

151 FERC ¶ 61,231  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Philip D. Moeller, Cheryl A. LaFleur,  
Tony Clark, and Colette D. Honorable.

PJM Interconnection, L.L.C.  
Commonwealth Edison Company

Docket No. ER15-3-001

ORDER DENYING REHEARING

(Issued June 18, 2015)

1. On November 28, 2014, the Commission accepted proposed revisions to Attachment H-13 (Network Integration Transmission Service for Commonwealth Edison Company (ComEd) of the PJM Open Access Transmission Tariff (Tariff) submitted by PJM Interconnection, L.L.C. (PJM ) on behalf of ComEd.<sup>1</sup> The revisions allow ComEd to begin assessing a wholesale distribution charge to Energy Vault LLC (Energy Vault). The Energy Storage Association (ESA) has requested rehearing of the November 28, 2014 Order. In this order, we deny rehearing.

**I. Background**

2. Energy Vault is a battery energy storage facility connected to ComEd's distribution system that will participate in PJM's markets. Attachment H-13 of the Tariff sets forth the method that ComEd uses to assess wholesale distribution charges on customers such as Energy Vault connected to ComEd's distribution system. ComEd imposes a wholesale distribution charge on all customers taking wholesale distribution service with the exception of generators connected to the distribution system. ComEd at one time applied a wholesale distribution charge for generation, but eliminated that provision because it conducted studies that "demonstrate that reverse flows from renewable generators may benefit ComEd's system by reducing congestion and line loading in some conditions."<sup>2</sup>

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<sup>1</sup> *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,185 (2014) (November 28, 2014 Order).

<sup>2</sup> *Commonwealth Edison Co.*, 129 FERC ¶61,185, at P 8 (2009).

3. The wholesale distribution charge is a weighted average carrying charge that is applied on a case-by-case basis, depending on the distribution facilities expected to be used in providing wholesale distribution service. Using the method required by paragraph 7 of Attachment H-13,<sup>3</sup> ComEd identified the distribution facilities that will be used by Energy Vault's battery storage operation and computed an annual wholesale distribution charge of \$3,449, to be billed at a rate of \$287.42/month. ComEd's October 1, 2014 filing in this docket revised paragraph 8 of Attachment H-13 to add Energy Vault's wholesale distribution charge.<sup>4</sup> ComEd stated in its filing that it consulted with Energy Vault and understood that there was no objection to the charge.

4. The ESA protested the applicability of wholesale distribution charges to energy storage facilities that provide services to the grid such as Energy Vault. The ESA also contended that the wholesale distribution charge would charge energy storage project customers, such as Energy Vault, which withdraw and inject energy as part of their normal operations, twice for the same service.

5. In the November 28, 2014 Order the Commission accepted the charge, finding that Energy Vault is located on ComEd's distribution system, and as a result, ComEd must plan its system to accommodate the Energy Vault facility. The Commission found that the wholesale distribution charge would ensure that Energy Vault shares in the cost of the distribution system that is needed for Energy Vault to withdraw energy to charge its batteries and that the customer-specific withdraw amount is reflected as directly-assigned net distribution plant and is specific to Energy Vault's share of non-coincident peak loading.<sup>5</sup> The Commission also determined that, contrary to the claims of the ESA, ComEd did not propose to double charge Energy Vault for such service.<sup>6</sup>

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<sup>3</sup> Paragraph 7 of Attachment H-13 provides that "[a]n annual Fixed Charge Rate of 24% shall apply to the net distribution plant that is directly assigned to a customer taking wholesale distribution service over ComEd distribution facilities. The net distribution plant will be directly assigned to the customer based on the customer's pro-rata share of the non-coincident peak loading of the distribution facilities necessary to provide the service. Generating units connected at the distribution level and requiring wholesale distribution service will not be assessed a charge based on application of the Fixed Charge Rate, but will be responsible for paying interconnection costs and other incremental costs determined for such customer."

<sup>4</sup> <http://etariff.ferc.gov/TariffSectionDetails.aspx?tid=1731&sid=168686>.

<sup>5</sup> November 28, 2014 Order at PP 13-14.

<sup>6</sup> *Id.*

## II. Request for Rehearing

6. On December 29, 2014 the ESA filed a timely request for rehearing. The ESA contends that the Commission erred by allowing ComEd to assess a wholesale distribution charge to Energy Vault because, according to the ESA, the November 28, 2014 Order: (1) incorrectly classified Energy Vault as a wholesale customer serving load at the distribution level; (2) erroneously decided that an entity not subject to station power charges should be assessed wholesale distribution charges; (3) conflicts with the Commission's precedent that defines energy storage resources as generators; and (4) discounts or ignores the benefits that energy storage resources provide to the grid.

## III. Other Pleadings

7. On December 24, 2014, Energy Vault filed a motion to intervene out of time and protest. Energy Vault states that good cause exists to permit it to intervene out of time. In support of its motion to intervene, Energy Vault states that it did not previously intervene in this proceeding because ComEd did not serve Energy Vault as required under the Commission's regulations. Energy Vault contends that its intervention is necessary to correct certain representations regarding Energy Vault's agreement to the wholesale distribution charge and participation in this proceeding.<sup>7</sup>

8. On December 31, 2014, Glidepath Power LLC filed comments in support of the motion to intervene and protest of Energy Vault and the ESA request for rehearing. Consolidated Edison Energy, Inc. (Consolidated Edison) filed an out of time motion to intervene on January 5, 2015.

9. On January 8, 2015, ComEd filed an answer to the motion to intervene and protest of Energy Vault and the request for rehearing of the ESA.

10. Answers to ComEd were filed on January 22, 2015 by Energy Vault and January 22, 2015 by the ESA. ComEd filed a second answer on February 5, 2015 and Energy Vault and the ESA again responded with their second answers on February 20, 2015.

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<sup>7</sup> ComEd had no objection to the grant of a motion to intervene out of time to Energy Vault.

#### IV. Discussion

##### A. Procedural Matters

11. When ruling on a late-filed motion to intervene, the Commission applies the criteria set forth in Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2014), and considers, among other things, whether the movant had good cause for failing to file the motion within the time prescribed, whether any disruption to the proceeding might result from permitting the intervention, and whether any prejudice to or additional burdens upon the existing parties might result from permitting the intervention. In addition, it is generally the Commission's policy to deny motions to intervene out of time that are, as here, filed following issuance of a dispositional order.<sup>8</sup>

12. With respect to Energy Vault, we find good cause exists and grant Energy Vault's late-filed motion to intervene and protest. Energy Vault, the party that is required to pay the charges at issue in this proceeding, was not served by ComEd with a copy of the Tariff revisions until after the order was issued by the Commission on November 28, 2014.

13. Consolidated Edison contends its late-filed intervention is the result of administrative oversight. We find that Consolidated Edison failed to make a showing of good cause to justify late intervention, and accordingly we deny Consolidated Edison's late-filed motion to intervene.

14. Rule 713(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.713(d) (2014) prohibits an answer to a request for rehearing. Accordingly, we reject the Answers filed by ComEd Energy Vault and the ESA.

##### B. Substantive Matters

15. The Commission has allowed transmission owners to charge a wholesale distribution charge to customers, including generators, using their distribution systems to make wholesale sales of energy.<sup>9</sup> In 2009, ComEd determined that on its system, it

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<sup>8</sup> *Columbia Gas Transmission*, 111 FERC ¶61,431 (2005).

<sup>9</sup> See *PJM Interconnection, LLC*, 116 FERC ¶ 61102, at P 8 n.4 (2006) (assessing wholesale distribution charge on a wind generator interconnecting to ComEd's distribution system); *PJM Interconnection, L.L.C.*, 123 FERC ¶ 61,087 (2008) (accepting wholesale distribution agreement for a generating facility); *PJM Interconnection, L.L.C.*, 122 FERC ¶ 61,112 (2008) (wholesale distribution charge for hydroelectric facility).

would no longer impose a wholesale distribution charge on generators because reverse flows from renewable generators may benefit ComEd's system by reducing congestion and line loading in some conditions.<sup>10</sup>

16. The ESA, in its rehearing request, and Energy Vault, in its protest, assert that the Energy Vault battery should be considered “generation” exempt from wholesale distribution charges under ComEd’s attachment H-13, because storage facilities have been so deemed by the Commission in other contexts. We disagree. The Commission has recognized that storage devices may be classified as generation, transmission, or distribution assets; it is a case-specific inquiry, depending upon the intended use of the storage device at issue.<sup>11</sup> For this very reason, in Order No. 784,<sup>12</sup> the Commission modified its Uniform System of Accounts by creating new sub-accounts for storage devices under each of the existing functional classifications of production, transmission, and distribution.

17. While the Commission has in some cases treated storage devices the same way it treats generation for specific purposes such as interconnection or Exempt Wholesale Generator status under the Public Utility Holding Company Act, all such cases rely on the specific facts and intended uses of the storage devices at issue. Further, those cases say nothing at all regarding the recovery of costs incurred through a wholesale distribution charge, the question at the heart of this proceeding. Moreover, the ESA and Energy Vault’s view that a storage device should be treated the same way for purposes of assessing a wholesale distribution fee is undercut by the fact that storage and generation have significantly different impacts on the distribution system.

18. An energy storage device such as Energy Vault’s, located on a distribution system, spends a substantial share of its operating life being charged by withdrawing energy from the distribution system. Generation does not. ComEd has explained that a storage device in charging mode uses its distribution system like any other load. ComEd has also pointed out that one reason why generation is exempted in the tariff from the wholesale distribution charge is because the associated counterflow was largely beneficial to

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<sup>10</sup> *Commonwealth Edison Co.*, 129 FERC ¶ 61,185, at P 8 (2009).

<sup>11</sup> See, e.g., *Western Grid Development, LLC*, 130 FERC ¶ 61,056, *reh’g denied*, 133 FERC ¶ 61,029 (2010) (*Western Grid*).

<sup>12</sup> *Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*, Order No. 784, 78 Fed. Reg. 46,178 (July 30, 2013), FERC Stats. & Regs. ¶ 31,349, at P 141 (2013), *order on clarification*, Order No. 784-A, 146 FERC ¶ 61,114 (2014).

ComEd's distribution system.<sup>13</sup> While a storage device discharging to the distribution system should also provide beneficial counterflow, a storage device differs from generation in that it must spend a substantial amount of time charging. During charging, it will add to the flow and load on the distribution system just like any other load and, crucially, unlike a generator.<sup>14</sup> Therefore, in light of these particular facts we find reasonable Com Ed's determination to treat the use of the distribution system by a storage device differently from generation, as it has in the revised Tariff.

19. The ESA asserts that the revisions to the PJM Tariff filed by ComEd incorrectly classified Energy Vault as a "wholesale customer serving load" and therefore the wholesale distribution charge is unlawful.<sup>15</sup> The ESA appears to argue that because Energy Vault does not serve retail load, the fact that it's charging activity places burdens on the distribution system should be ignored. However, the impact of its charging load on the distribution grid is indistinguishable from the impact of any other load. Notwithstanding the label applied to Energy Vault, be it deemed a wholesale customer serving load, generation, market seller or some combination, it is indisputable that Energy Vault seeks to use the ComEd distribution system to both inject into and withdraw power from its batteries. The November 28, 2014 Order was not based on any particular label or classification for Energy Vault, but upon the fact that Energy Vault is using ComEd's distribution system to withdraw energy for battery charging and therefore should contribute to its costs. Thus, we find that ComEd may recover the costs of the use of its distribution system by Energy Vault, provided such recovery is just and reasonable.<sup>16</sup>

20. The ESA refers to the definition of "Energy Storage Resource" as a "Market Seller" in the PJM Tariff in support of its position that energy storage is generation and thus Energy Vault is not subject to the ComEd wholesale distribution charge. The Energy Storage Resource (ESR) definition in the PJM Tariff states:

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<sup>13</sup> ComEd Attachment H-13 at paragraph 7, Letter Order, Docket No. ER10-16 (November 3, 2009).

<sup>14</sup> Energy storage devices are assessed a distribution charge for charging their systems. A second charge is not imposed when they discharge energy to make a wholesale sale.

<sup>15</sup> ESA December 29, 2014 Request for Rehearing at 3-4.

<sup>16</sup> 16 U.S.C § 824d (2012).

“Energy Storage Resource” shall mean flywheel or battery storage facility used solely for short term storage and injection at a later time to participate in the PJM energy and/or Ancillary Services markets as a Market Seller.”<sup>17</sup>

Again, this language does not speak to the question of the lawfulness of a wholesale distribution charge applicable to Energy Vault. The fact that a facility such as Energy Vault is defined as a “Market Seller” in the PJM Tariff does not bar ComEd from recovering, on a just and reasonable basis, costs incurred by ComEd providing distribution service to Energy Vault. Nor does the label applied to the Energy Vault battery somehow make the disparate grid impacts of energy storage and generation the same.

21. The ESA then contends that “[by] defining an ESR as a Market Seller it was PJM’s and FERC’s clear intention to ensure that battery facilities, such as Energy Vault, would be treated similar to other Market Sellers, such as generators and pumped storage facilities...”<sup>18</sup> However, the Commission has not stated that treating battery storage and generation in a manner that is “similar” means that ComEd is barred from imposing a just and reasonable wholesale distribution charge on Energy Vault based on the specific facts regarding impacts and costs.

22. In the November 28 Order, the Commission made reference to the fact that generators consuming on-site energy pay a distribution delivery component through station power charges. The ESA claims that “[t]he fact that ESRs do not pay Station Power charges is not a reason for them to be assessed a Wholesale Distribution Charge.”<sup>19</sup> The outcome of this proceeding does not hinge on facts regarding ComEd station power service to generation. Rather, the outcome is based on Energy Vault’s use of ComEd’s distribution system in charging mode. Consequently, it is appropriate for the Commission to note that any entities making use of ComEd’s distribution system, including both generators purchasing station power and others purchasing wholesale distribution service, help pay for that distribution through some form of charge just as ComEd is asking Energy Vault to do in this proceeding.

23. The ESA also asserts that “FERC has well established precedent that ESRs are deemed to be generators and therefore should not be assessed WDCs [wholesale

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<sup>17</sup> PJM Interconnection LLC, Section 1.3 IG of the PJM Operating Agreement.

<sup>18</sup> ESA Rehearing Request at 3-4.

<sup>19</sup> *Id.*

distribution charges].”<sup>20</sup> Energy Vault has made the same argument. The ESA and Energy Vault’s reliance on Order No. 792 in support of their assertion that the Commission has held that wholesale distribution charges may not be imposed on energy storage is misplaced.<sup>21</sup> Order No. 792 was adopted by the Commission to improve the “fast track” interconnection process for small generation, such as solar photovoltaics, while maintaining grid reliability.<sup>22</sup> The ESA and Energy Vault cite the fact that Order No. 792 defined “Small Generating Facility” eligible for this new fast track interconnection process to include storage devices. However, the relevant issue here is not interconnection procedures, but recovery of costs related to use of a distribution system.

24. The ESA and Energy Vault also contend that due to the considerable benefits of energy storage, including the major role that it could play to facilitate integration of variable renewable energy resources into the power system, it should not be subject to wholesale distribution charges.<sup>23</sup> However, benefits provided by energy storage resources do not prevent a transmission owner from seeking to recover a just and reasonable charge for an energy storage device’s use of its distribution system when in charging mode.

25. Finally, Energy Vault claims that the wholesale distribution charge is “unjust and unreasonable because it contravenes the policy goals of Order No. 755 and distorts price signals.”<sup>24</sup> The “policy goals of Order No. 755 are to remedy undue discrimination in the procurement of frequency regulation in the organized wholesale electric markets . . . .”<sup>25</sup> Order No. 755, like Order No. 792, does not touch on the key issue in this proceeding, the

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<sup>20</sup> *Id.* at 7-8.

<sup>21</sup> ESA Rehearing Request at 3-4; Energy Vault Motion and Protest at 9-10.

<sup>22</sup> *Small Generator Interconnection Agreements and Procedures*, Order No. 792, 78 FR 73,240 (Nov. 22, 2013), 145 FERC ¶ 61,159 (2013), *clarifying*, Order No. 792-A, 146 FERC ¶ 61,214 (2014).

<sup>23</sup> ESA at 9-10; Energy Vault at 11-13.

<sup>24</sup> Energy Vault at 14-15.

<sup>25</sup> *Frequency Regulation Compensation in the Organized Wholesale Power Markets*, Order No. 755, FERC Stats. & Regs. ¶ 32,324, at P 1 (2011), *reh’g denied*, Order No. 755-A, 138 FERC ¶ 61,123 (2012).



imposition of a wholesale distribution charge on the Energy Vault battery. Therefore, Order No. 755 does not lend any support to the ESA and Energy Vault's claims.

The Commission orders:

The request for rehearing is hereby denied, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.