

July 15, 2013

Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First St., NE, Room 1A  
Washington, DC 20426

Re: PJM Interconnection, L.L.C., Docket No. ER13-\_\_\_\_\_  
Queue Positions U2-041 and V3-028; Original Service Agreement Nos.  
3598, 3599, 3600, and 3601.

Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d, part 35 of the Federal Energy Regulatory Commission's ("Commission") regulations, 18 C.F.R. part 35, and Part VI of the PJM Interconnection, L.L.C. ("PJM") Open Access Transmission Tariff ("PJM Tariff"), PJM submits for filing three executed interconnection service agreements ("ISAs") among PJM, AEP Ohio Transmission Company, Inc. ("AEP"), and the three separate owners of the Hardin Energy Center ("Customer Facility") as the Interconnection Customer: Hardin Wind Energy LLC ("Hardin"),<sup>1</sup> Hardin Wind Energy II LLC ("Hardin II"),<sup>2</sup> and Hardin Solar Energy LLC ("Hardin Solar")<sup>3</sup> (collectively, the

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<sup>1</sup> Interconnection Service Agreement Among PJM Interconnection, L.L.C. And Hardin Wind Energy LLC And AEP Ohio Transmission Company, Inc. ("Hardin ISA"). Because the Hardin ISA being filed electronically with this transmittal letter contains electronic signatures and not the original signatures of the parties, a copy of the sheet containing the original signatures is included as Attachment A to this transmittal letter.

<sup>2</sup> Interconnection Service Agreement Among PJM Interconnection, L.L.C. And Hardin Wind Energy II LLC And AEP Ohio Transmission Company, Inc. ("Hardin II ISA"). Because the Hardin II ISA being filed electronically with this transmittal letter contains electronic signatures and not the original signatures of  
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“Hardin Parties” or “Interconnection Customer Group”). The three ISAs are referred to as the Hardin ISAs. PJM also is submitting an executed interconnection construction service agreement (“CSA”) among PJM, Hardin, and AEP.<sup>4</sup> PJM requests an effective date of June 13, 2013, for the Hardin ISAs and the Hardin CSA, which are designated as Original Service Agreement Nos. 3598, 3599, 3600, and 3601.

PJM is submitting the Hardin ISAs and the Hardin CSA for filing because they contain non-standard terms and conditions that do not conform with the form of ISA and CSA set forth in Attachment O to the PJM Tariff (“ISA Form”) and Attachment P to the PJM Tariff (“CSA Form”). The non-standard terms and conditions are necessary to accommodate the unique circumstances of the interconnection, namely the ownership of the Customer Facility by three separate entities.<sup>5</sup>

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the parties, a copy of the sheet containing the original signatures is included as Attachment B to this transmittal letter.

<sup>3</sup> Interconnection Service Agreement Among PJM Interconnection, L.L.C. And Hardin Solar Energy LLC And AEP Ohio Transmission Company, Inc. (“Hardin Solar ISA”). Because the Hardin Solar ISA being filed electronically with this transmittal letter contains electronic signatures and not the original signatures of the parties, a copy of the sheet containing the original signatures is included as Attachment C to this transmittal letter.

<sup>4</sup> Interconnection Construction Service Agreement Among PJM Interconnection, L.L.C. And Hardin Wind Energy LLC And AEP Ohio Transmission Company, Inc. (“Hardin CSA”). Because the Hardin CSA being filed electronically with this transmittal letter contains electronic signatures and not the original signatures of the parties, a copy of the sheet containing the original signatures is included as Attachment D to this transmittal letter.

<sup>5</sup> The non-conforming language in the Hardin ISAs and the Hardin CSA is described below in more detail and is set forth in redline format in Attachments E, F, G, and H to this transmittal letter.

**I. Background**

The Interconnection Customer Group requested separate ISAs for each owner of the Customer Facility associated with the Generation Interconnection Requests assigned PJM Queue Positions U2-041 and V3-028. Because the Hardin ISAs address the interconnection of the Customer Facility, the language in the Hardin ISAs is almost identical except for the description of each owner's project specific milestones, Interconnection Customer Equipment, equipment configuration, construction responsibility, and charges. Similarly, the non-standard terms and conditions set-forth in Schedule F of each of the Hardin ISAs are almost identical and vary only slightly from each other to reflect the different Hardin Parties.

**II. Description of the Hardin ISAs and the Hardin CSA**

**A. Hardin ISAs and Hardin CSA**

The Hardin ISAs, designated as Original Service Agreement No. 3598 (Hardin ISA), Original Service Agreement No. 3599 (Hardin II ISA) and Original Service Agreement No. 3601 (Hardin Solar ISA), and the Hardin CSA, designated as Original Service Agreement No. 3600, facilitate the interconnection to the PJM transmission system of the entire 320 MW Customer Facility (the Hardin Energy Center) located in Hardin County, Ohio. See Hardin ISAs, Specifications § 1.0. Each of the Hardin ISAs is for a separate discrete portion of the Customer Facility ("Interconnection Customer Equipment"). The Hardin ISA is for a 207.4 MW portion of the Customer Facility and indicates that Hardin shall have 27 MW of Capacity Interconnection Rights associated

with the interconnection. Hardin ISA, Specifications §§ 1.0.c and 2.1.<sup>6</sup> The Hardin II ISA is for a 92.6 MW portion of the Customer Facility and indicates that Hardin II shall have 12 MW of Capacity Interconnection Rights associated with the interconnection. Hardin II ISA, Specifications §§ 1.0.c and 2.1.<sup>7</sup> The Hardin Solar ISA is for a 20 MW portion of the Customer Facility and indicates that Hardin Solar shall have 7.6 MW of Capacity Interconnection Rights associated with the interconnection. Hardin Solar ISA, Specifications §§ 1.0.c and 2.1.<sup>8</sup>

The Network Upgrades charge (\$1,700,700) for the interconnection is in Hardin ISA and is allocated solely to Hardin.<sup>9</sup> The Network Upgrades charge consists of \$900,200 in direct labor costs, \$287,200 in direct material costs, \$369,200 in indirect labor costs, and \$144,100 in indirect material costs.<sup>10</sup> The Hardin II ISA and Hardin Solar ISA do not contain any Network Upgrades charges.<sup>11</sup>

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<sup>6</sup> The Hardin ISA also contains Appendices 1 and 2. Appendix 1 contains all of the definitions from section 1 of the PJM Tariff. Appendix 2 contains all of the standard terms and conditions that are set forth in the ISA Form. The Appendices in the Hardin ISA are derived from the version of the PJM Tariff as of the effective date of the Hardin ISA. The Hardin CSA also contains Appendices 1 and 2. Appendix 1 of the Hardin CSA contains all of the definitions from section 1 of the PJM Tariff. Appendix 2 contains all of the standard construction terms and conditions that are set forth in the CSA form.

<sup>7</sup> The Hardin II ISA also contains Appendices 1 and 2 as described in supra note 6.

<sup>8</sup> The Hardin Solar ISA also contains Appendices 1 and 2 as described in supra note 6.

<sup>9</sup> See Hardin ISA, Specifications § 4.2.

<sup>10</sup> Id., Specifications § 4.6.

<sup>11</sup> Section 1.0 of both the Hardin ISA and the Hardin II ISA indicates that the Hardin ISA and Hardin II ISA supersede the Interim ISA among PJM, Hardin, and Ohio Power Company designated as Original Service Agreement No. 2349 (“Original  
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**B. Non-Standard Terms and Conditions**

The non-standard language and the need for three separate ISAs and the Hardin CSA are necessary to accommodate and coordinate separate discrete ownership interests in the Hardin Energy Center. The Commission previously has accepted similar non-standard language in ISAs regarding similar ownership structures of generating facilities.<sup>12</sup> With minimal exception, the non-standard language throughout the Hardin ISAs is uniform and not specific to any one of the Hardin ISAs, except with respect to the specific Interconnection Customer Equipment and power factors. The non-standard language in the Hardin ISAs and the Hardin CSA is described below.

First, the non-standard term “Interconnection Customer Equipment” is used to refer to Interconnection Customer-owned equipment at the Customer Facility (i.e., the portion of the Customer Facility owned by each Interconnection Customer). This term is used in section 3.0, sections 1.0a, 1.0b, 1.0c, 1.0d, and 2.1a of the Specifications, and Schedule C of each of the Hardin ISAs and in section 3.0b of the Hardin CSA. Additionally, because there are three owners of the Hardin Energy Center, section 7.0 (Provision of Interconnection Service) of each of the Hardin ISAs provides for the

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Service Agreement No. 2349”). PJM filed a notice of cancellation, which the Commission accepted, for Original Service Agreement No. 2349 in Docket No. ER11-2073-000, effective October 11, 2010. PJM Interconnection, L.L.C., Letter Order, Docket No. ER11-2073-000 (Dec. 8, 2010).

<sup>12</sup> See PJM Interconnection, L.L.C., Letter Order, Docket No. ER13-726-000 (Mar. 1, 2013); PJM Interconnection, L.L.C., Letter Order, Docket No. ER12-359-000 (Dec. 28, 2011); PJM Interconnection, L.L.C., Letter Order, Docket No. ER09-1713-000 (Oct. 23, 2009); PJM Interconnection, L.L.C., Letter Order, Docket No. ER09-1413-000 (Aug. 14, 2009); PJM Interconnection, L.L.C., Letter Order, Docket No. ER08-1572-000 (Nov. 10, 2008).

interconnection to the PJM transmission system of the Interconnection Customer Equipment, rather than the Customer Facility. The Commission has accepted ISAs containing the term Interconnection Customer Equipment.<sup>13</sup>

Second, section 5.0 of the Hardin ISAs references non-standard provisions in Schedule F regarding security and notices, respectively. As described below, Schedule F provides that should the Hardin Parties fail to provide the security required under the terms of the Hardin ISAs, then the Hardin ISAs shall be terminated.

Third, section 12.0 of the Hardin ISAs contains non-conforming language regarding the Power Factor Requirement for the Customer Facility. Section 12.0 of the Hardin ISA and Hardin II ISA indicates that “The results of the System Impact Study require that, for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its wind-powered Customer Facility with the ability to maintain a power factor of 1.0 (unity) measured at the Point of Interconnection.” Similarly, section 12.0 of the Hardin Solar ISA indicates that “[t]he results of the System Impact Study require that, for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its non-synchronous Customer Facility with the ability to maintain a power factor of 1.0 (unity) measured at the Point of Interconnection.” A power factor of 1.0 unity does not conform with section 4.7.1.1 of Appendix 2 of the Hardin ISAs.<sup>14</sup> The non-conforming language

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<sup>13</sup> See PJM Interconnection, L.L.C., Letter Order, Docket No. ER13-726-000 (Mar. 1, 2013).

<sup>14</sup> See Hardin ISAs at Appendix 2, § 4.7.1.1 (“For all new wind-powered and other non-synchronous generation facilities, if determined in the system impact study to be required for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its Customer Facility with the  
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is necessary because the stability and low-voltage ride through analysis, done in the System Impact Study, showed that the project impact on the transmission system was most beneficial when the generation was operated at unity power factor.

Fourth, section 18.0 of the Hardin ISAs provides that, except as provided in paragraph 3 of Schedule F, any notice or request made by a party regarding the Hardin ISAs shall be made in accordance with the terms of Appendix 2 to the Hardin ISAs.

Fifth, section 20.0 provides that, in the event of a conflict between a provision of Schedule F that the Commission has accepted, and any provision of the Hardin ISAs and Appendix 2 to the Hardin ISAs, Schedule F will control.

Finally, the provisions of Schedule F (the schedule of non-standard terms and conditions) in the Hardin ISAs set forth terms and conditions required to accommodate the ownership agreement of the Customer Facility and other operating requirements. Schedule F in each of the Hardin ISAs is substantially the same. The provisions address security, notice, billing, payment obligations and requirements, a common facilities agreement, and the output of the Hardin Energy Center. Both schedules specify that the provision of security paid by the Hardin Parties will satisfy the security requirements for the required Network Upgrades specified in the Hardin ISAs. They further specify that security associated with Network Upgrades required for the Hardin Energy Center interconnection are set forth only in the Hardin ISA. They also specify that PJM will retain the full amount of security set forth in the Hardin ISAs until the construction of all Network Upgrades under the applicable agreement is complete. These provisions ensure

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ability to maintain a composite power delivery at continuous rated power output at a power factor of at least 0.95 leading to 0.95 lagging.”).

the provision of security and protect the owners of the Hardin Energy Center in the event one of the owners drops out of the project.

Additionally, the security provisions in Schedule F provide that if one of the Hardin Parties withdraws or terminates its ISA or fails to provide security in accordance with the terms of the Hardin ISAs, the Hardin ISAs shall terminate. The Schedule F security provisions further specify that the security will be refunded to the entity that paid the security or an entity specified by that entity. These provisions clarify the rights and obligations of the Hardin Parties with regard to security required under the Hardin ISAs for the Network Upgrades required for interconnection of the Customer Facility.

Schedule F also contains provisions that provide that notices and bills will be provided to a designated representative for the owners of the Customer Facility. The billing provisions in Schedule F further provide that any owner of the Customer Facility may cure a breach of the Hardin ISAs with respect to payment.

The Schedule F provisions are more fully summarized below:

- Separate ISAs: The Hardin Parties agreed to enter into three separate ISAs pursuant to the PJM Tariff to govern their individually owned equipment and to receive Capacity Interconnection Rights. (Hardin ISAs, Schedule F, § 1)
- Security: With regard to Network Upgrades required for the Customer Facility, the provision of security in Schedule F provides that the Security associated with Network Upgrades are set forth only in the Hardin ISA. Additionally, PJM may retain the security set forth and provided consistent with the Hardin ISAs, until the completion of the construction and reconciliation of final invoice of all Attachment Facilities listed in section 3.0.b of the Specifications of the Hardin ISA. Failure to provide any or all of such initial security will result in withdrawal and termination of the New Service Request associated with PJM Queue Position Nos. U2-041 and V3-028 and loss of PJM Queue Position Nos. U2-041 and V3-028. If additional security is required pursuant to the Hardin ISAs or if additional security is not provided by the deadline required by PJM, PJM shall provide Notice thereof pursuant to section 4 of Schedule F. If the notice is for a Breach for failure to pay such additional Security, the Hardin Parties shall have five (5)



days to cure such Breach. The Hardin Parties shall be jointly and severally liable for the additional security. (Id., Schedule F, § 2)

- Refund of Security: Upon completion of the construction of all of the Network Upgrades specified in the Hardin ISA and final payment for such facilities, PJM shall refund to the appropriate Hardin Party or to the entity(ies) designated by the Hardin Parties the total amount of any Security provided by the Hardin Parties pursuant to the Hardin ISAs that PJM retained. (Id., Schedule F, § 2.c)
- Ownership of Customer Interconnection Facilities: The Hardin Parties shall own, operate, and maintain the Customer Interconnection Facilities pursuant to a common facilities agreement by and among the Hardin Parties entitled “Assignment, Co-Tenancy, and Shared Facilities Agreement.” (Id., Schedule F, § 3)
- Notices to Hardin Parties: Any required notice and all communications to the Hardin Parties and any required notice and all communications from any Hardin Party to PJM and/or AEP regarding any matter relating to the Hardin ISAs governing the interconnection of the Customer Facility shall be made only to, and given only by, the specified contacts. (Id., Schedule F, § 4)
- Billing, Payments and Defaults: PJM will submit bills required by the Hardin ISAs to the designated representative of the Interconnection Customer identified in section 4 of Schedule F. In the event that the bill is not paid, PJM and/or AEP will provide written notice of such Breach. The Hardin Parties, collectively or individually, may cure the Breach within five (5) days of receipt of the notice of the Breach. The Hardin Parties agreed to be jointly and severally liable for all actual costs associated with interconnection of the Customer Facility. (Id., Schedule F, § 5)
- Satisfaction of Obligations by Hardin Parties: Satisfaction of all costs by one of the Hardin Parties will satisfy the obligations of all Hardin Parties. (Id., Schedule F, § 6)
- The Hardin Parties agreed that all issues between the Hardin Parties regarding invoices, disbursements, operations, maintenance, liability, and all other matters related to the Customer Facility shall be resolved between the Hardin Parties. PJM and/or AEP may provide to the Point of Contact a single invoice, payment, or other documentation regarding one or more of the Hardin Parties. PJM and/or AEP shall not be required to segregate any payments or information pertaining to any Hardin Party except for PJM market settlement. (Id., Schedule F, § 7)
- The Hardin Parties agreed to notify PJM and AEP within ten (10) business days if the Assignment, Co-Tenancy, and Shared Facilities Agreement is terminated. If the Assignment, Co-Tenancy, and Shared Facilities Agreement is amended or terminated, other than as a result of the Hardin Parties being owned by the same entity(ies), the Hardin Parties shall be deemed in Breach of their respective ISAs,

unless PJM, AEP, and the Hardin Parties can cure such Breach by mutual agreement. Notwithstanding the foregoing, in the event that Hardin, Hardin II, Hardin Solar or all of the Hardin Parties assign, sell, or otherwise transfer their ownership interests in the Customer Facility, none of the Hardin ISAs shall be deemed in Breach, so long as the acquiring entity(ies) assumes the full responsibility and liability of the respective Hardin Party, including all of the responsibility and liability under the respective Hardin Party ISA. (Id., Schedule F, § 8)

- All references in Appendix 2 of the Hardin ISAs to the term “Customer Facility” shall be a reference to the term “Interconnection Customer Equipment.” (Id., Schedule F, § 9)
- In the event that one of the Hardin Parties terminates or defaults on its respective ISA or the Hardin CSA, the Hardin ISAs and the Hardin CSA shall be deemed terminated, unless PJM, AEP, and the non-terminating or non-defaulting Hardin Party mutually agree upon terms and conditions pursuant to which the non-defaulting Hardin Party’s ISA and/or the Hardin CSA may continue in full force and effect. (Id., Schedule F, § 10)
- The Hardin Parties intend that the output of each wind turbine generator for Queue Position No. U2-041, which are the subject of the Hardin ISA and Hardin II ISA, shall be 1.6 MW instead of 1.5 MW. The total collective net output of the Hardin and Hardin II Interconnection Customer Equipment shall be limited to 300 MW (“Wind Farm MW Limit”), and the Hardin Parties acknowledge that any increase in this output will require a new Interconnection Request. The Hardin Parties also state that the net output of the Hardin Solar Interconnection Customer Equipment will be 20 MW, which results in a maximum facility output of 320 MW for the Hardin Energy Center. The Hardin Parties enumerate the methods they will use to maintain the Wind Farm MW Limit of the Hardin Energy Center to 300 MW. In the event the Hardin Parties exceed the limit of 300 MW output, PJM and AEP have the right to require additional appropriate action to limit the output, and the Hardin Parties will defend, indemnify and hold harmless PJM and AEP from any and all actions that arise out of the adverse consequences of limiting the Hardin Energy Center. Finally, PJM and AEP can request documentation from the Hardin Parties at any time to verify that the Wind Farm MW Limit is not being exceeded. (Id., Schedule F, §11)

### **III. Effective Date and Request for Waiver**

PJM requests a waiver of the Commission’s 60 day prior notice requirement to allow an effective date of June 13, 2013 for the Hardin ISAs and the Hardin CSA.<sup>15</sup>

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<sup>15</sup> See Hardin ISAs § 4.0.

Waiver is appropriate because the agreements are being filed within thirty days of their requested effective date.<sup>16</sup>

**IV. Documents Enclosed**

PJM encloses the original and six copies of the following:

1. Transmittal Letter;
2. Hardin ISA, Original Service Agreement No. 3598;
3. Hardin II ISA, Original Service Agreement No. 3599;
4. Hardin Solar ISA, Original Service Agreement No. 3601;
5. Hardin CSA, Original Service Agreement No. 3600;
6. Attachment A: Copy of sheet containing original signatures of the Hardin ISA;
7. Attachment B: Copy of sheet containing original signatures of the Hardin II ISA;
8. Attachment C: Copy of sheet containing original signatures of the Hardin Solar ISA;
9. Attachment D: Copy of sheet containing original signatures of the Hardin CSA;
10. Attachment E: Redline page showing non-standard terms and conditions in the Hardin ISA;
11. Attachment F: Redline page showing non-standard terms and conditions in the Hardin II ISA;
12. Attachment G: Redline page showing non-standard terms and conditions in the Hardin Solar ISA; and
13. Attachment H: Redline page showing non-standard terms and conditions in the Hardin CSA.

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<sup>16</sup> See Prior Notice and Filing Requirements Under Part II of the Federal Power Act, 64 FERC ¶ 61,139, at 61,983-84 (1993); see also 18 C.F.R. § 35.3(a)(2).

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**V. Correspondence and Communications**

Correspondence and communications with respect to this filing should be sent to, and PJM requests the Secretary to include on the official service list, the following:

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**VI. Service**

PJM has served a copy of this filing on Hardin, Hardin II, Hardin Solar, and AEP, and the state regulatory commissions within the PJM region.

Respectfully submitted,

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