BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of The Application of Moraine Wind LLC for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility.	))))	Case No. 21-0516-EL-REN
In the Matter of The Application of Rugby Wind LLC for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility.	))))	Case No. 21-0517-EL-REN
In the Matter of The Application of Elm Creek II for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility.	))))	Case No. 21-0531-EL-REN
In the Matter of The Application of Buffalo Ridge II for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility.	))))	Case No. 21-0532-EL-REN
In the Matter of The Application of Barton Windpower 1 for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility.	))))	Case No. 21-0544-EL-REN
In the Matter of The Application of Barton Windpower, LLC for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility.	))))	Case No. 22-0380-EL-REN

INITIAL POST-HEARING BRIEF OF CARBON SOLUTIONS GROUP, LLC

Dated: January 17, 2023

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I. INTRODUCTION

This case involves six separate applications to certify windfarms in North and South Dakota, Minnesota, and Iowa as "qualifying renewable energy resources" eligible to participate in Ohio's renewable energy credit (REC) market. There is no evidence that a single kilowatt hour from any of these facilities is, has been, or ever will be "physically deliverable" into Ohio. These windmills are not entitled to a windfall but that is what certification would give them.

The Applicants are not here because their facilities are about to generate renewable energy and they wish to claim their rightful incentives. The facilities have been operating in the Midwest ISO (MISO) and Southwest Power Pool (SPP) regions for decades and the thought of selling RECs in Ohio never crossed their mind until recently. Their delay in seeking certification is understandable: since 2011, the Commission had consistently denied certification to resources in non-contiguous states. Beginning in 2020, however, the Commission began rolling out the welcome mat to these far-flung resources, and that is when the Applicants decided to show up.

The Applicants were thinking of ways to "maximize the value of their assets" (code for "making more money") when they crossed paths with Blue Delta, a consultant in the renewable space that does the same type of work as Carbon Solutions Group, LLC (CSG). Blue Delta believed it had a way to get around the deliverability barrier for MISO-based resources—just get *PJM* to issue a DFAX report[1] showing how electricity generated by a facility would affect transmission lines in Ohio *if* (and only if) the facility's generation were delivered into Ohio. Blue Delta had recently procured such reports for other clients and Staff accepted them as proof of deliverability, and the hat trick worked again when reports were submitted for the Applicants' facilities. The Staff Reports for each facility—issued well before the Commission granted intervention to CSG, took comments, or heard evidence—rely on the DFAX reports to conclude that the Applicants' resources are physically deliverable into Ohio.

The Applicants' and Blue Delta's strategy relied heavily on the casual approach typically taken in REN certification proceedings, where applications are typically processed "under the radar" without the involvement of legal counsel—not even for the applicant.[2] When CSG entered the scene, the Applicants and Blue Delta fought against a formal proceeding tooth and nail; when that failed, they

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[1] DFAX stands for "distribution factor analysis."

[2] The Applications in these cases were filed in late April and early May 2021. As the dockets reveal, the Applicants entered an appearance of counsel in August 2021, *after* CSG and Blue Delta intervened.

tried to get CSG kicked out of the case for imagined "discovery violations." The Applicants became so consumed by these obfuscating efforts that they completely lost sight of their own case.

The Applicants suffered numerous unpleasant surprises throughout the hearing, starting with their witnesses' inability to authenticate or lay a foundation for the most important piece of evidence in their case (the DFAX reports) and concluding with the belated realization—"belated" meaning *after* they presented their witnesses and rested their case—that every single filing ever made in the case attached *the wrong DFAX reports*. Things continued to spiral when the "corrected" DFAX reports required further "correction" from witnesses who had their recollections "refreshed" with documents withheld from CSG during discovery. By the end of the hearing, the record of which version of which DFAX report came from where, why there are multiple versions, and why none of these versions had ever been produced to CSG, exemplified what has been wrong with the Applicants' case from the beginning—an over-willingness to blindly follow Blue Delta's lead and trust but not verify the legal and factual basis for deliverability that Blue Delta had sold them on.

The Applicants' and Staff's fixation on *Koda*[3] is, and has always been, a red herring. The outcome of this case does not hinge on what deliverability "test" should apply; it is dictated by the Applicants' failure to satisfy this test, with reliable and complete evidence, should the Commission choose to apply it. Reviewing a list of highlighted values on a document stamped "DFAX Study" to determine whether any meet or exceed a threshold does not satisfy the *Koda* test or Ohio law. More important than these numerical values is what these values represent. The purported source of the values—PJM—say they represent impacts to Ohio transmission by the Applicants' facilities "*if they were to deliver their energy into PJM.*"[4] There is zero evidence these facilities could or would *actually* impact transmission in PJM, let alone Ohio.

It is now clear why the Applicants did not include the DFAX report cover letters when they first introduced (or attempted to introduce) the DFAX spreadsheets with comments filed in November 2021. PJM's "if" qualification destroys the Applicants' case. The legal standard here is "physically deliverable" and this standard must be "shown" or "demonstrated." Hypothetical power flows based on assumed, hypothetical delivery does not demonstrate actual deliverability.

The confusion about different copies and version of Applicants' DFAX reports only amplifies the evidentiary problems that Applicants have here. Their

[3] *Koda Energy LLC*, Case No. 09-555-EL-REN, March 31, 2011, Finding and Order. The Staff Report in this proceeding was filed February 28, 2011 and will be referred to here as the "*Koda* Staff Report."
[4] *See* Staff Ex. 2A, DFAX Analysis of Renewable Resources for Avangrid, Cover Letter at 1.

DFAX reports are not reliable evidence of deliverability. The fact that the reports are hearsay is only the beginning of problems. The Commission and CSG are entitled to know, at a minimum, who requested the reports from PJM, to whom the request was made, the identify and qualifications of the individual(s) who prepared the reports, the information PJM relied on and its source, and similar basic details. *None of the witnesses could answer these questions and Applicants and Blue Delta objected to calling the witness who could.* As if that were not enough, five of the six DFAX reports reviewed and relied on by the Applicants and Staff *were not produced to CSG until the very end of the case*. These procedural irregularities, combined with the refusal to allow PJM to testify, are grounds alone to deny certification, independent of the massive evidentiary problems the Applicants and Blue Delta created.

The proponents of certification of the Applicants' facilities have simply failed to deliver the record the Commission needs to give them what they are asking for. The cagey, hide-the-ball tactics that have plagued this case from the beginning have come home to roost. The Commission has little choice but to deny certification.

II. BACKGROUND

R.C. 4928.64(B) mandates that "[b]y the end of 2026," Ohio EDUs and electric services companies "shall have provided" a certain percentage of electricity supplied to Ohio consumers through "qualifying renewable energy resources" that are either "located in this state" or "that can be shown to be deliverable into this state."[5] Entities subject to this mandate may satisfy their compliance obligation by directly contracting for renewable energy or purchasing RECs. "A REC (an acronym also used for "renewable energy certificate") is a nontangible, tradable commodity that serves as a mechanism for utilities and regulators to track renewable-energy purchases."[6]

"[T]he General Assembly is not presumed to do a vain or useless thing, and that when language is inserted in a statute it is inserted to accomplish some definite purpose."[7] The General Assembly recognized that renewable energy cannot be "provided" to Ohio consumers unless it is generated in this state or is deliverable here. The statute recognizes that resources in neighboring states or regional transmission organization footprints *could* be deliverable into Ohio but limits

[5] *Id.*; R.C. 4928.64(B)(2) and (3).
[6] *In re Rev. of Alternative Energy Rider Contained in Tariffs of Ohio Edison Co*., 2018-Ohio-229, 153 Ohio St. 3d 289, 290.
[7] *State ex rel. Cleveland Elec. Illum. Co. v. Euclid* (1959), 169 Ohio St. 476, 479.

eligibility to facilities where deliverability "can be shown." Certification is thus the gateway into the Ohio REC market.

A. The REN Certification Process

Under Commission rules, "[t]o be eligible for use towards satisfying a benchmark, a REC [] must originate from a facility that has been certified by the commission [.]"[8] To become certified, a facility must satisfy, among other requirements, "the deliverability requirement." The "delivery requirement" in Rule 4901:1-40-03(A)(1) mirrors the statutory "delivery requirement" in R.C. 4928.64(B)(3): "The qualifying renewable energy resources implemented by the utility or company shall be met either through facilities located in this state or with resources that can be shown to be deliverable into this state."

Commission rules also direct "the entity seeking facility qualification" to "file an application" that "shall include a determination of deliverability to the state in accordance with paragraph (F) of rule 4901:1-40-01 of the Administrative Code."[9] Under that rule, "[d]eliverable into this state" means "that the electricity . . . originates from a facility within a state contiguous to Ohio. It *may* also include electricity originating from other locations, *pending a demonstration that* the electricity is physically deliverable to the state."[10] This administrative definition renders explicit that which is already implicit in the statute, *i.e.,* that "deliverable into this state" means "physically deliverable." Again, renewable energy cannot be "provided" at mandated levels unless it is physically deliverable.

In most REN certificate cases the deliverability requirement is a non-issue. If the facility is in Ohio, the resource is deliverable. If the facility is in a contiguous state, the resource is deliverable. It is only when the resource is from some "other location"—meaning a state not contiguous to Ohio—that an applicant must affirmatively "demonstrate[e] that the electricity is physically deliverable to" Ohio.

B. Physical Deliverability of Electricity

Electricity is not so much a "thing" as it is a physical phenomenon and this presents a conceptual challenge to the notion of electricity being "physically deliverable." This phrase has a special meaning in the present context and must be applied accordingly.[11]

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[8] O.A.C. 4901:1-40-04(C)(1).
[9] O.A.C. 4901:1-40-04(D).
[10] O.A.C. 4901:1-40-01(F) (emphasis added).
[11] "In construing statutes, it is customary to give words their plain ordinary meaning unless the legislative body has clearly expressed a contrary intention. This maxim applies equally to administrative regulations." *State ex rel. Brilliant Elec. Sign Co. v. Indus. Comm'n,* 57 Ohio St.

Electric power is created by generating stations, which are connected to transmission grids managed by PJM, MISO, and other RTOs. These resources are synchronized to ensure that the production of electricity and its consumption are always matched. The amount of electric current generated by any individual resource (measured in megawatt hours) can be measured but the flow of electrons on and off the transmission grid cannot be traced.[12] Contracts for the purchase and sale of energy are economic constructs that essentially price the activities of putting energy onto the grid or consuming energy. These economic transactions are not measures of physical deliverability.[13]

The "physical deliverability" of electricity refers to the physical properties of energy flows. Although it is not possible to trace electrons, it is possible to predict and measure the impact that electrons generated in a specific location will have on transmission lines in a different location. The upshot of *Koda* is that if this impact achieves a certain threshold, the resource is considered "physically deliverable." More specifically, "the absolute value of (a facility's) impact on a transmission line in Ohio must be greater than 5 percent and greater than 1 MW, as determined by an adequate power flow study."[14] Staff acknowledges its ability and discretion to consider additional information beyond power flow studies even if it did not do so here.[15]

The *Koda* approach recognizes that *potential* deliverability does not equate to *probable* deliverability. In developing the thresholds, Staff understood that because the facility was connected to the grid in an RTO region that at the time partially covered Ohio (*i.e*, MISO), it was possible this new resource would affect transmission in Ohio. The MISO power flow study tested this hypothesis and showed that the resource would indeed have an impact, but such a negligible one that the resource should not be deemed physically deliverable.[16] This intuitively makes sense given the hundreds of miles separating Minnesota and Ohio. And repeated testing of this hypothesis led to the same result. Between the time *Koda* was decided in 2011 until 2020, most resources in non-contiguous states could not satisfy the *Koda* threshold. Applications in 15 cases were denied during this period

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2d 51, 54 (1979) (internal quotation omitted). *See also* R.C.1.42 ("Words and phrases shall be read in context and construed according to the rules of grammar and common usage. Words and phrases that have acquired a technical or particular meaning, whether by legislative definition or otherwise, shall be construed accordingly.")

[12] *Koda* Staff Report at 5.

[13] *Koda* Staff Report at 4.

[14] *See, e.g.,* Staff Ex. 3 (Moraine facility Staff Report) at 2. *See also Koda* Staff Report at 5.

[15] Tr. III at 367:4-10.

[16] *Koda* Staff Report at 7-8.

and only 2 approved.[17] This pattern flipped with applications filed in 2020 and later: the Commission has granted certificates in unopposed applications in 10 cases, denied 1 application,[18] and Staff is recommending approval in these 6 cases.[19]

The concept of "physical deliverability" has practical, real-world implications that inform reliable operations. As CSG's expert, Travis Stewart, explained, "for any customer to use electricity, it must be physically delivered to their location. Customers cannot use electricity that is virtually or theoretically deliverable; conditions must exist so the energy is available when needed. Physical deliverability is synonymous with actual deliverability."[20] RTOs evaluate physical deliverability through numerous tools and data points, such as transmission service reservations, system impact studies, market-to-market flowgate tests and NERC E-Tags.[21] These tools and data points exist to ensure that electricity can be physically delivered, which is one of the primary reasons for having RTOs in the first place. RTOs are not academic institutions or research labs.[22]

PJM and MISO recognize that new generation resources in one region may potentially impact transmission in the other and plan for it accordingly. A Joint Operating Agreement establishes a planning process where transmission impacts are studied not just in the RTO where a new generation facility interconnects but also in the neighboring RTO. "Physical deliverability" does not honor RTO borders.

A finding that the Applicants' resources are physically deliverable into Ohio would mean that the Applicants' facilities produce renewable energy that energizes the transmission grid in Ohio, which has the further implication that these resources are displacing fossil generation. As Mr. Stewart explained, "If a non-deliverable facility is being credited as serving Ohio customers and is, in fact, not, another facility would need to be dispatched and turned on to serve those customers [.] [T]here is a high likelihood that facility will be emitting pollution in or close to Ohio."[23] And that is the whole point of certification and having actual

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[17] *See* Tr. III at 367:16-369:9 (total of 28 applications including Koda; 16 denied and 12 approved; 10 of 12 approvals since 2020).
[18] *Nickelson Solar LLC,* Case No. 20-1790-EL-REN, March 23, 2022 Finding and Order.
[19] During 2021, the Commission granted certificates in unopposed applications filed in the following cases: 20-1091 (Elk Wind Energy), 20-1092 (Hawkeye Wind Energy), 20-1150 (Autumn Hills), 20-1637 (Superior Wind Project), 20-1638 (Lakota Wind Project), 20-1692 (Rail Splitter Wind Farm), 20-1761(Rippey Wind Farm), 20-1821 (Pioneer Trail Wind Farm), and 21-0085 (Clear Creek Wind).
[20] CSG Ex. 3 at QA11.
[21] *Id*. at Q&A 12-20..
[22] *See id*. at Q&A 11.
[23] Tr. II at 277:14-20.

qualifications for *qualified* renewable energy resources: to limit RPS compliance opportunities to the purchase of RECs from entities that can "show" or "demonstrate" they are contributing to Ohio's RPS goals. Facilities that do not contribute to these goals cannot be rewarded as if they do.

C. The Applicants' Facilities

Each of the six facilities are indirectly owned by Avangrid Renewables, LLC and connected to transmission substations in MISO or SPP. Two facilities are in Minnesota (Moraine and Elm Creek), two in Iowa (Barton I and II) and one each in North Dakota (Rugby) and South Dakota (Buffalo Ridge). The facilities were placed into service between 2003 and 2010.[24]

The Applicants decided to seek certification in Ohio to "enhance the[] value" of the facilities and "monetize our RECs."[25] Five applications were filed in late April or early May 2021 and the Barton 2 application in April 2022.[26] At least two facilities have multiple PPAs for some or all their output. Three PPAs associated with Rugby for roughly half the capacity but seeking certification "for the merchant half."[27] Barton has two PPAs.[28] Staff looked at the in-service date on each application but did not verify that any of the facilities are currently operating.[29]

None of the applications included a DFAX study.[30] Staff's correspondence with the Applicants advised them that they needed to include a "*demonstration of physical deliverability*" and the "[s]uch demonstration has typically taken the form of a power flow study (i.e., distribution factor analysis or 'dFax') performed by PJM."[31] The last application (Barton II, Case No. 22-380) is the only docket in which a DFAX was publicly filed. According to Staff, "The Applicant (Avangrid) had asked that the DFAX studies be treated as confidential."[32]

Partial DFAX studies first appeared in the Applicants' November 2021 comments.[33] They did not include the cover letters and, as was later learned at hearing, they do not even pertain to the Applicants' facilities. The cover letters and

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[24] A separate Staff Report was prepared for each facility. *See* Staff Exs. 3-8.
[25] Tr. I at 36:24-37:6; 13-19.
[26] The Applicants initially objected to consolidating Barton 2 with the other applications but later withdrew their objection. *See* Applicants' filings on May 18 and June 24, 2022 in Case No. 22-380-EL-REN.
[27] Tr. I at 42:3-7; 42:23-43:2.
[28] Tr. I at 43:17-23; CSG Ex. 2.
[29] Tr. III at 363:13-25.
[30] Tr. I at 25:13-17.
[31] Staff Ex. 2A at 2 (emphasis in original).
[32] Staff Reply Comments (Dec. 8, 2021) at 7.
[33] *See* Applicants' Initial Comments, filed Nov. 18, 2021, and attachments thereto.

spreadsheets were combined for the first time in the Applicant's August 12, 2022 direct testimony filing—again with the wrong spreadsheets.

Each Staff Report for each facility relies on a DFAX report. Neither Mr. Chiles nor Staff know whether the facilities modeled in the reports is "a complete and exhaustive list[] of all of the PJM facilities" or only PJM facilities in Ohio.[34] Mr. Chiles acknowledges, "I do not know specifically who at PJM would have performed this analysis."[35] Nor does Staff. Staff confirmed that it relied on the cover letters and spreadsheets provided by the Applicants or Blue Delta.[36] Staff did not discuss any of the reports with PJM, and no witnesses knows who at PJM prepared or contributed to any of these reports.[37] Mr. Landoni believes they came from PJM because they are accompanied by cover letters with a PJM logo.[38] He has never talked to anyone at PJM about the reports and has never personally requested a DFAX from PJM.[39]

The cover letter for each DFAX summarizes PJM's analysis:[40]

> The information below provides some background information on the analysis.
>
> PJM confirmed the required information about the renewable resources from MISO to identify these facilities in the 2025 RTEP PSS/E case with the information for these facilities contained in the list below. A DFAX analysis on approximately 3,000 BES transmission facilities in Ohio and surrounding areas was performed using the TARA program. The buses at which the Wind generators are located provided the source for the DFAX analysis, and the generation with the PJM footprint provided the sink for the DFAX analysis. Finally, it was confirmed that there were a number of EHV transmission facilities on which at least 5% of the energy from these wind resources would be expected to flow if they were to deliver their energy into PJM. Details of the analysis are in the table attached to this report.

The next to the last sentence above is a critical limitation, for reasons that should be obvious. And despite the fact that the facilities are spread among four different states, two different RTOs, have different levels of rated capacity, and are the subject of different DFAX reports prepared at different points in time, Staff determined that each facility had virtually the *same* impact on the *same* transmission line in Ohio.[41] Indeed, the record shows that Barton 1 and 2 were

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[34] *See* Tr. I at 87:16-17.
[35] Tr. I at 85:23-24
[36] Tr. III at 355.
[37] *See* Tr. I at 20:17-19; 21:15-17; 22:18-23:2; 29:3-18; at 24:2-8; 29:19-23; 29:24-30:1.
[38] Tr. I at 30:21-25.
[39] Tr. I at 52:5-9.
[40] Avangrid Ex. 7A (corrected, filed Dec. 14, 2022); *See also* Staff Ex. 2A.
[41] Page 2 of each Staff Report (Staff Exs. 3-8) identifies AEP's Marysville (OH) – Sorenson (IN) 765 kilovolt transmission line as the facility with the highest DFAX value.

actually modelled *together* and resulted in the same impact to the same line when Barton 2 was studied separately.[42] Nonetheless, Staff concluded that the output of each facility "is physically deliverable to the state of Ohio."[43]

III. ARGUMENT

"The PUCO, as a creature of statute, has no authority to act beyond its statutory powers."[44] Deliverability is a statutory standard so the Commission must apply that standard. "[T]he commission may not legislate in its own right"[45]

To become certified, each applicant must show that its resource is "deliverable into this state," meaning "physically deliverable" to Ohio.[46] Ohio law reasonably and rationally ensures that opportunities exist for resources in states not contiguous to Ohio to participate in the Ohio REC market *if* they can "show" and "demonstrate" physical deliverability into Ohio. This means the Applicants must explain how resources are deliverable from Location A (the applicable MISO and SPP regions of Minnesota, the Dakotas, and Iowa) to Location B (the MISO/PJM "seam") to Location C (Ohio transmission). The DFAX reports expressly *assume* delivery from Locations A to Location B and model "physical deliverability" from Location B to Location C. Ohio law requires a solution to the entire physically deliverable equation but only a partial solution has been presented here.

A. There is no evidence the Applicants' resources are physically deliverable into Ohio.

The Applicants entire case hinges on DFAX reports purportedly created by someone at PJM.[47] The reports offered here are unreliable hearsay and the Commission would be well within its authority to refuse to consider them. If it does consider them, it must accept them for what they say, and that does not help the case for deliverability at all.

1. The PJM DFAX Reports are unreliable hearsay.

Hearsay is a "statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter

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[42] *See* Tr. III at 358:4-359:7.
[43] *Id.*
[44] *Disc. Cellular, Inc. v. Pub. Util. Comm.*, 2007-Ohio-53, ¶ 51.
[45] *Office of Consumers' Counsel v. Pub. Util. Comm.*, 67 Ohio St. 2d 153, 166, 423 (1981).
[46] R.C. 4928.64(B)(3)(b); O.A.C. 4901:1-40-01(F).
[47] *See* Tr. I at 36:3-6.

asserted."[48] The DFAX reports clearly meet this definition: the author(s) of the reports did not testify, and the statements and information in the reports are being offered for their truth. None of the Evid. R. 803 exceptions to hearsay apply.

The Commission may consider hearsay *along with* competent and reliable evidence, but the Commission *may not* base its decisions entirely on evidence that is "clearly hearsay" and therefore "incompetent."[49] "Although we recognize that the Public Utilities Commission, being an administrative body, is not and should not be inhibited by the strict rules as to the admissibility of evidence which prevail in courts, yet such freedom from inhibition may not be distorted into a complete disregard for the essential rules of evidence by which rights are asserted or defended."[50]

The fact that the reports have been admitted into the record does not mean they cease to meet the definition of hearsay. It just means the record evidence includes hearsay. The Commission must still weigh this evidence and in doing so, the absence of testimony by PJM dramatically increases the importance of questions about the authenticity, reliability, and accuracy of these reports and the credibility of the witnesses who testified about them. "PUCO orders which merely made summary rulings and conclusions without developing the supporting rationale or record have been reversed and remanded."[51]

The evidentiary problems with the DFAX report go well beyond any "chain of custody" issues.[52] We are not dealing with a murder weapon or bag of drugs. No one is claiming an "original" DFAX report with a "wet" signature needs to be in the record. The problems here begin with the basic requirement of authentication; *i.e.,* "evidence sufficient to support a finding that the matter in question is what its proponent claims."[53] Staff made no attempt to authenticate the DFAX reports it says it relied on and the Applicants' witness outright admitted he *assumes* the reports came from PJM "[b]ecause its got a letter on there from PJM."[54] How does he know the letter came from PJM? Because the letter says so.[55]

Comparing the DFAX reports for the various facilities among each other reveals numerous inconsistencies and question marks. Barton 2 was the last

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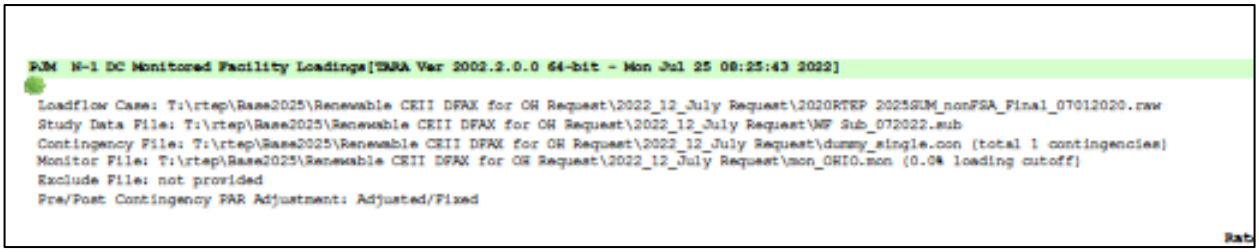
[48] Ohio Evid. R. 801(C).
[49] *Chesapeake & O. Ry. Co. v. Pub. Utilities Comm'n,* 163 Ohio St. 252, 263 (1955).
[50] *Id.*
[51] *Ohio Consumers' Counsel v. Pub. Util. Comm*., 2006-Ohio-5789, ¶ 34, 111 Ohio St. 3d 300, 309,
[52] Tr. III at 379:4-9.
[53] Ohio Evid. R. 901(A).
[54] Tr. I at 30:19-20.
[55] *Id*. at 30:21-25 ("Q. Okay, you are assuming that the letters are authentic and issued by PJM. You are relying on the document itself to inform your belief of what it is; is that fair? A. Yes.").

application filed and the DFAX report is filed in the docket. The heading in the cover letter identifies the intended recipient (shown on the far right):[56]

The cover letter identifies the facility:[57]

1. Barton Wind II Branch Solar, LLC is a 80 MW Wind farm in Alliant Energy West that connects to Barton 161 kV substation. In the 2025 RTEP case, it is modeled at bus 631151.

And the top of the first page of the spreadsheet refers to the data and methods PJM relied on:[58]



A chain of emails exists between the Applicants and Staff regarding the Barton 2 DFAX but none reflect direct communication from PJM.[59]

The paper trail that exists for Barton 2 does not exist for the other facilities. The DFAX for Moraine, Rugby, Buffalo Ridge and Elm Creek apparently was not prepared at the Applicants' request, based on the entity listed at the top far right of the cover letter:[60]

[56] Staff Ex. 2C, DFAX Analysis of Renewable Resources for Avangrid.
[57] *Id*.
[58] Staff Ex. 2C, Spreadsheet page 1.
[59] *See* Applicants Ex. 11; Staff Ex. 2C.
[60] Staff Ex. 2A, Cover Letter page 1.

The top of the first page of the spreadsheet for these four facilities also omits the source data included in the Barton 2 report:[61]And while Barton 2 was modelled individually, all four of these facilities were modelled together:[62]

1. Moraine I is a 49.5 MW Wind farm in Xcel Energy North that connects to Chanarambie 34.5 kV bus. In the 2025 RTEP case, it is modeled at bus 600092.

2. Rugby is a 149.1 MW Wind farm in Otter Tail Power Company that connects to Rugby Wind 230 kV bus. In the 2025 RTEP case, it is modeled at bus 620115.

3. Buffalo Ridge II is a 210 MW Wind farm in Xcel Energy North that connects to Oak Lake Wind 115 kV bus. In the 2025 RTEP case, it is modeled at bus 600137 and 600140.

4. Elm Creek is a 148.8 MW Wind farm in Xcel Energy North that connects to Lakefield 345 kV bus. In the 2025 RTEP case, it is modeled at bus 600134.

Regarding the Barton I DFAX, Staff testified that this report "was just provided. I did not find record of us requesting it."[63] Blue Delta requested this document from PJM, as shown on the cover page.[64]And like the previous DFAX prepared for "ACT," the input data on the first page of the spreadsheet is again missing.[65] The cover letter for the Barton I DFAX also indicates that Barton I and II were modelled *together*.[66]

1. Barton Windpower is a 160 MW wind farm in Alliant Energy (West), IA that connects between the Adams South and Lime Creek 161 kV substations. In the 2025 RTEP base case it is modeled as two 80 MW wind generators at buses 631150 and 631151.

If Barton 1 and 2 were in fact modeled together, as the DFAX seems to clearly indicated, then there is no evidence Barton 1was actually ever modeled as a stand-alone facility (unlike Barton 2). Moreover, why "Barton Windpower" is the first of fourteen facilities listed in a *different* version of the Barton 1 DFAX cover

[61] Staff Ex. 2A, Spreadsheet page 1.
[62] Staff Ex. 2A, Cover Letter page 1.
[63] Tr. III at 376:18-23.
[64] Staff Ex. 2B, DFAX Analysis of Wind Farms for Blue Delta Energy, LLC.
[65] *Id*., Spreadsheet page 1.
[66] *Id*., Cover Letter page 1.

letter remains a mystery.[67] The Koda facility was modelled individually. Barton 2 was modelled individually. And throughout this case, the Applicants represented that each of their facilities were modelled individually.[68] None of the witnesses have explained how it is even possible to study four or fourteen facilities simultaneously.

The issue here is not admissibility. The reports have been admitted. Admission of the reports does not entitle them to a presumption of truth, accuracy, or integrity. The Commission must weigh the evidence. The DFAX reports are being used and relied on as a substitute for expert testimony; a person who could answer questions about what PJM did has been substituted for documents that cannot be cross examined. Although PJM certainly has institutional expertise, the proponents of these documents cannot answer basic questions about who prepared these reports, the preparer's credentials and qualifications, or whether the reports represent the work of the individual preparer or PJM as an institution. Even if those boxes could be checked, "[a]lthough the experts are highly qualified, their experience, by itself, does not establish the legal reliability of their opinions as applied to the facts of this case."[69] An expert's conclusions and opinions must be based on "reliable scientific, technical, or other specialized information"[70] because "even a qualified expert is capable of rendering scientifically unreliable testimony [.]"[71] The Applicants have offered nothing to demonstrate the reliability of the data or conclusions in the DFAX reports.

The unreliability of the data passed off as PJM's work product infects Staff's and Mr. Chile's conclusions. "Expert opinion testimony may not be based upon evidence the expert has heard or read on the assumption that the facts supported thereby are true, where such evidence is voluminous, complicated, or conflicting, or consists of opinion, inferences, and conclusions of other witnesses."[72] Staff and Applicant witnesses may very well be qualified individuals, but their opinions and conclusions are not based on any special expertise. They have not even offered "their" opinions. They have offered their opinions of PJM's opinions by taking

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[67] *See* Applicant Ex. 7, Corrected Attachment B.
[68] *See, e.g.,* Tr. I at 16-24.
[69] *Valentine v. Conrad,* 2006-Ohio-3561, ¶ 23, 110 Ohio St. 3d 42, 46. *See also Watkins v. Affinia Grp.*, 2016-Ohio-2830, ¶ 19, 54 N.E.3d 174, 178 ("The admissibility of expert testimony in Ohio is governed by Evid.R. 702 and 703, and the United States Supreme Court decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.,* 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), and its progeny.").
[70] Ohio Evid. R. 702(C) (emphasis added).
[71] *Valentine v. Conrad,* 2006-Ohio-3561, ¶ 17, 110 Ohio St. 3d 42, 44.
[72] *Wells v. Miami Valley Hosp.,* 90 Ohio App. 3d 840, 856–57(1993), citing *Zelenka v. Indus. Comm.* (1956), 165 Ohio St. 587.

everything represented in the DFAX reports at face value. "Expert testimony may not be based on mere speculation."[73]

The integrity and reliable of the data relied on in this case is important because the final decision in this case is important—not just to the parties, but all Ohioans. As Mr. Stewart explained, "[I]f a non-deliverable resource is being credited as serving Ohio customers when, in fact, it is not, a replacement resource has to come online and one of those replacement resources would very likely be a fossil fuel resource and [] Ohio residents are not getting the benefit of developing new renewable resources in the state and getting that benefit from job creation."[74]

The stakes in this case are too high to render a decision based on questionable, unreliable, and unexamined underlying data.

2. The DFAX reports *assume* deliverability into PJM and Ohio.

To the extent some version of the DFAX reports can be settled upon as the correct version, the admission of the documents for their truth means the Applicants and Staff are stuck with PJM's disclaimer of deliverability. The DFAX reports do not support the conclusion for which they are offered.

The Applicants have spent a lot of time and energy to establish a point that has never been disputed: that power flow studies, including DFAX reports, may be used to figure out whether energy is physically deliverable from one area to another. But very little attention has been paid to the actual power flow studies being relied on in this proceeding." The purported authors of the studies sponsored here convey the following information:[75]

> The information below provides some background information on the analysis.
>
> PJM confirmed the required information about the renewable resources from MISO to identify these facilities in the 2025 RTEP PSS/E case with the information for these facilities contained in the list below. A DFAX analysis on approximately 3,000 BES transmission facilities in Ohio and surrounding areas was performed using the TARA program. The buses at which the Wind generators are located provided the source for the DFAX analysis, and the generation with the PJM footprint provided the sink for the DFAX analysis. Finally, it was confirmed that there were a number of EHV transmission facilities on which at least 5% of the energy from these wind resources would be expected to flow if they were to deliver their energy into PJM. Details of the analysis are in the table attached to this report.

[73] *Rose v. Truck Centers, Inc.*, 611 F.Supp.2d 745, 750 (N.D. Ohio 2009).
[74] Tr. II a 279:14-21
[75] Staff Ex. 2A., Cover Letter page 1.

The next to the last sentence is clear: "[I]t was confirmed that there were a number of EHV transmission facilities on which at least 5% of the energy from these wind resources would be expected to flow if they were to deliver their energy into PJM." This is what Staff observed and reported as evidence of physical deliverability. Each Staff Report identifies the same EHV transmission facility (the AEP Marysville (OH)-Sorenson (IN) 765 kv transmission line) across which the energy from each facility would flow "if they were to deliver their energy into PJM."

The presence of the Applicants' facilities in an RTO that no longer manages Ohio transmission presents a different situation than *Koda*. The MISO power flow study relied on in Koda was "adequate"[76] for the task at hand because MISO managed transmission where the facility interconnected (Location A) and in parts of Ohio (Location B). MISO did not have to assume the facility would delivery energy to MISO because it already did. The management and operation of the transmission grid in Ohio has since changed. It is not possible to draw any conclusion about physical deliverability of resources in the Upper Midwest without understanding power flows in MISO and PJM. PJM has modelled power flows in its region "if" the energy is delivered into PJM but PJM did not model power flows in MISO. There is no evidence the energy is deliverable from MISO into PJM. So even if the DFAX Reports were reliable, Applicants have only established half of the physical deliverability test they've insisted the Commission must apply.

The Applicants could have presented additional or alternative evidence for deliverability (such as those explained by Mr. Stewart) but they did not.[77] The Applicants *chose* to rely solely on DFAX reports; they were not *required* to do so. *Koda* does not state that deliverability may *only* be shown by "a power flow study," that a DFAX study is the *only* appropriate power flow study, or that the thresholds applied are the *only* appropriate measure of deliverability.

Regardless of the general suitability of DFAX reports for showing deliverability, the reports in the record here *assume* deliverability into Ohio rather than prove it.

B. Procedural irregularities prejudiced CSG.

The REN certification rules authorize intervention and when intervention is granted and a hearing scheduled, intervenors are entitled to due process. Numerous procedural irregularities occurred that denied due process to CSG and exposed serious flaws in the REN certification process. Staff appears to recognize these

[76] Each Staff Report summarizes the Koda test by reference to an "adequate" power flow study.
[77] *See* Tr. II at 308:19-21; CSG Ex. 3, Q&A 12-20.

flaws and CSG appreciates the efforts made to correct them, but Staff's new measures do not remedy the prejudice caused by prior practices.

"In determining whether any order of the commission is unlawful and unreasonable, inquiry should therefore be made, not only into the evidence, to determine whether the order is properly supported by the evidence, but also into the proceedings during the course of the hearing, to determine whether the statutes relative to procedure have been followed and whether the law applicable to the proceeding has been properly applied."[78] Procedural requirements were *not* followed here, starting with the commencement of the cases.

"An entity seeking facility qualification shall file an application for certification of its electric generating facility" and "[t]he application shall include a determination of deliverability to the state in accordance with paragraph (F) of rule 4901:1-40-01of the Administrative Code."[79] The Applicants characterize themselves as data-gathers for Staff and at hearing protested being referred to as the filing entity.[80] CSG recognizes that the Commission processes hundreds of REN applications annually (Over 11,000 certifications have been granted since the RPS went into effect) and this makes the desire for a relaxed and informal process understandable.[81] But the certification rules expressly contemplate and authorize intervention by "[a]ny interested person" to "file comments and objections to any application [.]"[82]Applications by resources in non-contiguous states are anything but typical, and the stakes are far too high to permit the casual attitude and approach exhibited with the applications here.[83]

The Applicants' failure to include the DFAX studies or other "determination of deliverability" is a much more serious problem than semantics over who "filed" the applications.[84] Had this simple rule been followed, the fiasco over the incorrect reports being filed and refiled repeatedly would have been avoided. CSG and other

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[78] *Vill. of St. Clairsville v. Pub. Util. Comm.*, 102 Ohio St. 574, 579 (1921).
[79] O.A.C. 4901:1-40-04(D).
[80] Tr. I at 26:3-12.
[81] Tr. III at 376:20-25.
[82] O.A.C. 4901:1-40-04(D)(1).
[83] The practice of Staff filing applications on behalf of third-parties arguably constitutes the unauthorized practice of law. *See* R.C. 4705.01 ("No person shall be permitted to practice as an attorney and counselor at law, or to commence, conduct, or defend any action or proceeding in which the person is not a party concerned, either by using or subscribing the person's own name, or the name of another person, unless the person has been admitted to the bar by order of the supreme court in compliance with its prescribed and published rules."); *Williams v. Glob. Const. Co.,* 26 Ohio App. 3d 119, 121 (1985) ("Where it appears that one not licensed to practice law has instituted legal proceedings on behalf of another in a court of record, such suit should be dismissed [.]"(quotation omitted).
[84] *See* Tr. I at 25:13-17.

parties could have avoided the time and expense of having to review new information and emails. The "clerical error" would have been fixed at the beginning of the case rather than the very end.

Staff has recognized the need for transparency and disclosure and has begun to publicly file DFAX reports, effective with the Barton 2 application filed in April 2022. This did not happen with the other five applications; if it had, someone presumably would have picked up on the fact that the Applicants were relying on the wrong reports. Filing the DFAX reports is a step in the right direction, and a necessary step if the requirement to include this material in the application is going to continue to be ignored.

The failure to include the DFAX studies with the applications or file them in the dockets could have been remedied had the Applicants complied with their discovery obligations, but that did not happen, either. CSG's written discovery asked for all the basic information and documents one might expect.[85] None of the email traffic between or among the Applicants, Staff, or others were produced until the hearing.[86] None of the correct DFAX reports for the facilities (other than Barton 2) were produced until after the Applicants and Blue Delta rested their case.

CSG entered these proceedings with an information disadvantage that should have been cured long before the end of the evidentiary hearing. CSG was not privy to interactions between or among the parties, Staff, or PJM. When the Applicants filed DFAX reports represented as those applicable to the facilities at issue, CSG had no choice but to accept this representation at face value. That representation was false; the cover letters are a material part of the reports but were excluded from the versions initially filed. When CSG specifically requested the reports in discovery, it was referred to the incomplete and erroneous versions previously filed.[87] When cover letters and spreadsheets were finally filed together in August 2022, they were *still* wrong.

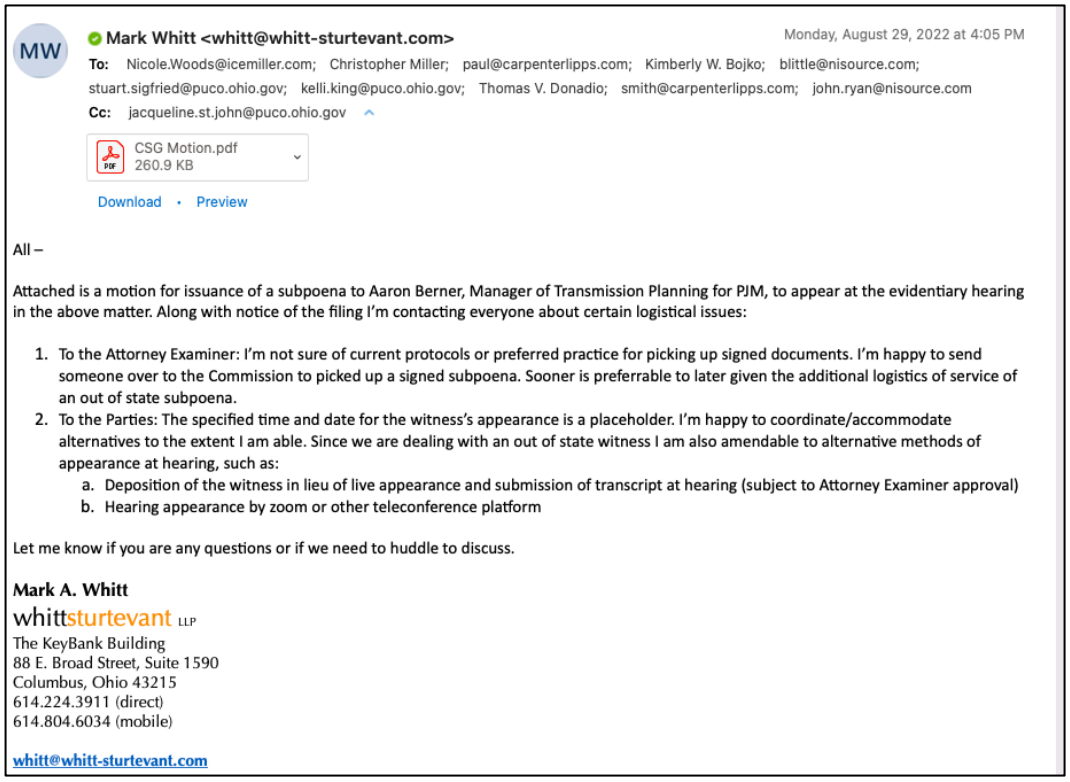
CSG had questions that it believed PJM could answer and *should* answer, given the importance the Applicants and other parties placed on the DFAX reports. Respectfully, the hearing examiners' mishandled CSG's request to subpoena PJM and this compounded the prejudice of not have access to critical information in a timely manner.

The issuance of a subpoena should be a simple, summary process, and that is reflected by entirely different procedural requirements and deadlines. Subpoenas requesting the attendance of witnesses must be filed "no later than ten days prior to the commencement of hearing" and if expedited treatment is requested, "no later

[85] *See generally*, CSG Ex. 1; CSG Ex. 3, Attachment TS-1 (Applicant discovery responses).
[86] Tr. II at 319:23-320:11; 329:21-330:10.
[87] *See* CSG Ex. 3, Attachment TS-1.

than five days."[88] Subpoenas must be requested by "motion" but a motion requesting a subpoena is not subject to Rule 4901-1-12. The motion rule specifically applicable to subpoenas does not contemplate or authorize memoranda contra because the purpose of the "motion" is simply to provide notice to parties and the attorney examiner. A "motion" for subpoena does not require the requesting party to justify its request, anticipate objections, or otherwise ask permission.[89] The signature on a subpoena by an attorney examiner or other authorized individual is a ministerial act necessary to render the subpoena valid and capable of service. The signature does not represent a finding or ruling on any objection the party served with the subpoena may raise or the admissibility of future testimony.

CSG attempted to subpoena PJM not once, but twice. The first motion was filed before originally scheduled hearing date and withdrawn a few days later when the hearing was re-scheduled.[90] The cover email to the Attorney Examiners specifically inquired about the preferred logistics for signature and service and invited alternatives to bringing in an out-of-state witness:



MW

Mark Whitt <whitt@whitt-sturtevant.com> Monday, August 29, 2022 at 4:05 PM

To: Nicole.Woods@icemiller.com; Christopher Miller; paul@carpenterlipps.com; Kimberly W. Bojko; blittle@nisource.com; stuart.sigfried@puco.ohio.gov; kelli.king@puco.ohio.gov; Thomas V. Donadio; smith@carpenterlipps.com; john.ryan@nisource.com

Cc: jacqueline.st.john@puco.ohio.gov

CSG Motion.pdf
260.9 KB

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All –

Attached is a motion for issuance of a subpoena to Aaron Berner, Manager of Transmission Planning for PJM, to appear at the evidentiary hearing in the above matter. Along with notice of the filing I'm contacting everyone about certain logistical issues:

1. To the Attorney Examiner: I'm not sure of current protocols or preferred practice for picking up signed documents. I'm happy to send someone over to the Commission to picked up a signed subpoena. Sooner is preferrable to later given the additional logistics of service of an out of state subpoena.
2. To the Parties: The specified time and date for the witness's appearance is a placeholder. I'm happy to coordinate/accommodate alternatives to the extent I am able. Since we are dealing with an out of state witness I am also amendable to alternative methods of appearance at hearing, such as:
    a. Deposition of the witness in lieu of live appearance and submission of transcript at hearing (subject to Attorney Examiner approval)
    b. Hearing appearance by zoom or other teleconference platform

Let me know if you are any questions or if we need to huddle to discuss.

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[88] O.A.C. 4901-1-25(E).
[89] The Commission's subpoena rule is generally analogous to Rule 45 of the Ohio Rules of Civil Procedure and should be construed as such. "Without limiting the Commission's discretion the Rules of Civil Procedure should be used wherever practicable."
[90] *See* September 1, 2022 Entry in these proceedings.

CSG's next motion was filed on November 21, 2022—a full fourteen days prior to the commencement of hearing, which gave everyone nearly three times the notice the rules require. The attorney examiners were heavily and readily involved in email correspondence regarding one of many sanctions motions filed by the Applicants but no action on the motion for subpoena was communicated to CSG. On November 29, CSG reminded the hearing examiners:

Re: Second Renewed Motion For Sanctions By Applicants Moraine Wind LLC, Rugby Wind LLC, Elm...

MW

Mark Whitt <whitt@whitt... Tuesday, November 29, 2022 at 4:1...

To: Jacqueline.St.John@puco.ohio.gov; Angela Paul Whitfield; Cheryl Smith; Valerie Cahill; Kimberly W. Bojko; Jonathan Wygonski; blittle@nisource.com; Christopher.miller@icemiller.com; Nicole.woods@icemiller.com; nbagnell@reedsmith.com

Cc: David.Hicks@puco.ohio.gov

Thank you for the clarification. I would also like to inquire about the status of the motion for subpoena. Typically these are signed immediately so they can be served.

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Rather than sign the subpoena so CSG could arrange service (which is absolutely permitted for out-of-state corporate witnesses),[91] the hearing examiners requested that parties wishing to file a "memo contra" do so by Friday, December 1. This left no time for service of the subpoena before the hearing scheduled the following Monday, so the subpoena was not served. When the hearing started, the first order of business was to "deny" the motion for subpoena.[92]

[91] A Commission subpoena "may be served at any place within this state" (O.A.C. 4901-1-25(B)) but there are numerous ways to compel the attendance of out-of-state witnesses through service to agents within Ohio. For example, under Ohio Civ. R. 4.2, "delivery of a subpoena to a corporation's statutory agent will accomplish proper service of the subpoena upon the corporation." *A.O. Smith Corp. v. Perfection Corp.,* 2004-Ohio-4041, ¶ 23. This is true for both foreign and domestic business. PJM does business in Ohio and is unquestionably subject to personal jurisdiction here.

[92] *See* Tr. I at 9-12.

The explanation given for denial of the subpoena says both too much and too little. The subpoena was not served, so every argument raised to "quash" or "deny" the subpoena as if it had been served was moot. The Applicants and Blue Delta had no standing to object to the subpoena in the first place because it did not implicate *their* rights. They would have had the same opportunity to question PJM as CSG, and PJM proved itself perfectly capable of asserting its own rights. PJM raised non-material technical objections but indicated its willingness to appear of given more time to prepare. An explanation for not signing the subpoena in the first place has not been provided, and everything that followed merely compounded this prejudice.

The Commission itself may issue a subpoena on its own initiative and frankly, it is hard to a imagine a more appropriate case for doing so than this case. In any event, the absence of testimony from PJM simply leaves too many holes in the Applicants' case to grant certification.

IV. CONCLUSION

Certification to sell RECs to Ohio electric utilities and suppliers is statutorily reserved to applicants who can demonstrate that their resources are "deliverable into this state." Deliverability must be proven, not merely assumed or asserted. The Applicants have failed to carry their burden and this leaves the Commission no choice but to deny certification.

Dated: January 17, 2023

Respectfully submitted,
/s/ *Mark A. Whitt*
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ATTORNEYS FOR
CARBON SOLUTIONS GROUP, LLC

CERTIFICATE OF SERVICE

I hereby certify that a courtesy copy of the foregoing pleading was served by electronic mail upon the following individuals on January 17, 2023:

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One of the Attorneys for
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