present proceeding was limited to potential impacts related to the change in turbine selection, not as Skipjack aptly characterized Ocean City's proposal, consideration of "an entirely different offshore wind project than the one it has been diligently developing in reliance on the 2017 OREC Order."¹¹⁴ Finally, Order No. 88192 at Condition 7 provides that Skipjack must use best commercially-reasonable efforts to minimize visual impacts. Nowhere did the Commission require that the Project be invisible from the shore. For these reasons, the Commission finds that it is not commercially reasonable to require the Project to be moved beyond the visibility of Ocean City's shore.

34. As an alternative to moving the Project 33 miles offshore, Ocean City argues that the Commission should require Skipjack to locate the turbines in the part of the lease area that is the farthest from the shore, "even if that means a few of the turbines are expanded

¹¹² Gravgaard Rebuttal at 3.

¹¹³ Order No. 88192 at 42, citing PUA § 7-701(k)(1). It is evident that the General Assembly never intended to require that offshore wind projects be invisible from the shore given the definition of Qualified Offshore Wind Project as a project between 10 and 30 miles off Maryland's coast.

¹¹⁴ Skipjack Brief at 5.

into the larger Ørsted lease area.¹¹⁵ The Commission declines Ocean City's request. The request would alter the Skipjack Project beyond the original Application in Case No. 9431 and beyond what the Commission approved in Order No. 88192, and it is therefore beyond the scope of this proceeding. Additionally, the request, if granted, would infringe upon the lease area Ørsted has purchased to potentially pursue other projects.

35. Likewise, the Commission declines to mandate that Skipjack delineate a final turbine configuration now, though we are sympathetic to Ocean City's complaint that it is difficult to fully evaluate a Project that is changing.¹¹⁶ The Commission observes that in the BOEM process, the federal permitting agencies will have the opportunity to hear from a broad array of state and local stakeholders in Maryland and Delaware in determining whether to approve the final Project layout.¹¹⁷ If the Commission were to mandate a final layout now, it would deprive BOEM and participating stakeholders from that opportunity. There are also issues that are beyond the jurisdiction of the Commission, such as shipping lanes and offshore environmental matters, which are firmly within the purview of BOEM and other federal agencies.¹¹⁸ The Commission cannot and should not short circuit that review.

36. Ocean City has asked that Skipjack use aircraft detection lighting systems, referred to as radar-enabled Aircraft Detection Lighting System ("ADLS"), if the

¹¹⁵ Ocean City Brief at 7-8.

¹¹⁶ See id. at 20-21, stating: "[Skipjack] has failed to provide the Commission or Ocean City with the specific location of where those turbines will be located, making it difficult to determine the impact of using these massive turbines."

¹¹⁷ See Hr'g. Tr. at 50-51 (Gravgaard), stating that review of the final project layout is "actually what the BOEM and the [NEPA] process, et cetera, are there for \dots so that there can be public debate and discussion about it".

¹¹⁸ In a colloquy with the Commission, Mr. Sullivan agreed that during the NEPA process and BOEM review, the federal agencies will consider the cumulative effect of multiple offshore wind projects, including visual impacts. Hr'g. Tr. at 376-77 (Sullivan).

technology is approved and available.¹¹⁹ The Commission finds that request reasonable. Skipjack's selection of the Haliade-X will require aerial lighting because the turbine exceeds 700 feet in height.¹²⁰ During the hearing, Mr. Gravgaard discussed that motionactivated lighting technology is in development, which would turn the aerial lights on only when aircraft are nearby.¹²¹ Although the technology does not yet have full approval by the relevant federal agencies, Skipjack has offered to install it on the Project if it does become available.¹²² In fact, Skipjack stated that it could install the technology as an "add-on" to the Project even after the Project was completed.¹²³

37. Order No. 88192 recognized "that viewshed impacts are not limited to daytime activities" and therefore conditioned the OREC award "on the requirement that each Applicant use best commercially-reasonable efforts to minimize the nighttime viewshed impacts as well."¹²⁴ The Commission finds that it is reasonable to require Skipjack to install radar-enabled ADLS on the Haliade-X turbines, if the technology is approved and becomes available. That requirement will persist even if the technology does not become available until after the turbines are installed and the Project is otherwise complete.

38. Regarding outreach to stakeholders, the Commission finds Skipjack's efforts were deficient. Order No. 88192 clearly imposes upon Skipjack the duty to work with stakeholders, including state and local officials, to discuss placement of the turbines in a

¹¹⁹ Ocean City Brief at 40.

¹²⁰ Hr'g. Tr. at 370 (Sullivan).

¹²¹ Gravgaard Rebuttal at 5; Hr'g. Tr. at 73 (Gravgaard), stating "there is a product on the market which only activates lighting when aircraft are approaching, and we are in discussions with the authorities about this."

¹²² Hr'g. Tr. at 74 (Gravgaard), stating: "In the U.S. market it doesn't have full approval. If it does become available, we will make it available for this project."

¹²³ See Id. at 103 (Gravgaard): "It's an add-on to the project and I'm certain that you can add that later on as well."

¹²⁴ Order No. 88192 at 46.

manner that minimizes visual impacts. Order 88192 provides: "We therefore have specifically conditioned our award with requirements that the Applicants ... continue to work with Maryland citizens, and local, state, and federal authorities in addressing all applicable environmental, visual, and other impacts of public concern."¹²⁵ Additionally, Condition 11 provides that Skipjack "shall conduct comprehensive and timely outreach with Maryland and Delaware local, state, and federal officials and agencies, particularly involving, but not limited to, the siting of its Qualified Offshore Wind Project."¹²⁶

39. Despite the requirements of Order No. 88192, Skipjack's engagement with Ocean City appears meager. For example, Mayor Meehan testified that Skipjack has not provided routine outreach to Ocean City representatives or stakeholders for the past several years.¹²⁷ He also stated that the hearing was the first time he became aware that it may be possible to move the turbines within the existing lease area to minimize visual impacts.¹²⁸ Ocean City raised the possibility of alternative configurations to Skipjack's two-row proposal, such as a three-row configuration or a layout with turbines arranged parallel to the shore.¹²⁹ Ocean City demonstrated that such an alternative could allow the Project to be shifted east by up to an additional two miles, further reducing its visibility.¹³⁰ However, Skipjack failed to consider these alternatives and, prior to the hearing, it never discussed them with Ocean City. Instead, Skipjack appears to have simply informed Ocean City of its turbine selection and configuration at approximately

¹²⁵ Order No. 88192 at 3.

¹²⁶ Order No. 88192, Appendix B, Condition 11. That Condition also requires periodic reports on the progress of stakeholder discussions.

¹²⁷ Hr'g. Tr. at 335 (Meehan).

¹²⁸ *Id*, at 341-42 (Meehan).

¹²⁹ Ocean City Brief at 12-13; Hr'g. Tr. at 58 (Gravgaard).

¹³⁰ Hr'g. Tr. at 65-66 (Gravgaard). Mr. Gravgaard further testified that the Project "could be moved further out from the shore consistent with the COP... in commercially reasonable way." *Id.* at 68-69.

the same time it provided notice to BOEM and the Commission. To Ocean City, that conduct rightly appears to be a *fait accompli* rather than a discussion among stakeholders. Skipjack's defense, that Ocean City presented "consistent opposition to the Project," is unavailing.¹³¹ Skipjack's duty to reach out to stakeholders was not contingent on the stakeholders' enthusiasm for the Project. Ocean City is an important stakeholder whose economy is vital to the State. Nor should Ocean City be punished for its lawful advocacy of a bill that would have required offshore wind turbines to be located at least 26 miles from shore. Skipjack is therefore ordered to reengage with stakeholders, consistent with Condition 11 of Order No. 88192, and to provide a status report to the Commission every six months on the ongoing engagement until ordered to discontinue. The status report should be filed in writing and contain specific information regarding dates and times of meetings, persons met with, topics discussed, and the notice given for stakeholder engagements. In its stakeholder engagements, Skipjack should discuss alternative layouts and turbine configurations that may minimize visual impacts. However, nothing in this Order should be interpreted as a requirement that Skipjack accept any particular turbine configuration. That final determination is left to the BOEM stakeholder process, consistent with the requirements of Order No. 88192 to engage stakeholders and to minimize visual impacts.

IT IS, THEREFORE, this 20th day of August, in the year Two Thousand Twenty,

¹³¹ Skipjack Brief at 26.

ORDERED: (1) That the selection by Skipjack Offshore Energy, LLC of the General Electric Haliade-X 12 MW turbine for its 120 MW offshore wind Project is approved;

(2) That the Commission finds pursuant to COMAR 20.61.06.18(B), that no further action is necessary regarding Skipjack's turbine selection; and

(3) That Skipjack is ordered to reengage with stakeholders, consistent with Condition 11 of Order No. 88192, and to provide a status report to the Commission regarding stakeholder engagement every six months until ordered to discontinue, with the status report to be filed in writing and to contain specific information regarding dates and times of meetings, persons met with, topics discussed, and the notice given for stakeholder engagements.

> /s/ Jason M. Stanek /s/ Michael T. Richard /s/ Anthony J. O'Donnell /s/ Odogwu Obi Linton /s/ Mindy L. Herman Commissioners