#### **ORDER NO. 90830**

\*

\*

\*

\*

\* \* \* \*

Aligned Data Centers (MD) Propco, LLC Request for a Certificate of Public Convenience and Necessity Exemption Pursuant the Public Utilities Article Section 7-207.1

BEFORE THE	
PUBLIC SERVICE COMMISSION	ſ
OF MARYLAND	
Maillog No. 302893	

# PROVISIONAL ORDER GRANTING IN PART AND DENYING IN PART APPLICANT'S REQUEST FOR REHEARING

Before: Frederick H. Hoover, Chair Michael T. Richard, Commissioner Anthony J. O'Donnell, Commissioner<sup>1</sup> Kumar P. Barve, Commissioner Bonnie A. Suchman, Commissioner

Issued: October 10, 2023

<sup>&</sup>lt;sup>1</sup> Commissioner O'Donnell dissents. *See, infra* at footnote 13.

#### I. <u>BACKGROUND</u>

On May 12, 2023, Aligned Data Center (MD) Propco, LLC ("Aligned" or the "Applicant") filed an Application for Commission approval to site 168 diesel emergency engine-generators—rated at 3 megawatts ("MW") each—at a site in Frederick County, Maryland, designated as the IAD04 data center. The Application requests exemption from the Certificate of Public Convenience and Necessity ("CPCN") requirement, pursuant to *Annotated Code of Maryland*, Public Utilities Article ("PUA") §§ 7-207.1 and 7-207.2 ("Exemption Request").<sup>2</sup> The Commission's Technical Staff ("Staff") reviewed the Application, and filed comments recommending that the Commission approve the Applicant's Exemption Request. Staff requested further that, if necessary, the Commission should waive any element of the approval process that requires aggregation of the capacity of each generator.<sup>3</sup>

The matter was considered at the Commission's August 2, 2023, Administrative Meeting.<sup>4</sup> In addition to Staff's presentation, the Commission also heard from counsel for the Applicant<sup>5</sup> along with the Senior Director for Data Center Engineering,<sup>6</sup> the Senior Director for Program Management,<sup>7</sup> the Construction Manager<sup>8</sup> and the Managing Consultant for Trinity Consultants—the Applicant's air emissions consultant.<sup>9</sup> Also present were counsel for the Maryland Department of Natural Resources, Power Plant

<sup>&</sup>lt;sup>2</sup> The Applicant's May 12, 2023, letter stated that it was planning for fifteen stationary emergency enginegenerators, fourteen rated above the Type I generator definition of 2 MW, and one emergency generator rated below 2 MW. However, the Applicant's May 16, 2023 letter <u>confirmed</u> Aligned's plan to install 168 generators, each rated at 3 MW, as listed in Appendix A.

<sup>&</sup>lt;sup>3</sup> Staff Comments, IR-6100 (dated July 25, 2023) at 1. <sup>4</sup> Aug. 2, 2023 Audio Recording at 54:40 - 1:33:49.

Aug. 2, 2023 Audio Recording at 54:40 - 1:55:49.

<sup>&</sup>lt;sup>5</sup> David W. Beugelmans, Esq. Michael C. Powell, Esq. also was present at the hearing on behalf of the Applicant.

<sup>&</sup>lt;sup>6</sup> Rick Sparkman.

<sup>&</sup>lt;sup>7</sup> Jessica Baker.

<sup>&</sup>lt;sup>8</sup> Kevin Lancaster.

<sup>&</sup>lt;sup>9</sup> David Simmons.

Research Program ("PPRP"),<sup>10</sup> along with the PPRP Program Manager,<sup>11</sup> as well as the Maryland Department of the Environment ("MDE") Manager, Air Quality Permits Program.<sup>12</sup>

Commissioners raised a number of questions regarding planned operation of the data center, aggregation of the backup generators for which the CPCN Exemption Request is being made, and frequency of generator operations. The Commission also asked questions regarding its authority to consider, pursuant to PUA § 2-113(a)(2)(v), "the preservation of environmental quality" and (vi) "the achievement of the State's climate commitments for reducing statewide greenhouse gas emissions." Commissioners inquired of Aligned project alternatives and contingency plans in the event the Commission denied the Exemption Request. Counsel for the Applicant responded that the project could *possibly* be redesigned, but maintained that generating station projects rated at 2 MW or less are entitled to a CPCN Exemption by right, and in a CPCN process, the data center project would be looked at holistically – not something that would typically be looked at for CPCN applications.

PPRP's counsel noted that this case is a "first look" at siting backup generation for data centers in Maryland, and also recognized Aligned's generation-siting request—in the aggregate—is the equivalent of a 504 MW diesel power plant, well over the PUA § 7-207.1 70 MW exemption limit, and that, despite not being connected to the grid, could all turn on and operate at once. Discussing the CPCN and non-CPCN processes, the PPRP

<sup>&</sup>lt;sup>10</sup> Steve Talson, Esq.

<sup>&</sup>lt;sup>11</sup> Shawn Seaman.

<sup>&</sup>lt;sup>12</sup> Suna Sariscak.

representative noted that, for air quality review purposes, the processes are practically the same.

In response to additional Commission questions, MDE's Air Quality Permits Program Manager noted that a non-CPCN air quality review would not consider each of 168 generating stations on a stand-alone basis, but evaluate the entire 504 MW generation capacity as a whole. Ms. Sariscak noted that through the CPCN process MDE works with PPRP on the air quality permit requirements, but the recommendations for both the CPCN process and stand-alone non-CPCN air permit recommendations are the same.

Following consideration of the matter, the Commission denied the Aligned Data Center's CPCN Exemption Request to install 168 3 MW diesel engine-generating stations pursuant to PUA § 7-207.1, noting that the project request should instead proceed through the CPCN process. The Commission issued a Letter Order, denying the Applicant's Exemption Request on August 2, 2023.

On September 1, 2023, pursuant to PUA § 3-114, and Code of Maryland Regulations ("COMAR") 20.07.02.08, Aligned filed with the Commission an Application for Rehearing of the Commission's Order ("Request for Rehearing"). Parties filed comments, supporting and opposing the Applicant's Request for Rehearing.

An application for rehearing seeking to reverse or modify an order of the Commission shall allege the facts and circumstances which have arisen after the hearing or order which justify the reversal or modification, or the consequences resulting from compliance with the order which justify or entitle the applicant to the reversal or modification. COMAR 20.07.02.08D(2). For the reasons discussed below, Aligned's Request for Rehearing is granted in part and denied in part.

4

Subject to the conditions set forth herein, the Commission grants provisional authorization for Aligned to install diesel engine-generating capacity—not exceeding 70 MW—as emergency backup generation for its data center in Frederick, Maryland.<sup>13</sup>

#### A. <u>Request for Rehearing</u>

In its Request for Rehearing, Aligned maintains that its proposal to install 168 3 MW diesel stand-by rated emergency generators is entitled to exemption from the CPCN process pursuant to PUA § 7-207.1, arguing that despite the aggregate capacity of 504 MW, "[t]he Emergency Generating Stations will run only in the event of a complete disruption of utility service to the Data Center, as well as individually for short maintenance periods."<sup>14</sup> Aligned argues that contrary to the Commission's findings, the Emergency Generating Stations are "independent generating stations that each qualify for an exemption under PUA § 7-207.1."<sup>15</sup>

In response to the Commission's concerns regarding emissions from diesel enginegenerators, Aligned maintains that currently there are "no viable alternatives" to diesel backup generators for this use.<sup>16</sup> Aligned also notes that the maximum potential emissions from the full array of 168 emergency generating stations would constitute "just 0.006% of Maryland's goal" of reducing greenhouse gas ("GHG") emissions by 60% from 2006 levels by 2031.<sup>17</sup>

Also, with regard to alternatives, Aligned states that its consultant analyzed potential alternatives to diesel generators, "but found none satisfy the criteria required for

<sup>&</sup>lt;sup>13</sup> Commissioner Anthony J. O'Donnell dissents, stating that in his opinion the Commission's August 2, 2023 decision denying the Applicant's CPCN Exemption Request in its entirety should be reaffirmed.
<sup>14</sup> Aligned Request for Rehearing at 1.

<sup>&</sup>lt;sup>15</sup> Id.

<sup>&</sup>lt;sup>16</sup> Id.

<sup>&</sup>lt;sup>17</sup> *Id*. (emphasis original).

this use case."<sup>18</sup> The Applicant notes that the "microgrid" project likely referenced at the Administrative Meeting is simply a substation with utility-owned diesel backup generators, and that it has never developed a data center that uses renewables or battery storage in place of diesel backup generators. With regard to the Arizona project, Aligned states that the power source for that data center is supplied by a substation with *utility-owned* diesel backup generators.<sup>19</sup>

Instead, Aligned offers—as a recommended condition to granting its Exemption Request—to fully offset its yearly onsite kWh production of diesel generation by retiring an equivalent amount of Tier 1 solar and/or wind renewable energy credits ("RECs") that qualify under the Maryland Renewable Portfolio Standard.<sup>20</sup> It argues that by conditioning the requested Exemption with solar and/or wind RECs, this will address the Commission's PUA § 2-113(a)(2)(v-vi) concerns while leaving the generating stations' design and siting decisions to Frederick County and air permitting decisions to MDE.<sup>21</sup>

Aligned argues that the Commission's decision denying its CPCN Exemption Request represents an "unprecedented expansion of its CPCN permitting authority to commercial and industrial developments that require emergency backup generation, while providing no incremental greenhouse gas reduction benefits compared to conditioning its order granting a CPCN exemption."<sup>22</sup> It argues further that requiring the Applicant to seek

<sup>&</sup>lt;sup>18</sup> *Id.* at 18.

<sup>&</sup>lt;sup>19</sup> Maillog No. 305102 ("Aligned Response to Maryland Office of People's Counsel ("OPC") Opposition) at 1-2. In response to OPC's reference to a North Carolina data center project relying on solar energy, Aligned notes that the solar project does not appear to be located at the same site of the data center. *Id.* at 2. It notes that a system sized for just 48 hours of backup generation would be a 340 MW solar photovoltaic facility paired with a large 24-hour battery for a total capacity of 2,606 MWh of battery energy storage capacity. Aligned Request for Rehearing at 18.

<sup>&</sup>lt;sup>20</sup> Aligned Request for Rehearing at 2.

<sup>&</sup>lt;sup>21</sup> Id.

<sup>&</sup>lt;sup>22</sup> *Id.* at 3, 9.

CPCN review and approval for its 168 3 MW generating stations would impose a one-year delay on this important economic development project, and nullify the extensive local permitting that has already occurred.<sup>23</sup>

In its Request for Rehearing, Aligned asserts that the Commission erred in determining that the Emergency Generating Stations should be aggregated as a single "generating station" for purposes of PUA § 7-207.1.<sup>24</sup> Aggregating the 168 3 MW generating stations as a single generating station would constitute an exemption request for a 504 MW generating station, which far exceeds the 70 MW threshold set forth in the statute.<sup>25</sup> Arguing that the diesel emergency-engine generators for which it is requesting a CPCN exemption are "electrically independent" and not an integral part or unit for the production of electricity, Aligned asserts that under COMAR 20.79.01.02B(23)(a), the generating stations should not be considered "aggregated."<sup>26</sup> The fact that all 168 3 MW diesel generators are installed on the same property does not—Aligned argues—transform the data center campus into an "integral part or unit of the production of electricity."<sup>27</sup>

Additionally, Aligned argues that the Commission erroneously denied its Exemption Request based on the inference that there are available alternatives to diesel backup generators that could be used as emergency power in the event of a distribution grid system failure disrupting power to the data center.<sup>28</sup> Aligned argues that the Commission's sole consideration under PUA § 7-207.1 must be limited to "safety and

<sup>&</sup>lt;sup>23</sup> *Id*. at 3.

<sup>&</sup>lt;sup>24</sup> *Id*. at 6.

<sup>&</sup>lt;sup>25</sup> *Id*. at 8.

 $<sup>^{26}</sup>$  *Id.* at 6.

<sup>&</sup>lt;sup>27</sup> *Id.* at 11.

 $<sup>^{28}</sup>$  *Id.* at 16. Aligned estimated that backup generator operation for emergencies is expected to be minimal, noting that only six outages have occurred in the last three years, four lasting less than five minutes and two lasting more than five minutes. *Id.* at 20-21.

reliability issues" and should not consider preservation of the environment and the achievement of the State's climate commitments for reducing statewide GHG emissions, as required under PUA § 2-113(a)(2).<sup>29</sup>

Finally, Aligned asserts that the Commission erred in its findings regarding GHG emissions associated with the installation of its proposed emergency generating stations.<sup>30</sup> Notwithstanding, Aligned argues that the maximum potential GHG emissions under an assumed MDE permit to construct "would be inconsequential in Maryland and globally, including with respect to achievement of emissions reductions under the Climate Solutions Now Act of 2022."<sup>31</sup> Aligned adds that under current Environmental Protection Administration reporting standards, the emergency generating stations for which it seeks a CPCN exemption in this case would not be required to report GHG emissions, as it would be below the tons-per-year threshold for which reporting is required.<sup>32</sup>

# B. <u>Staff Comments</u>

Staff filed written comments recommending the Commission approve Aligned's Exemption Request, and if necessary, waive any element of the approval process that requires aggregation of the capacity of the backup generators.<sup>33</sup> In summarizing the Exemption Request, Staff described Aligned's request as an Application for the installation of 168 diesel generators rated at 3 MW each (504 MW total), to be used during power outages at the data center campus.<sup>34</sup> As the relevant applicable law, Staff noted that PUA § 7-207.1 permits approval of a generating station designed to provide on-site generated

<sup>&</sup>lt;sup>29</sup> *Id*. at 16.

<sup>&</sup>lt;sup>30</sup> *Id*. at 19.

<sup>&</sup>lt;sup>31</sup> *Id*.

 $<sup>^{32}</sup>$  *Id.* at 21.

<sup>&</sup>lt;sup>33</sup> Staff Comments at 1.

 $<sup>^{34}</sup>$  *Id*. at 2.

electricity if it has a capacity less than 70 MW, and any electricity exported is sold in the wholesale market.<sup>35</sup>

In its analysis, Staff noted that the generators will not be connected to the grid and will be used on-site exclusively during emergencies. Generation from the stations will also not be used in any demand response program.<sup>36</sup> The data center itself will be powered by electricity from the transmission and distribution system portion of the grid operated by The Potomac Edison Company ("Potomac Edison"), sourced from two 230 kilovolt ("kV") transmission lines from the Potomac Edison Lime Kiln and Sage Substations. Power from these lines is stepped down to 34.5 kV to supply the data center campus with energy.<sup>37</sup>

Staff notes further that the State recently enacted legislation to promote the construction of new data centers in Maryland. Qualified Data Centers are eligible for a Certificate of Exemption from the State Comptroller, exempting the holder from Maryland sales and use taxes.<sup>38</sup> Staff notes that the incentives enacted through SB 397 (2020) apply to qualified data center equipment used in the generation, transformation, transmission, distribution, or management of electricity—inclusive of the diesel generators for which Aligned's CPCN Exemption Request is sought in this case.<sup>39</sup>

Staff notes also that the 168 backup diesel generators will not be installed all at once, but rather over the course of several years and construction phases.<sup>40</sup> The initial phase—the current plan—involves one data center building and the installation of 24 3 MW diesel backup engine-generators, consisting of 20 primary and four reserve 3 MW

<sup>&</sup>lt;sup>35</sup> Id.

 $<sup>^{36}</sup>$  Id. at 3. The breaker control scheme associated with the diesel engine-generators, Staff notes, prevents even a momentary export of electricity to the grid. Id. at 4.

<sup>&</sup>lt;sup>37</sup> *Id.* at 5. Aligned Request for Rehearing at 21.

<sup>&</sup>lt;sup>38</sup> Staff Comments at 4; Senate Bill 397 (2020).

<sup>&</sup>lt;sup>39</sup> *Id*. at 4.

<sup>&</sup>lt;sup>40</sup> Id.

generators, along with one 2 MW "house generator," utilizing a block redundant topology in a 6+1 system. For every *aggregate* six primary blocks (12 MW critical), there is one reserve block ready to take on the load of a single failure.<sup>41</sup> Depending on market conditions, an additional 18 primary and two reserve generators and another 2 MW house generator would be installed.<sup>42</sup> When fully completed, the Quantum Loophole campus will host four buildings, each housing 42 3 MW diesel generating stations, for a total of 168 backup generators, excluding the four house generators.<sup>43</sup>

Staff notes that on any given day, only one or two generators will operate simultaneously for a short time to perform maintenance. Since the generators will not normally operate at the same time, Staff submits that each generator should be considered individually under the PUA § 7-207.1 exemption approval criteria. Staff notes that the diesel generators will not normally operate together except in an emergency involving the loss of electric power from the local grid.<sup>44</sup> Staff submits, however, that to the extent any rule or Commission prior practice might suggest that aggregation is required, the Commission should waive such a requirement under the public interest provision set forth in PUA § 7-207.1(e).<sup>45</sup>

In response to Aligned's Request for Rehearing, Staff reiterates its recommendation that the Commission approve the Applicant's Exemption Request.<sup>46</sup> Staff disagrees with Aligned's characterization of Commission precedent regarding co-location,<sup>47</sup> but

<sup>&</sup>lt;sup>41</sup> Aligned Request for Rehearing at 6.

<sup>&</sup>lt;sup>42</sup> Staff Comments at 5. The house generators, rated at 2 MW, Staff notes are not included in Aligned's Exemption Request. They are, however, included in the aggregate capacity authorized in the provisional exemption granted in this case.

<sup>&</sup>lt;sup>43</sup> Id.

<sup>&</sup>lt;sup>44</sup> Id.

 $<sup>^{45}</sup>$  *Id*. at 6.

<sup>&</sup>lt;sup>46</sup> Staff Response to Aligned Request for Rehearing at 6.

<sup>&</sup>lt;sup>47</sup> *Id*. at 7.

nonetheless reiterates that, if the Commission finds that aggregation of the 168 diesel engine-generators is required under PUA § 7-207.1, the Commission should waive this requirement as in the public interest.<sup>48</sup> Staff also submits that, if the Commission grants rehearing, as requested by Aligned, any CPCN exemption granted in this case should be subject to the condition proposed by the Applicant.<sup>49</sup>

# C. <u>Comments Opposing Rehearing</u>

The Maryland Office of People's Counsel ("OPC"), Sierra Club of Maryland ("Sierra Club"), Chesapeake Climate Action Network ("CCAN"), the Climate Change Working Group of Frederick County ("CCWG"), Peter Blood, Nicholas Carrera, and Elizabeth Law (on behalf of Fellowship of Scientists and Engineers) all oppose Aligned's request for rehearing.

In its Opposition, OPC notes that the Commission has broad authority over the siting of generation in the State.<sup>50</sup> OPC also notes that "[i]t is undisputed that Aligned's proposed 168 3 MW diesel generators are meant to power up, as a whole, to provide an integral 504 MW of generation to the proposed data center in the event of a power outage."<sup>51</sup>

OPC notes further that only a generating station that does not exceed 70 MW can qualify for a CPCN exemption under PUA § 7-207.1, and argues that in this case it is proper for the Commission to aggregate the generating stations proposed in Aligned's Exemption Request.<sup>52</sup> OPC further argues that nothing in PUA § 7-207.1 prohibits the Commission

<sup>&</sup>lt;sup>48</sup> *Id*. at 6.

<sup>&</sup>lt;sup>49</sup> Id.

<sup>&</sup>lt;sup>50</sup> OPC Opposition at 5, citing *Bd. of County Commissioners of Washington County v. Perennial Solar, LLC*, 239 Md. App. 380, 390 (2018).

<sup>&</sup>lt;sup>51</sup> *Id.* at 7, citing response of Aligned's Senior Director of Engineering, Rick Sparkman, Aug. 2, 2023 Audio Recording at 1:02:05.

<sup>&</sup>lt;sup>52</sup> Id. at 8.

from aggregating co-located backup generators when reviewing a CPCN exemption application.<sup>53</sup>

Additionally, OPC argues that the Commission acted properly in considering potential GHG emissions from the proposed diesel generators. Both under PUA § 2-113(a)(2)(v-vi), and under PUA § 7-207(e)(4)(iii-iv), the Commission must consider a generating station's climate impacts. According to OPC, the CPCN process is the best way for the Commission to address the installation of the 168 3 MW diesel engine-generators proposed by the Applicant in this case.

Sierra Club also opposes Aligned's Request for Rehearing. In its Opposition, Sierra Club argues that Maryland law requires CPCN proceedings for generators even if they are small in size, noting that a "blanket" CPCN exemption applies only for generators 2 MW or less, and beyond that only generators with a capacity under 70 MW.<sup>54</sup> According to Sierra Club, an exemption for 168 3 MW generating stations would deprive Maryland residents of the results of the critical analysis that occurs in the CPCN process.<sup>55</sup>

In its Opposition, CCAN argues that "[c]ombined, these generators would have more capacity than the now-closed C.P. Crane coal plant."<sup>56</sup> CCAN notes further that Aligned's backup generation-related data center proposal is among the first of many, and suggests that regulators must take the time to fully review industry practices and proposals to ensure that they are compatible with the State's commitment to addressing climate change.<sup>57</sup>

<sup>&</sup>lt;sup>53</sup> *Id*. at 10.

<sup>&</sup>lt;sup>54</sup> Sierra Club Opposition at 4.

<sup>&</sup>lt;sup>55</sup> *Id*. at 5.

 <sup>&</sup>lt;sup>56</sup> CCAN Opposition at 1. CP Crane was a 400 MW coal-fired electric generating station located in Baltimore County, Maryland. The plant was closed in June 2018.
 <sup>57</sup> Id.

CCWG also opposes Aligned's Request for Rehearing, arguing that if a precedent is set with this request, the total number of such diesel generators could be in the thousands throughout Maryland. It further argues that buying RECs to offset emissions from the proposed generators will make the GHG emissions "go away" is incorrect. It also claims using RECs as mitigation for a new "dirty" system only serves to exacerbate the climate crisis.<sup>58</sup>

Individual commenters also oppose rehearing. Peter Blood notes that "approval would set a bad precedent," that "all 168 generators function as one," the project is "oversized," "noise" has not been modeled," new infrastructure will be needed, which will result in "trickle down cost" for which residents will have to foot the bill.<sup>59</sup>

Nicholas Carrera argues that this is "exactly the kind of case that demands the full CPCN route," noting that "[w]e are talking about a data center here, not a hospital or a flight control center."<sup>60</sup>

Elizabeth Law, writing on behalf of the Fellowship of Scientists and Engineers, describes the operation of 168 3 MW ("locomotive-sized") diesel engine-generators as equivalent to one 504 MW diesel generator running during an electrical emergency.<sup>61</sup> She states that Frederick County's regulations were "inadequate" to prevent the approval of the site plan for the project, however, she notes that the Commission's decision denying Aligned's Exemption Request may prompt more rigorous and more protective regulations before another data center application is submitted for consideration.<sup>62</sup>

<sup>&</sup>lt;sup>58</sup> CCWG Opposition at 1.

<sup>&</sup>lt;sup>59</sup> Peter Blood Opposition at 1.

<sup>&</sup>lt;sup>60</sup> Nicholas Carerra Opposition at 1.

<sup>&</sup>lt;sup>61</sup> Elizabeth Law Opposition at 1.

<sup>&</sup>lt;sup>62</sup> *Id*. at 2.

## II. <u>DISCUSSION</u>

The Commission's conclusion that Aligned's Exemption Request for 168 3 MW diesel engine emergency generating stations, plus four 2 MW house generators, if granted would result in installation of an aggregate *512 MW* generation station is reinforced repeatedly by comments by representatives from PPRP and MDE during the August 2, 2023, Administrative Meeting. Additionally, in their opposition to Aligned's Request for Rehearing, OPC, Sierra Club, CCAN, CCWG and individual commenters argue that the proposed operation of all 168 3 MW diesel engine-generations "meant to power up, as a whole ... in the event of a power outage," clearly makes the project a 504 MW generating station within the meaning of "generating station" under COMAR 20.79.01.02B(23)(a). The Applicant's Request for Rehearing describes the backup power generation as an aggregate 504 MW system.<sup>63</sup> The Applicant's arguments to the contrary are not persuasive.

Aligned correctly notes that the Commission routinely grants CPCN exemptions for similar diesel backup generating stations that do not export electricity to the grid.<sup>64</sup> However, none of the Applicant's examples specified that the Commission did not—as it assumes—treat the generating stations as aggregated. Rather, they indicate the exact opposite. In each case, the focus of the applicant and Staff was that the generators would not be synchronized with the local electricity company's grid and would only be used during emergencies.

#### A. <u>The CPCN Process</u>

The CPCN process is a comprehensive process established pursuant to the Power Plant Siting and Research Act of 1971—and subsequent revisions—for evaluating the

<sup>&</sup>lt;sup>63</sup> Aligned Request for Rehearing at 17.

<sup>&</sup>lt;sup>64</sup> *Id*. at 8, n.14.

effects of proposed power generation facilities on surrounding communities,<sup>65</sup> involving among other things—the notification of specified stakeholders, the holding of public hearings, the consideration of recommendations by State and local government entities, and the consideration of the project's effects on various aspects of the State infrastructure, economy, and environment. Pursuant to PUA § 7-207(b)(1)(i), a party may not begin construction on a generating station unless that party obtains a CPCN from this Commission.

Before taking final action on a CPCN application, the Commission must give due consideration to recommendations of the governing body of each county or municipality in which any portion of the project is proposed to be located and various aspects of the State infrastructure, economy, and environment. While the General Assembly through Senate Bill 397 (2020) clearly intended to incentivize data center development in Maryland,<sup>66</sup> which does no doubt encourage the Commission to also make timely decisions regarding data center projects,<sup>67</sup> that act did not nor was there companion legislation abrogating the Commission's responsibility to faithfully administer the requirements of the CPCN statute.

Additionally, during the 2023 Legislative Session, the General Assembly enacted HB 692 granting counties and municipalities the authority to approve or deny any local permit required under a CPCN issued by the Commission, providing that a county or municipality must approve or deny such a permit within a reasonable time and in

<sup>&</sup>lt;sup>65</sup> Md. Code Ann., Nat. Res. § 3-301(d) (1974, 2012 Repl. Vol.); *Accokeek, Mattawoman, Piscataway Creeks Communities Council, Inc. v. Md. Pub. Serv. Comm'n*, 227 Md. App. 265, 293 (2016), *aff'd*, 451 Md. 1 (2016).

<sup>&</sup>lt;sup>66</sup> Aligned Request for Rehearing at 2.

<sup>&</sup>lt;sup>67</sup> *Id.* at Exh. 1 (letter from Governor Wes Moore, dated August 31, 2023).

accordance with local laws, to the extent that local laws are not preempted by State law.<sup>68</sup> In the Fiscal and Policy Note for HB 692 (2023), the Commission advised that the bill addresses an emerging regulatory gap occasioned by the Supreme Court of Maryland's decision in the *Perennial Solar* case<sup>69</sup> between the Commission's exclusive authority over the siting of generating stations in the State and local authority over the issuance of permits by counties and municipalities. The potential delays that are to be avoided by the bill with regard to renewable energy projects, can also be applied to this case.<sup>70</sup>

In this case, the CPCN process for the data center project and its on-site emergency backup generation can be somewhat more streamlined, since the backup generators will not be grid-connected. Nonetheless, that process still requires the Applicant and PPRP to consider alternatives.<sup>71</sup> Although the impact of the generators on the stability and reliability of the electric system need not be examined in the way that would apply to the construction of new base load capacity, diesel generator fuel storage, waste disposal, air and noise quality issues still warrant review. Whether the alternatives discussed during the

https://www.pjm.com/-/media/library/reports-notices/2022-rtep/2022-rtep-report.ashx

<sup>&</sup>lt;sup>68</sup> A county or municipality is prohibited from conditioning the approval of a local permit required under a CPCN on receipt of specified zoning reviews or approvals or on a finding of consistency with the local comprehensive plan or zoning.

<sup>&</sup>lt;sup>69</sup> Bd. of County Commissioners of Washington County v. Perennial Solar, LLC, 239 Md. App. 380, 390 (2018)

<sup>&</sup>lt;sup>70</sup> 2023 Md. Laws Ch. 515 (HB 692) takes effect on October 1, 2023.

<sup>&</sup>lt;sup>71</sup> Load growth in Maryland (including the Potomac Edison service territory), and data center-driven load forecasts are referenced in detail in PJM Interconnection, LLC's ("PJM") 2022 Regional Transmission Expansion Plan (RTEP). "Significant load growth due to new construction of data centers is driving the need for additional sensitivity studies to assess the potential impacts of large localized load increases on transmission adequacy ...." PJM 2022 RTEP at 36.

In January 2023, PJM noted that First Energy requested PJM consider load additions related to significant growth in data centers. The load is predominantly due to a single site called Quantum Loophole. The 2023 Load Forecast considers nearly 800 MW, though there is considered to be potential for significantly more. January 2023 Load Forecast Supplement at 19.

<sup>/</sup>https://pjm.com/-/media/planning/res-adeq/load-forecast/load-forecast-supplement.ashx

Commission's August 2, 2023 Administrative Meeting or by others are viable or not are best addressed by PPRP and other parties during the CPCN process.

## B. <u>Generating Station Exemptions</u>

PUA § 7-207.1 was added to the CPCN statutory scheme in 2001, pursuant to the enactment of HB 356 (2001). Subject to an opportunity for public comment and public hearing requirements, pursuant to PUA § 7-207.1(a)(1), the Commission may exempt from the PUA § 7-207 CPCN requirement construction of a generating station designed to provide on-site generated electricity if (1) the capacity of the generating station does not exceed 70 megawatts, and (2) the electricity that may be exported for sale from the generating station to the electric system is sold only on the wholesale market pursuant to an interconnection, operation, and maintenance agreement with the local electric company. The purpose of this alternate process is to facilitate and simplify regulatory approvals by transferring responsibility from the Commission's preemptive statewide-jurisdiction to the local governments – principally, but not exclusively – for smaller wind and solar-powered electric generating stations.<sup>72</sup>

A "generating station"—pursuant to COMAR 20.79.01.02B(23)(a)—means property or facilities located in Maryland constituting an integral plant or generating unit for the production of electric energy, including any new production unit that would be added to an existing production plant. Under COMAR 20.79.01.02B(23)(b), a generating unit less than or equal to 2 MW is <u>not</u> considered a generating station, and no CPCN

<sup>&</sup>lt;sup>72</sup> See, Dan's Mountain Wind Force, LLC v. Shaw, No. 1238, slip op. at 4 (Md. Ct. Spec. App. Apr. 14, 2022) (order affirming Commission decision granting CPCN exemption for less than 70 MW wind energy generating facility in Allegany County, MD), Petition for Writ of Certiorari denied (Aug. 30, 2022).

exemption is required. Generating stations -- defined under COMAR 20.79.01.02B(23)(a) -- of 3 MW may not be installed without a CPCN exemption from the Commission.

Pursuant to COMAR 20.79.01.03A, "A person may file an application for an exemption from the requirement to obtain a [CPCN] for the construction of a generating station if the person intends to construct a generating station which meets the requirements under [PUA] § 7-207.1(a)." For this case, the applicable exemption provision is PUA § 7-207.1(a)(1)(i)(1) – for off-site generating station capacity not exceeding 70 MW.

Unless the Commission is precluded as a matter of law from treating the 168 3 MW diesel emergency generating stations as aggregated, the installation of the generating stations—as proposed by Aligned—does <u>not</u> qualify for a PUA § 7-207.1 exemption.

Aligned argues that because the Data Center *as a whole is* not a "generating station," the capacity of the individual emergency generating stations cannot be aggregated for purposes of PUA § 7-207 and 7-207.1,<sup>73</sup> and that Commission precedent establishes that separate co-located generators are not aggregated for purposes of overall CPCN capacity.<sup>74</sup> Citing PUA § 7-207.1(e), Staff recommended that the Commission waive any element of the approval process that may require aggregation of the capacity of the data center diesel generators.<sup>75</sup>

In its Comments, Staff described prior instances in which it recommended aggregation, such as where two adjacent solar photovoltaic electric generation facilities under common ownership—operating together as a single generating station—were being evaluated. In this instance, however, Staff noted that the diesel generators will not

<sup>&</sup>lt;sup>73</sup> Aligned Rehearing Request at 11.

<sup>&</sup>lt;sup>74</sup> Id. at 12, 13 (citing Annapolis Solar Park ("Annapolis Solar") as an example).

<sup>&</sup>lt;sup>75</sup> Staff Comments at 6.

normally operate together except in an emergency involving the loss of electric power from the local grid.<sup>76</sup>

OPC notes, however, that Maryland law enables the Commission to aggregate individual generators as a single "generating station" for purposes of the CPCN exemption statute.<sup>77</sup> In response to Aligned's Annapolis Solar example, OPC also noted that (1) the Annapolis Solar project consisted of seven 2 MW or less solar net metering units that were excluded from the definition of "generating station" under COMAR 20.79.01B(23)(b), and (2) even if the Commission had chosen to aggregate the seven Annapolis Solar units, the aggregated capacity was less than 14 MW, well within the 70 MW exemption limit for offsite generation under PUA § 7-207.1. Here, the Commission rejects Staff's recommendation that the Commission waive aggregation of Aligned's 168 3 MW diesel engine-generators because the undisputed project design is for all 168 diesel generators plus four 2 MW house generators that power up, as a whole, to provide an integral *512 MW* of generation to the proposed data center in the event of a power outage.<sup>78</sup>

#### **COMMISSION DECISION**

Because the aggregate capacity of the Applicant's project exceeds 70 MW, Aligned's argument that the emergency generating stations should not be aggregated is rejected.<sup>79</sup> Aligned ask the Commission to ignore the total generation capacity of its project and focus only on the individual generators. However, based on the record in this case, the Commission grants Aligned's Request for Rehearing in part, by authorizing a

<sup>&</sup>lt;sup>76</sup> Id.

<sup>&</sup>lt;sup>77</sup> OPC Opposition at 8.

<sup>&</sup>lt;sup>78</sup> *Id.* at 7, citing response of Aligned's Senior Director of Engineering, Rick Sparkman, Aug. 2, 2023 Audio Recording at 1:02:05.

<sup>&</sup>lt;sup>79</sup> As OPC notes in its Opposition, acceptance of Aligned's request to not require aggregation of the generation stations in this case would render the 70 MW limit for off-site generation set forth in PUA § 7-207.1 nugatory. *Id.* at 11.

provisional exemption for the installation of generation up to a capacity level not to exceed 70 MW, subject to conditions as set forth herein.

#### A. <u>Provisional Exemption</u>

During the hearing, counsel for the Applicant responded that if Aligned's Exemption Request as presented was denied, the project could *possibly* be redesigned, noting that generating units 2 MW or less are exempt from the CPCN statute, but obviously—for the same reasons an exemption request for 168 3 MW generators is denied—a project redesign to deploy 256 2 MW diesel engine-generators would also be considered problematic. Redesigning the project to only include 2 MW or smaller units effectively negates the purpose of the CPCN exemption statute.

However, in Exhibit 3 of Aligned's Request for Rehearing—and as noted in Staff's Comments—the initial phase of the Applicant's project consists of constructing the core and shell of the data center building.<sup>80</sup> In order to accommodate, in part, the initial phase of the project, the Commission grants a provisional exemption for a portion of the Applicant's emergency generators, the aggregation of a number of generators less than or equal to 70 MW. This is inclusive of all on-site generation regardless of the generation source or the purpose for its use, both 2 and 3 MW generating units.<sup>81</sup> This would allow

<sup>&</sup>lt;sup>80</sup> Aligned Request for Rehearing, Exh. 3 at 1; Staff Comments at 5.

<sup>&</sup>lt;sup>81</sup> The house generators are included within the total 70 MW exemption. In determining generating station exemptions under PUA § 7-207.1, 35 2 MW generating units aggregate to 70 MW just as 168 3 MW generating stations aggregate to 504 MW. This is consistent with the Commission's routine practice, as indicated in its approval of an exemption request by Amazon.com Services, LLC to construct a 12 MW Type I generation station in Hagerstown, Maryland, comprising four 2.5 MW generators and one 2 MW generator, Maillog No. 239732 (Jun. 1, 2022), and the approval of an exemption request by Department of the Army, US Army Installation Management Command to construct two diesel generators rated at 2.5 MWs each for a total of 5 MW, Maillog No. 304128 (Sep. 20, 2023). Aligned's 12 MW block redundant topology clearly represents aggregation of the Applicant's generation project.

for the installation of generators up front, while the Applicant pursues a CPCN for the full deployment of backup generation for a completed data center campus.

A provisional exemption for partial installation of the backup generator array in this case is not inconsistent with the CPCN requirement, which is applicable to the full deployment of the total emergency generation installation as a whole. These would only be inconsistent if the exemption applied to the full amount of generating capacity for which the CPCN Exemption Request was made.<sup>82</sup> Here, the exempted generating stations are expected only to serve as the initial phase of a large project. The Applicant bears the risks of obtaining a CPCN for the full amount of capacity needed, but is authorized to proceed with the capacity amount of exempted generation, as a Qualified Data Center pursuant to Senate Bill 397 (2020).

In the event Aligned seeks a CPCN for the full 512 MW of backup generating capacity, the county and municipal government approvals authorized pursuant to HB 692 (2023), and required within a reasonable time and in accordance with local laws should provide for the timely and efficient decision-making stressed in Governor Moore's August 31, 2023 letter appended to Aligned's Request for Rehearing. The two-year notice requirement to the Commission prior to commencing a project set forth in PUA § 7-208(c) is hereby waived.

Additionally, the State Agencies involved in the CPCN process should be amenable to fully cooperating with the Applicant to make timely recommendations regarding the

<sup>&</sup>lt;sup>82</sup> See, e.g., Dan's Mountain Wind Force, LLC (Case Nos. 9164 and 9413) (an exemption authorization for a 69.6 MW wind generating facility was required to be withdrawn in order to pursue a full CPCN for the identical project).

Applicant's proposal. Any additional requests by the Applicant to expedite CPCN proceedings regarding this project will be given due consideration.

## B. <u>Conditions</u>

Pursuant to PUA § 7-208(f), the Commission may attach conditions to its approval of CPCNs and CPCN exemptions. To mitigate GHGs associated with periodic testing and operation of the stations during grid outages, Aligned proposes—as a condition to its Exemption Request—to fully offset its actual yearly onsite kWh production of diesel generation by retiring an equivalent amount of Tier 1 solar and/or wind RECs.<sup>83</sup> The Commission finds that adopting this condition comports with its responsibilities under PUA § 2-113(a)(2)(v-vi) to address preservation of environmental quality and the achievement of the State's climate commitments for reducing statewide greenhouse gas emissions. Therefore, in granting a provisional exemption to install up to 70 MW of onsite diesel engine-generators, should the Applicant accept the provisional exemption, the Commission requires the following conditions: (1) Aligned shall obtain and retire Maryland-qualified Tier 1 solar RECs as offsets equivalent to the annual kWh output of the generating stations exempted in this Order,<sup>84</sup> (2) the generating stations exempted herein shall be subject to any diesel fuel storage, waste disposal and other air quality and noise abatement requirements based on assessment by MDE and PPRP, (3) the Applicant shall, within 30 days of the installation of backup generators authorized herein, provide a detailed site plan for review by Staff and PPRP, displaying the location of each backup

<sup>&</sup>lt;sup>83</sup> Aligned Request for Rehearing at 2.

<sup>&</sup>lt;sup>84</sup> The Applicant offered to obtain and retire Tier 1 solar and/or wind RECs. In this Order, Tier 1 solar RECs are the preferred source of renewable energy offsets. If an adequate amount of solar RECs is infeasible, Aligned shall notify the Commission of the quantity of Tier 1 wind RECs needed to fulfill its commitment. The CPCN review process should consider the Applicant's compliance with the MDE and PPRP requirements applicable to the 70 MW of generating capacity installed pursuant to the provisional exemption granted herein.

generating station, and (4) in the event Aligned seeks a CPCN for the full 512 MW of backup generating capacity, the Applicant shall commit to obtaining and retiring Maryland-qualified Tier 1 solar RECs as offsets equivalent to the annual kWh output of the additional generating stations that may be authorized in a future CPCN order. A compliance report detailing REC offsets procured and retired shall be submitted annually to the Commission by April 1.<sup>85</sup>

Any CPCN proceeding associated with the Applicant's project shall not disaggregate the provisionally exempted generating stations, but shall consider, as a whole, the full capacity of the emergency generating stations' emissions output, and other environmental impacts.

#### III. <u>CONCLUSION</u>

For the foregoing reasons, the Commission grants in part and denies in part Aligned's Request for Rehearing. In accordance with this Order, and subject to the conditions set forth herein, the Commission grants a provisional exemption to Aligned for the installation of diesel engine-generation stations with total capacity of up to 70 MW as backup generation for its data center project in Frederick County, Maryland. The Commission denies Aligned's Request for the balance of the back-up diesel enginegenerating stations. Aligned shall notify the Commission within 15 days of this Order whether it accepts the provisional authorization granted herein.

**IT IS, THEREFORE,** this 10th day of October, in the year Two Thousand Twenty-Three by the Public Service Commission of Maryland, **ORDERED**:

<sup>&</sup>lt;sup>85</sup> Alternative compliance payments with regard to REC offsets that are not retired are subject to the requirements of PUA § 7-705(b).

(1) that Aligned Data Centers (MD) Propco, LLC's Request for Rehearing is hereby granted in part and denied in part. The Applicant's Exemption Request for the installation of the full array of 168 3 MW diesel engine-generators without Certificate of Public Convenience and Necessity review is denied. However, subject to the conditions set forth herein, Aligned is granted a provisional CPCN exemption to install generators with total on-site generating capacity of up to 70 MW for the initial phase of its data center project in Frederick, Maryland;

(2) that Aligned shall confirm acceptance or rejection of the provisional exemption authorized in this Order within 15 days;

(3) that the two-year notice requirement to the Commission prior to commencing a project set forth in PUA § 7-208(c) is hereby waived;

(4) that within 30 days of installation of backup generators authorized herein, Aligned shall provide a detailed site plan for review by Staff and PPRP, displaying the location of each backup generating station;

(5) that Aligned shall procure Maryland-qualified Tier 1 solar renewable energy credits to offset the full annual kWh output of each provisionally authorized backup generating station, and report compliance as directed herein;

(6) that any CPCN obtained by Aligned shall encompass consideration of the aggregate generation output of all backup generating stations, including those for which a provisional exemption is authorized in this Order;

(7) that any CPCN obtained by Aligned shall be subject to the full Marylandqualified Tier 1 solar REC offset requirement for the annual kWh output for each additional generating station, and report compliance as directed herein;

24

(8) that if an adequate quantity of solar RECs is infeasible to satisfy the Applicant's renewable energy offset requirements under the provisional exemption or under a CPCN for its additional backup generating capacity, Aligned shall notify the Commission of the quantity of Tier 1 wind RECs needed to fulfill its commitment; and

(9) that *if the provisional authorization granted herein is accepted*, within 90 days of this Order, Aligned shall submit a compliance filing with the Commission demonstrating compliance with the conditions set forth herein.

/s/ Fredrick H. Hoover, Jr.

/s/ Michael T. Richard

/s/ Kumar P. Barve

<u>/s/ Bonnie A. Suchman</u> Commissioners