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June 10, 2022

**VIA ELECTRONIC MAIL**

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Carmen D. Diaz  
Acting Secretary of the Board  
Board of Public Utilities  
44 South Clinton Avenue, 1<sup>st</sup> Floor  
P.O. Box 350  
Trenton, New Jersey 08625-0350

**RE:** Atlantic City Electric Company Responses to Clarifying Questions Set 1 from the New Jersey Board of Public Utilities staff and The Brattle Group in Docket No. QO20100630

Dear Acting Secretary Diaz:

Atlantic City Electric Company ("ACE") is pleased to provide answers to Clarifying Questions Set 1 from the New Jersey Board of Public Utilities ("BPU" or the "Board") staff ("Staff") and its consultant, The Brattle Group ("Brattle"), in support of the ACE proposals in pursuit of the PJM State Agreement Approach ("SAA") for New Jersey offshore wind ("OSW") transmission in Docket No. QO20100630. Specifically, Staff and Brattle sent Clarifying Questions Set 1 to ACE on May 27, 2022, requesting additional information regarding several of the ACE SAA proposals. ACE respectfully submits the following responses.

**Clarifying Questions Set 1**

New Jersey State Agreement

Approach Docket No. QO20100630

May 27, 2022

Prepared for

Atlantic City Electric Company

On behalf of The New Jersey Board of Public Utilities



**Responses are due by 5:00 pm EST on June 10, 2022**

**Instructions:**

The New Jersey Board of Public Utilities (“Board”) staff (“Staff”), and its consultant The Brattle Group (“Brattle”) have prepared the following questions to clarify your application submitted under the State Agreement Approach (“SAA”), Docket No. QO20100630.

All responses are due by **5:00 pm EST on June 10<sup>th</sup>, 2022.**

Responses must be uploaded to the Board’s e-filing system. See the Board’s [e-filing website](#) for further instructions on e-filing. Please note, the Board’s filing system can support 10 files of 100 MB each for each submittal session. If you need to submit additional files, you may then begin another submission session. If you experience difficulty uploading your documents, you may contact Andrea Hart, contact information below, to make alternative arrangements.

All responses will be made part of the Board’s record and relied upon by the Board, Board Staff and Brattle in the Board’s evaluation, and possible selection, of the SAA projects submitted under this docket.

**Confidentiality of Submitted Materials:**

All materials filed with the Board are public documents and are therefore subject to the good government sunshine laws of the State of New Jersey. However, the Board appreciates the confidential nature of some of the material that must be submitted with an Application and recognizes that New Jersey law allows Applicants to request protection of:

any information ... which in the person's or entity's opinion constitutes trade secrets, energy trade secrets or other energy information submitted pursuant to N.J.S.A. 52:27F-18, proprietary commercial or financial information, or information which if disclosed, would be likely to cause damage to either a competitive or bidding position or national security, may assert a confidentiality claim by following the procedures set forth in this subchapter.

N.J.A.C. 14-1-12.1(b).

To facilitate the review process, the Board will require all Project Sponsors to submit public (redacted) and confidential (unredacted) versions of their responses, per the Board’s Rules of Practice and Procedure governing submission of confidential materials, N.J.A.C. 14-1-12.1, et seq., and the Open Public Records Act, N.J.S.A. 47:1A-1 et seq. (“OPRA”).

Each uploaded file must include “Public” or “Confidential” in the file name. The public versions of all documents must also be searchable PDF files, except where a different file type such as Excel is required.

For the confidential version of the responses, Project Sponsors must include a statement identifying each type of data or materials it asserts are exempt from public disclosure under OPRA and/or the common law, and explaining the basis for the proposed redaction. Assertions that the entire response is exempt from public disclosure under OPRA, the common law, or the U.S. Copyright Act are overbroad and will not be honored by the Board unless appropriate.

The Board notes that it may elect to share confidential portions of the response materials with other New Jersey government entities, including, but not limited to, Rate Counsel and the Economic Development Authority, during the evaluation period or post-award. Board Staff may also share the information to PJM.

Please acknowledge receipt of these instructions.

- Siting/Permitting:

- Identify progress made in securing necessary land, easements, ROW grants, etc. for your project(s) since submittal.

The four ACE 1a proposals (127, 734, 929 and 975) are comprehensive solutions designed to be contained within existing ACE (or affiliated company) property or easement.

- Proposal 929 is within the existing ACE rights-of-way between Cardiff and Orchard Substation for approximately 36 miles. The route may require minimal to no additional rights-of-way. This will be confirmed during the detailed engineering phase. ACE will identify and implement potential engineering solutions that will alleviate the need for new ROW where feasible.
- Proposals 127 and 734 call for the rebuild of the existing Cardiff to New Freedom 230kV line to Double Circuit Tower Line (“DCTL”), which may require minimal to no additional rights-of-way. This will be confirmed during the detailed engineering phase. ACE will identify and implement potential engineering solutions that will alleviate the need for new ROW where feasible. The line is approximately 33 miles long.
- Additional land or rights-of-way are not required to execute proposal 975; it is contained within the existing utility owned property and/or easement.
- Proposal 797, the ACE 1b bid, utilizes existing public rights-of-way, is underground, and minimizes impact to affected communities. The proposed route avoids the need to acquire private property and avoids major urban and residential areas.

ACE has not acquired additional ROW since submitting its proposals. The majority of the ACE proposals are contained within existing ACE (or affiliated company) property or easement. In the event that minimal additional ROW or property is required, ACE expects that it will be able to acquire the ROW.

- Please describe how your proposed solutions will minimize environmental impacts and permitting requirements through the use of common corridors that can accommodate more than one transmission cable, including an estimate of the miles in which facilities/infrastructure will be co-located within a common corridor and miles in which facilities/infrastructure will be located in separate corridors.

The ACE 1a solutions (127, 734, 929 and 975) are designed to be contained within existing ACE owned property or easement. The ACE design maximizes the use of the corridors for all four 1a solutions, including the redesign of Cardiff, the existing Cardiff to New Freedom route and the existing Cardiff to Orchard route. Utilizing existing easements minimizes environmental impacts, mitigates cost overruns and

avoids the burden and challenge of building transmission lines in new corridors. Visual impact is also minimized since new transmission facilities are added in an existing corridor that already contain similar transmission facilities. The ability to use existing corridors also lessens the permitting challenges and helps to mitigate timing risks associated with delays due to acquiring needed land or easements. Additionally, interconnecting to ACE's transmission infrastructure results in the shortest aquatic path and shortest land route from BOEM approved offshore wind lease areas compared to interconnecting further away into northern New Jersey. A shorter project will necessarily have a smaller footprint and therefore impact less land and communities.

- Proposal 929 is within the existing ACE rights-of-way between Cardiff and Orchard Substation for approximately 36 miles. This right-of-way hosts other ACE's transmission infrastructure.
  - Proposals 127 and 734 call for the rebuild of the existing Cardiff to New Freedom 230kV line to DCTL, which may require very minimal to no additional rights-of-way. The line is approximately 33 miles long. This right-of-way will be fully utilized by the proposed double circuit design.
  - There is no need to secure additional land/acquire additional rights-of-way to execute proposal 975. It is fully contained within existing ACE owned property.
  - The ACE 1b proposal (797) utilizes existing public rights-of-way, is underground, and minimizes impact to affected communities. The proposed route avoids the need to acquire private property and avoids major urban and residential areas. The length of this route is approximately 10 miles.
- In the case where facilities/infrastructure are using common corridors, please explain the methods for reducing environmental impacts, including what equipment will be used in common corridors, when each facility will be installed, and how they will be installed, and how the common corridors will mitigate, minimize, or avoid future construction efforts.

ACE has yet to complete a full environmental analysis and comprehensive engineering work, therefore the full extent of how the facilities will be installed is not yet known. However, ACE proposes to utilize existing ACE property and easement that currently contain other ACE infrastructure. Utilizing existing easements minimizes environmental impacts, mitigates cost overruns and avoids the burden and challenge of constructing transmission lines in new corridors.

In general, our construction method may utilize matting techniques that minimize environmental impacts, micro-site tower foundations, adjust the span between towers in certain environmentally sensitive areas and utilize helicopter construction in certain critical areas to minimize environmental impact.

Transmission line 2321, which spans 36 miles between the Cardiff and Orchard substations, was placed into service by ACE in 2019. For this recent construction, which ACE proposal 929 proposes to repeat by adding a second circuit in the same ROW, ACE utilized composite matting, helicopter construction and modified structure locations. These techniques and equipment were utilized to reduce environmental impacts.

Substantial environmental and engineering work is required before we can fully identify what type of equipment will be used, how the facilities will be installed and what techniques will be utilized to minimize or reduce environmental impacts. But the methods, techniques and equipment mentioned above are some of the options which ACE has successfully employed in the past to minimize environmental impact. We see helicopter construction as a critical component to reduce and minimize environmental impact in certain locations. Upon selection, ACE will begin substantial development activities and will update the BPU once more information becomes available.

- Project Schedule:

- Offshore wind developers have identified schedule risk as the primary concern for selecting offshore transmission facilities via the SAA. Please explain how your proposed schedule will ensure offshore wind generation facilities will be able to meet their construction schedule and projected in-service date for each solicitation, and the need for electricity back-feed 12 to 15 months prior to its in-service date.

The potential for delay is an inherent risk that every transmission project faces and eliminating the risk in its entirety is virtually impossible. However, mitigating individual components that impact timing can reduce the overall timing risk. The ACE 1a proposals provide significant risk reduction benefits compared to greenfield solutions. Routing and land acquisition is a significant component that can derail the timing of a project. Permitting and environmental factors can also disrupt the timing of a project. The four ACE 1a bids are comprehensive solutions designed to be contained within existing ACE (or affiliated company) property or easement. Utilizing existing utility property and easements ensures a less challenging permitting and construction process, minimizes environmental impacts, mitigates cost overruns, avoids the challenge of constructing transmission lines through new corridors in environmentally sensitive areas, and ultimately mitigates routing risk. The ACE proposals will likely require a minimum of one year for permit review, and depending on the proposal, some vegetation clearing will be required which may impact the Pinelands, but the ACE proposals avoid some of the significant factors that contribute to timing delays and provide greater assurance that the projects will be completed on time and on budget. Upon selection, ACE will engage the NJDEP to streamline the permitting

process and explore how the NJDEP may assist in the Pinelands review, if required. Additionally, coordination between the transmission developer and offshore wind generation developer is critical to align the timing of both projects. It makes sense that the Board make its SAA solicitations award prior to the next NJ OREC solicitation so that the wind developers know where they need to interconnect. After the SAA award, and after any future OREC award, the wind developer and the transmission developer need to immediately coordinate.

Transmission is a long lead time process, and any OSW generation project scheduling requirements, including back-feed requirements, can likely be incorporated in the transmission developer's schedule, but the earlier they can coordinate the better. ACE has the flexibility to adjust project schedules to match the offshore wind generation schedule, but early coordination and a close working relationship between ACE and the offshore wind developer is required. ACE, as a PJM transmission owner, is accustomed to working with generation developers in the PJM interconnection queue to build the required network upgrades based on the timing requirements of the generator. It is also not uncommon for generators in the PJM interconnect queue to change their required in-service date and ACE has experience working with generation developers to adjust the development timeline for the needed transmission upgrades.

Based on our knowledge and experience, ACE is confident that it can obtain all required approvals and construct the projects in a timely fashion. ACE can also phase in components of the project to meet the timing needs of the offshore wind developers.

- In the absence of a firm schedule commitment, please describe steps taken to ensure schedule coordination with BPU and developer to ensure timely project delivery, OSW generation & energization.

As mentioned above, ACE, as a PJM transmission owner, is accustomed to working with generation developers in the PJM interconnection queue to build the required network upgrades based on the timing requirements of the generator. It is also not uncommon for generators in the PJM interconnect queue to change their required in-service date and ACE has experience working with generation developers to adjust the development timeline for the needed transmission upgrades. Upon selection, ACE will immediately begin to work with the offshore wind developers and the BPU to ensure a timely project delivery.

- If the Board were to increase the capacity procured during future offshore wind solicitations, how can your proposal accommodate that change? In your response, please describe the earliest in-service date possible for each phase of your proposed project(s), the limitations to achieving an earlier in-service, and the costs for accelerating the cost schedule.

In general, the ability to use existing corridors lessens permitting challenges and mitigates timing risks associated with delays due to acquiring needed land or easement rights. Starting a project with all rights-of-way in hand is the equivalent of getting a head start in a race and reduces the delays and limitations to achieving an earlier in-service date, if required. The ACE proposals are anticipated to need minimal or no new land or easements. Therefore, timing risks are reduced and the ability to accelerate the schedule increases compared to a green field project.

ACE is also mindful of the global supply and labor challenges affecting many industries. If the electric transmission space is also affected, then the ability to accelerate project timing will be impacted. As an affiliate member of the Exelon companies, ACE will take advantage of Exelon's robust procurement process and the experience capable of managing this risk. ACE can leverage the Exelon supply organization, which when aggregated with all subsidiaries and affiliates, typically procure well over \$1 billion in materials and services every year and can effectively manage supply chain constraints. This becomes a significant benefit if the Board were to request an earlier in-service date.

The ACE proposals inject more potential OSW energy and capacity into southern New Jersey, which offer customers a more cost-effective solution and better schedule flexibility compared to longer transmission lines further north and inland into New Jersey. Further inland POIs which require a lengthy underwater and underground route are more costly and offer less schedule flexibility due to their large footprint. A shorter aquatic path and the shortest land route from the BOEM approved lease areas has a smaller environmental and community impact and therefore provide a higher probability to successfully accommodate a schedule change.

If the Board were to increase the capacity procured during future offshore wind solicitations, the ACE proposals can provide complementary benefits. The ACE 1a proposals (127, 734, 929 and 975) call for a redesign of the Cardiff substation which will add three additional positions for future use. All three positions will be readily available for any future offshore wind solicitation when Cardiff is placed in-service Q1 2028, or through a phased in process starting in 2027. Network violations associated with the increased capacity will depend on the future OSW injections. ACE will work with PJM to study the additional injections, identify potential violations and address those violations in our service territory as quickly and safely as possible.



The ACE 1b proposal (797) will not only allow New Jersey to connect 1,200MW of offshore wind, but is also designed to provide New Jersey with the capability for future expansion. The project also adds resiliency to the grid as it proposes to add three new 400MW circuits from near Scull substation to Cardiff substation and reduces future upgrade costs for an additional 400MW of transmission transfer capability to Cardiff. The proposed project is sized for 1,200W by utilizing three 400MW circuits inside a duct bank. However, the duct bank is designed to accommodate a fourth 400MW circuit. This empty duct bank circuit slot will provide New Jersey with the ability to add an additional 400MW of offshore wind transmission transfer capacity in the future. The underground infrastructure will be available to pull another cable to accommodate offshore wind without significant impact to the communities along the route.

- Environmental

- Proposal 127.1

- ▶ Green Acres: Have you conducted title work or reviewed the right of way/easement language specific to each parcel impacted, in an effort to verify that the proposed project is permissible under the existing right of way/easements? If yes, please describe. This would apply to new/additional/upgraded service lines, poles and towers or the clearing of trees in an expanded right of way.

Our routing analysis, which was included with our submission for proposal 127, identifies the primary route along with two alternative routes. A table at the end is included showing the number of parcels aligning with different real estate categories (residential, commercial, industrial, farm, public use facility, ...) for the three routes that were considered. The table also shows the number of acres for wetlands, forestry impacts, Pinelands Commission jurisdiction, airports, ...

We are aware that in general, some of the existing ACE easements may impact Green Acres, farmland preservation areas and State wildlife management areas. Additionally, we are aware of State, County and Municipal Open Spaces adjacent to the primary route for proposal 127. However, our initial review for this proposal found no Green Acres impact along the route.

As the project advances, we will commence detailed routing and environmental work which will assess the amount and type of impact to Green Acres. ACE has extensive experience building transmission in southern New Jersey and is well versed with the requirements, including Green Acres, and how to navigate these requirements to successfully build projects.

- ▶ State-owned lands (Parks, Forests, Wildlife Management Areas): Have you consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands? Does this project include any alternatives that would avoid state lands? If yes, please describe and explain how you will address potential additional impacts on ratepayers should the alternative site make the project more costly. If an alternative is pursued, what (if any) impacts might that decision have on the project schedule?

ACE has not consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands. We do not believe that State-owned lands will impact the primary route for the proposal as it is contained within existing ACE easements and rights-of-way. The primary route also minimizes environmental and social impact by utilizing existing ACE easements and rights-of-way. Alternative routes were explored, but they contained greater wetlands or forestry impacts. The table in our routing analysis provides this information.

While ACE has not consulted the Office of Transactions and Public Land Administration, ACE has engaged with the NJ DEP and had a pre-filing meeting. During our pre-filing meeting on September 14, 2021, DEP staff noted that proposals that utilize existing easements without needing new rights-of-way was an overall positive aspect. The DEP staff also appreciated our strategy to limit longer, potentially more impactful transmission projects, by leveraging existing infrastructure to increase capacity closer to the offshore lease area.

- ▶ Pinelands: Have you had any communication with the Pinelands Commission regarding the proposed project. If so, please specify what authorizations would be needed from the Pinelands Commission.

ACE has not consulted with the Pinelands Commission regarding the proposed project. Our preliminary analysis indicates the project is within the Pinelands Area and a Certificate of Filing will likely be required. As the project advances, we will commence detailed routing and environmental work to assess the full impact related to the Pinelands Area and will work to attain the required approval. ACE possess considerable experience working with the Pinelands Commission and has successfully built transmission infrastructure impacting the Pinelands Area.

– Proposal 127.10

- ▶ Land Use/Zoning: Please provide an environmental assessment with respect to all of the resources that are listed on the checklist that was included in the DEP supplemental form of the initial application. Please explain the conclusions you have drawn with respect to each of these resources with regard to the permits and easements that would be required for successful completion of this project.

Proposal 127 is contained within existing ACE easements and rights-of-way. Our routing analysis, which was included with our submission for proposal 127, identifies the extent of work performed on environmental assessment for the route. As the project advances, we will commence detailed routing and environmental work to fully assess the resources along the route and the permits required. If additional easements are necessary, the detailed routing and environmental analysis will identify this requirement.

– Proposal 797

- ▶ Green Acres: Have you conducted title work or reviewed the right of way/easement language specific to each parcel impacted, in an effort to verify that the proposed project is permissible under the existing right of way/easements? If yes, please describe. This would apply to new/additional/upgraded service lines, poles and towers or the clearing of trees in an expanded right of way.

Proposal 797 is underground and entirely along public rights-of-way. We are not aware of any needed title work as it does not impact private parcels. There are State, County and Municipal Open Spaces adjacent to the primary route, but further investigating is required to assess if the land is subject to Green Acres restrictions.

As the project advances, we will commence detailed routing and environmental work to assess if the project does impact Green Acres. ACE has extensive experience building transmission in southern New Jersey and is well versed with the requirements, including Green Acres, and how to navigate these requirements to successfully build projects.

- ▶ Pinelands: Have you had any communication with the Pinelands Commission regarding the proposed project? If so, please specify what authorizations would be needed from the Pinelands Commission.

ACE has not consulted with the Pinelands Commission regarding the proposed project. Our preliminary analysis does not indicate impacts related to the Pinelands Commission, but as the project advances, we will commence detailed routing and environmental work to assess the full impact related to the Pinelands Commission and will work to obtain the required approval.

▶ Stream Crossings: What are the proposed installation methods for stream crossings? Additional engineering and routing analysis is required to design the project and to develop the methods of installation required for any stream crossings. The entire project is underground and as we further develop the project, we will be able to identify the exact installation methods, and whether trenching is enough, or HDDs are required for stream crossings.

- ▶ State-owned lands (Parks, Forests, Wildlife Management Areas): Have you consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands? Does this project include any alternatives that would avoid state lands? If yes, please describe and explain how you will address potential additional impacts on ratepayers should the alternative site make the project more costly. If an alternative is pursued, what (if any) impacts might that decision have on the project schedule?

ACE has not consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands. We anticipate the project to be wholly contained in an existing public right-of-way, locally owned, and ACE-owned property. We do not believe that State-owned lands will be impacted, but as the project advances, we will commence detailed routing and environmental work to better assess the full impact and where State-owned lands may be impacted.

– Proposal 929

- ▶ Green Acres: Have you conducted title work or reviewed the right of way/easement language specific to each parcel impacted, in an effort to verify that the proposed project is permissible under the existing right of way/easements? If yes, please describe. This would apply to new/additional/upgraded service lines, poles and towers or the clearing of trees in an expanded right of way.

Our routing analysis, which was included with our submission for proposal 929, identifies the proposed route, which is entirely contained within an existing ACE easement or right-of-way. A table at the end is included showing the number of parcels aligning with different real estate categories (residential, commercial, industrial, farm, public use facility, ...) for the route. The table also shows the number of acres for wetlands, forestry impacts, Pinelands Commission jurisdiction, and airports, among others.

We are aware that, in general, some of the easements owned by ACE may impact Green Acres, farmland preservation areas and State wildlife management areas. Specifically for this route, we are aware of State, County and Municipal Open Spaces adjacent to the route, but we have not performed detailed surveys and in-person site visits; further investigation is required.

As the project advances, we will commence detailed routing and environmental work to assess if the project does impact Green Acres. ACE was incorporated almost a century ago and possesses extensive experience building transmission in southern New Jersey. ACE is well versed with permitting and construction requirements, including Green Acres, and how to navigate these requirements to successfully build projects. And as mentioned earlier, ACE has recent experience constructing a 500kV circuitry in this same ROW. Transmission line 2321 went into service in 2019, and our success with 2321 has shown that ACE has the experience and knowledge needed to permit and construct a project in this same ROW.

- ▶ Pinelands: Have you had any communication with the Pinelands Commission regarding the proposed project. If so, please specify what authorizations would be needed from the Pinelands Commission.

ACE has not consulted with the Pinelands Commission regarding the proposed project. Our preliminary analysis indicates the project requires clearing within the Pinelands Area and a Certificate of Filing is needed. As the project advances, we will commence detailed routing and environmental work to assess the full impact related to the Pinelands Commission and will work to attain the required approval. But as already mentioned earlier, ACE has recent experience constructing a 500kV circuitry in this same ROW. Transmission line 2321 went into service in 2019, and our success with 2321 has shown that ACE has the experience and knowledge needed to permit and construct a project in this same ROW.

- ▶ State-owned lands (Parks, Forests, Wildlife Management Areas): Have you consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands? Does this project include any alternatives that would avoid state lands? If yes, please describe and explain how you will address potential additional impacts on ratepayers should the alternative site make the project more costly. If an alternative is pursued, what (if any) impacts might that decision have on the project schedule?

ACE has not consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands. We don't believe that State-owned lands will impact the route for the proposal as it is contained within existing ACE easements and rights-of-way. The route minimizes environmental and social impact by utilizing existing ACE easements and rights-of-way. Alternative routes were not considered.