

March 22, 2019

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

> **California Independent System Operator Corporation** Re:

> > Filing of Dynamic Transfer Balancing Authority Operating Agreement with Gridforce Energy Management, LLC

Docket No. ER19- -000

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO") submits for Commission filing and acceptance the Dynamic Transfer Balancing Authority Operating Agreement ("Dynamic Transfer Agreement") between the CAISO and Gridforce Energy Management, LLC ("Gridforce"). The CAISO requests that the Commission accept the Agreement effective on May 22, 2019, i.e., 61 days from the date of this filing.

I. **Purpose of the Agreement**

The purpose of the Agreement is to allow the provision of both dynamic schedule and pseudo-tie arrangements between the CAISO and Gridforce balancing authority areas. The Agreement is consistent with the requirements of the CAISO tariff,² and is modeled upon and very similar to the Dynamic Transfer Balancing Authority Operating Agreement between the CAISO and the Western Area Power Administration – Desert Southwest Region accepted by the

The CAISO submits the Agreement pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d. The Agreement is designated as CAISO Rate Schedule No. 4956.

See CAISO tariff, appendix M, sections 1.2.1 and 2.2.1 (requiring a balancing authority operating agreement for dynamic scheduling); id., appendix N, sections 1.3.1 and 2.3.1 (requiring a balancing authority operating agreement for pseudo-ties). Those appendices M and N set forth the rules and requirements for setting up dynamic schedules and pseudo-ties between the CAISO and another balancing authority.

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Commission in 2014.³ Like that earlier agreement, the Agreement between the CAISO and Gridforce contained in this filing includes the following provisions:

- Section 1 provides for the effective date and termination;
- Section 2 includes definitions referenced in the agreement;
- Section 3 describes the purpose of the agreement;
- Section 4 outlines the requirements for dynamic scheduling;
- Section 5 outlines the requirements for pseudo-ties;
- Section 6 establishes limitations on the parties' liability;
- Section 7 covers miscellaneous provisions of the agreement;
- Schedule 1 provides for the addition of dynamically scheduled resources;
- Schedule 2 provides for the addition of pseudo-tie resources; and
- Schedule 3 contains notice provisions.

II. Effective Date

The CAISO requests that the Commission accept the Agreement effective May 22, 2019.⁴ The requested effective date will support continued dynamic scheduling and the implementation of a pseudo-tie planned for May of 2019.

³ Cal. Indep. Sys. Operator Corp., Commission Letter Order, Docket Nos. ER14-551-000, et al. (Jan. 24, 2014); see also Letter Order in Docket No. ER18-2421-000 dated October 18, 2018 (accepting a similar Dynamic Transfer Balancing Authority Operating Agreement with the Nevada Power Company).

Upon Commission acceptance, the CAISO will terminate the Dynamic Scheduling Balancing Authority Operating Agreement between the CAISO and Gridforce ("Dynamic Scheduling Agreement") identified in the CAISO's electronic quarterly report as Service Agreement No. 4031 concurrent with the effective date of the Agreement. The Agreement provides for dynamic scheduling and having the Dynamic Scheduling Agreement also in effect is unnecessary, duplicative, and potentially confusing.

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III. Service

The CAISO has served copies of this filing upon Gridforce, the California Public Utilities Commission, the California Energy Commission, Arizona Public Service Company, and Public Service Company of New Mexico.⁵ In addition, the CAISO has posted the filing on the CAISO website.

IV. Attachment

In addition to this transmittal letter, this filing includes the fully executed Agreement in Attachment A hereto.

V. Correspondence

In accordance with Rule 203(b)(3) of the Commission's Rules of Practice and Procedure,⁶ the CAISO requests that all correspondence, pleadings, and other communications concerning this filing be served upon the following:

John C. Anders
Assistant General Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (916) 608-7287

E-mail: janders@caiso.com

Arizona Public Service Company and Public Service Company of New Mexico are intermediary balancing authorities between the CAISO balancing authority area and the Gridforce balancing authority area and, as such, may have an interest in this proceeding.

^{6 18} C.F.R. § 385.203(b)(3).

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VI. Conclusion

The CAISO requests that the Commission accept the Agreement between the CAISO and Gridforce contained in this filing effective May 22, 2019.

Respectfully submitted,

By: /s/ John C. Anders

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Burton A. Gross
Deputy General Counsel
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Attorneys for the California Independent System Operator Corporation

Attachment A – Executed Agreement Dynamic Transfer Balancing Authority Operating Agreement between Gridforce Energy Management, LLC and the California Independent System Operator Corporation

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

AND

GRIDFORCE ENERGY MANAGEMENT, LLC

DYNAMIC TRANSFER BALANCING AUTHORITY OPERATING AGREEMENT

DYNAMIC TRANSFER BALANCING AUTHORITY OPERATING AGREEMENT

Executed by

GRIDFORCE ENERGY MANAGEMENT, LLC and

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

This Dynamic Transfer Balancing Authority Operating Agreement ("Agreement"), dated as of ______February_26______, 2019, is between GRIDFORCE ENERGY MANAGEMENT, LLC ("Gridforce"), doing business as Gridforce Energy Management, LLC, having its registered and principal executive office at Four Houston Center, 1331 Lamar Street, Suite 560, Houston, Texas 77010. Gridforce has responsibilities as a Balancing Authority and operates the Gridforce Balancing Authority Area.

the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ("CAISO"), a California nonprofit public benefit corporation having a principal executive office located at 250 Outcropping Way, Folsom, California 95630. The CAISO has responsibilities as a Balancing Authority and operates the CAISO Balancing Authority Area.

Gridforce and CAISO are referred to herein individually as a "Party" and collectively as the "Parties".

Recitals

- A) The Parties named above operate Balancing Authority Areas.
- B) The Parties wish to coordinate operation of dynamic transfers to satisfy North American Electric Reliability Corporation ("NERC") and Western Electricity Coordinating Council ("WECC") reliability standards and criteria and Good Utility Practice.
- D) The Parties desire to implement an agreement to facilitate dynamic transfers from resources in their respective Balancing Authority Area.
- E) The Parties wish to enter into this Agreement to establish the terms and conditions for the operation of the dynamic transfer functionality to include dynamic schedules and Pseudo-Tie arrangements between the Parties' Balancing Authority Areas.
- F) The Parties have certain statutory obligations under NERC and WECC standards and criteria to maintain power system reliability.

The Parties mutually agree as follows:

1. Term and Termination

1.1 Effective Date

This Agreement shall be effective upon acceptance for filing by the Federal Energy Regulatory Commission ("FERC") pursuant to a filing by the CAISO (the "Effective Date"), and shall continue in effect until terminated.

1.2 **Termination**

This Agreement may be terminated by either Party upon ninety (90) calendar days advance written notice to the other Party, or upon mutual consent of both Parties for a longer termination notice period for mitigating impacts on System Resources or Pseudo-Tie Generating Units listed in Schedule 1 or Schedule 2. For entities subject to FERC jurisdiction, termination will be effective upon acceptance by FERC of notice of termination. The CAISO shall file any required notice of termination with FERC within sixty (60) calendar days after issuance of the notice of termination by a Party where the preconditions for termination have been met.

Definitions

2.1 **NERC Definitions**

Except as defined below, terms and expressions used in this Agreement shall have the same meanings as those contained in the NERC Glossary of Terms Used in NERC Reliability Standards.

2.2 **Specific Definitions**

- 2.2.1 <u>Attaining Balancing Authority Area</u>: The Balancing Authority Area where the output of a Pseudo-Tie Generating Unit is fully included for purposes of calculation of Area Control Error and meeting Balancing Authority Area load responsibilities.
- 2.2.2 <u>CAISO Dynamic Transfer Protocols</u>: The protocols, which are set forth in Appendix M (Dynamic Scheduling Protocol) and Appendix N (Pseudo-Tie Protocol) of the CAISO Tariff.
- **2.2.3** CAISO Tariff: CAISO Operating Agreement and Tariff, as amended.

- 2.2.4 <u>Congestion</u>: A characteristic of the transmission system produced by a binding transmission constraint to the optimum economic dispatch to meet demand such that the locational marginal pricing, exclusive of marginal cost of losses, at different locations of the transmission system is not equal.
- 2.2.5 Generating Unit: An individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered or a physical scheduling plant that, in either case, is: (a) located within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) or, for purposes of scheduling and operating the real-time market only, an energy imbalance market entity Balancing Authority Area; (b) connected to the CAISO controlled grid, either directly or via interconnected transmission, or distribution facilities or via a Pseudo-Tie; and (c) capable of producing and delivering net energy (energy in excess of a generating station's internal power requirements).
- 2.2.6 Good Utility Practice: Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry in the WECC region during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 2.2.7 <u>Native Balancing Authority Area</u>: The Balancing Authority Area where a Pseudo-Tie Generating Unit is physically interconnected to the electric grid.
- **2.2.8** Point of Contact: A person or entity having the authority to receive and act upon scheduling or dispatch communications from the other Balancing Authority and available through a communications device mutually agreed upon on a 24-hour, 7-day basis.

- 2.2.9 <u>Pseudo-Tie</u>: A functionality by which the output and/or auxiliary load of a generating facility is telemetered into the Attaining Balancing Authority Area and the generating facility is under the Attaining Balancing Authority jurisdiction, but where the generating facility is electrically interconnected to transmission within the Native Balancing Authority Area in which it is physically located, as provided for under this Agreement.
- 2.2.10 <u>Scheduling Coordinator</u>: An entity certified by the CAISO for the purposes of undertaking the functions of: submitting bids or schedules for energy, generation, transmission losses, and ancillary services; coordinating generation; tracking, billing, and settling trades with other Scheduling Coordinators; submitting forecast information; paying the CAISO's charges; and ensuring compliance with CAISO protocols.
- 2.2.11 <u>System Emergency</u>: Conditions beyond the normal control of the CAISO that affect the ability of the CAISO Balancing Authority Area to function normally, including any abnormal system condition which requires immediate manual or automatic action to prevent loss of load, equipment damage, or tripping of system elements which might result in cascading outages or to restore system operation to meet the applicable reliability criteria.
- **2.2.12 System Resource**: "System Resource" is defined in the CAISO Tariff and, in the context of this Agreement, may include combinations of resources as described in the CAISO Dynamic Transfer Protocols.

General

3.1 **Purpose**

This Agreement sets forth the requirements that must be satisfied by the Parties to support Scheduling Coordinators' and Generating Unit owners' requests for implementation of dynamic transfer functionality and delivery of energy and energy associated with ancillary services to the respective Balancing Authority Area. The requirements encompass technical (energy management system ("EMS"), automatic generation control ("AGC"), and communications, interchange scheduling, telemetry, and aspects of

Balancing Authority Area operations. Nothing in this Agreement is intended to interfere with the rights of an affected transmission owner or transmission operator in the Gridforce Balancing Authority Area to determine its own terms of service associated with the facilitation of dynamic transfer by Gridforce.

3.2 NERC/WECC Operating Standards Observed

Nothing in this Agreement is intended to change, supersede, or alter either Party's obligations to abide by NERC and WECC reliability standards and policies and WECC criteria.

3.3 Applicable Standards

This Agreement incorporates, by reference, the CAISO Dynamic Transfer Protocols and Standards for Imports of Regulation. Where there is an inconsistency between the CAISO's Dynamic Transfer Protocols and Standards for Imports of Regulation and this Agreement, this Agreement will prevail to the extent of the inconsistency.

3.4 Coordination and Communication

Each Party operates and maintains, or provides for operation and maintenance on a 24-hour, 7-day control center with real-time scheduling and control functions. The appropriate control center staff shall be responsible for operational communications and shall have sufficient authority to commit and bind that Party on decisions relating to emergency operations. The Parties agree to exchange operational contact information for insuring reliable communication in a format to be agreed to by the Parties and completed as of the Effective Date of this Agreement. Each Party shall provide the other Party ten (10) calendar days advance notice of updates to its operational contact information for known changes, and as soon as practical, for unplanned changes.

4. Dynamic Schedules of Imports and Exports

Should the Parties elect to support a Scheduling Coordinators' request to implement dynamic scheduling functionality, all applicable operating, technical and business requirements set forth in Appendix M of the CAISO Tariff shall be satisfied, including, but not limited to, the following:

4.1 Telecommunications Requirements

The Parties shall establish and maintain real-time, redundant, diversely routed, communications links between the CAISO EMS

and the Gridforce EMS, with the primary link utilizing the standard inter-control center communications protocol ("ICCP") in accordance with the Applicable Standards for the dynamically scheduled resources listed in Schedule 1.

4.2 **Telemetry**

For each operating hour for which a dynamically scheduled resource is delivering energy, and/or energy associated with ancillary services to the receiving Balancing Authority Area, the Host Balancing Authority shall provide, via the ICCP communication links to the receiving Balancing Authority EMS, the data for each dynamically scheduled resource, as set forth in the Applicable Standards.

4.3 Interchange Scheduling Requirements

4.3.1 **Dynamic Schedules**

The Parties shall coordinate the arrangements for dynamic interchange schedules for the delivery of energy to the respective Balancing Authority Area reflecting the dynamically scheduled resource's instantaneous energy production or allocation level and taking into account available transmission capacity and, in the case of Gridforce, the impact of dynamic interchange schedules on transmission owner(s) and transmission operator(s) within the Gridforce Balancing Authority Area.

4.3.2 Treatment of Area Control Error ("ACE")

For Dynamic Scheduling, the Host Balancing Authority shall instantaneously compensate its AGC for the dynamically scheduled resource's energy output that is generated or allocated for establishing the dynamic schedule to the receiving Balancing Authority such that the dynamically scheduled resource energy production or allocation changes have an equal in magnitude and opposite in sign effect on the Host Balancing Authority's ACE.

4.3.3 Integration of Dynamic Schedules

For each operating hour during which energy was dynamically scheduled for delivery to the receiving Balancing Authority Area, the Host Balancing Authority shall compute an integrated amount of interchange based on the dynamically scheduled resource's integrated energy

production, by integrating the instantaneous dynamically scheduled resource production levels. Such integrated MWH value shall be agreed to hourly by the real-time schedulers.

4.3.4 Regulation Obligation

The Host Balancing Authority shall be responsible for regulation obligation for the portion of the dynamically scheduled resource's output not dynamically scheduled into the receiving Balancing Authority Area in accordance with WECC and NERC reliability standards. Dynamic energy deliveries to the receiving Balancing Authorities will be used to determine pro rata allocations of real time deviations applicable to each Balancing Authority that receives the dynamically scheduled generation.

4.3.5 Access to Information

The Parties agree to exchange information related to telemetry sent and received with respect to the delivery of energy (i) at the request of the other Party for purposes of after-the-fact interchange accounting or (ii) on demand for any other purpose.

4.3.6 Other Balancing Authority Responsibilities

4.3.6.1 **Operational Jurisdiction**

The Host Balancing Authority will have, at a minimum, the level of operational jurisdiction over the dynamically scheduled resource and the associated dynamic schedule that NERC and WECC vest in Host Balancing Authorities. Such level of operational jurisdiction shall not exceed that necessary to meet applicable reliability standards.

4.3.6.2 **E-Tagging**

The Parties must support associated e-tagging as described in the CAISO Dynamic Transfer Protocols and deemed to be consistent with NERC and/or WECC requirements.

4.3.6.3 **Real-Time Adjustments**

The Host Balancing Authority Area for a dynamically transferred resource must have a means to manually

override and/or otherwise adjust the dynamic signal for a dynamic schedule in real-time, if needed.

4.3.6.4 Coordination with Other Balancing Authorities

The Balancing Authority Area hosting a dynamic resource must provide in real-time the instantaneous value of each dynamic schedule to every intermediary Balancing Authority Area through whose systems such dynamic schedule may be implemented to the receiving Balancing Authority.

4.4 Other

4.4.1 **Losses**

The Parties shall not be responsible for transmission losses caused by transmitting energy dynamically within or across the other Parties Balancing Authority Area.

4.4.2 Certification

Only CAISO-certified System Resource/Host Balancing Authority arrangements will be allowed to bid or self-provide ancillary services in the CAISO's ancillary services market through a CAISO-certified Scheduling Coordinator.

4.4.3 No Guarantee of Award

Certification of a System Resource/Host Balancing Authority arrangement allows for bidding of energy and/or certain ancillary services into the CAISO market; it does not, however, guarantee selection of such bid.

4.4.4 Performance Assessment

The CAISO will monitor and measure dynamically imported ancillary services, whether bid or self-provided, against the performance benchmarks described in the CAISO Dynamic Scheduling Protocol.

4.4.5 Description of System Resources

Each dynamically scheduled System Resource permitted pursuant to this Agreement is described in Schedule 1. Each Party shall provide the other Party the opportunity to comment in writing on any change, modification, or addition to Schedule 1 at least forty-

five (45) calendar days prior to the effective date of such revised Schedule 1. Such changes shall not constitute an amendment to this Agreement. Changes, additions, or modifications to Schedule 1 shall be reflected in a new or revised Schedule 1 and will be distributed in accordance with Section 7.3 of the Agreement

4.4.6 Notifications

The Parties shall jointly develop methods for coordinating the notification of all affected scheduling entities within their respective Balancing Authority Areas regarding schedule changes in emergency or curtailment conditions.

5. Pseudo-Ties

Should the Parties elect to support a Pseudo-Tie generator's request to implement a Pseudo-Tie arrangement, the Parties shall comply with the applicable provisions of the Pseudo-Tie Protocol in Appendix N of the CAISO Tariff, including, but not limited, to the following:

- 5.1 Operation of Pseudo-Tie functionalities must comply with all applicable NERC and WECC reliability standards, policies, requirements, and guidelines regarding inter-Balancing Authority Area scheduling. A Pseudo-Tie must be registered as a Point Of Delivery ("POD") on North American Energy Standards Board's (NAESB's Electric Industry Registry ("EIR")). All (off-system) static scheduling associated with Pseudo-Tie functionality must be consistent with NERC Reliability Standards for interchange scheduling and coordination.
- 5.2 The Parties will establish the terms of any Pseudo-Tie between the two Balancing Authority Areas, will specify the location of that Pseudo-Tie point, and will register that location as a POD to the Attaining Balancing Authority Area.
- 5.3 All energy transfers associated with a Pseudo-Tie generating unit must be electronically tagged (E-tagged).
- 5.4 Unless a particular service is procured by the Pseudo-Tie generator from some other source, the Attaining Balancing Authority shall provide to a Pseudo-Tie generating unit all Balancing Authority services available to other generating units in the Attaining Balancing Authority Area, which may include the auxiliary load equipment needs of the Pseudo-Tie generating unit, provided firm transmission service is reserved across the transmission path from the CAISO Intertie to the Pseudo-Tie generating unit.

- The Parties, in conjunction with the affected Participating Transmission Owner, or, in the case of Gridforce, affected transmission owner(s) and transmission operator(s) within the Gridforce Balancing Authority Area and the owner of the Pseudo-Tie generating unit will develop a coordinated operating procedure outlining the agreed upon framework among all parties for the operation of a Pseudo-Tie of the generating unit out of the CAISO Balancing Authority Area, and to facilitate the continued delivery of Energy and Ancillary Services from a Pseudo-Tie generating unit into the CAISO Balancing Authority Area to the desired delivery points in the event the primary contract path is unavailable or curtailed.
- All applicable communication and telemetry requirements of the WECC, the CAISO, and a Pseudo-Tie generating unit's Native Balancing Authority Area regarding generating units and inter-Balancing Authority Area Interties must be satisfied. These requirements include the requirements of Appendix M applicable to Dynamic Schedules of imports and the requirements of the CAISO Tariff applicable to generating units in the CAISO Balancing Authority Area.
- 5.7 Proper incorporation of the dynamic signal into all involved Balancing Authority Areas' ACE equations will be required.
- 5.8 Should there be any need or requirement, whether operational or procedural, for the CAISO or the Balancing Authority for the Attaining Balancing Authority Area to make real-time adjustments to the CAISO's inter-Balancing Authority Area schedules at the pre-existing CAISO Intertie associated with the Pseudo-Tie generating unit (including curtailments), the dynamic transfer from the Pseudo-Tie generating unit shall be treated in the same manner as any CAISO Interchange Schedule at that pre-existing CAISO Intertie, and in accordance with any applicable operating instructions from any affected Participating Transmission Owner.
- 5.9 Each Pseudo-Tie Generating Unit permitted pursuant to this Agreement is described in Schedule 2. Each Party shall provide the other Party the opportunity to comment in writing on any change, modification, or addition to Schedule 2 at least forty-five (45) calendar days prior to the effective date of such revised Schedule 2. Such changes shall not constitute an amendment to this Agreement. Changes, additions, or modifications to Schedule 2 shall be reflected in a new or revised Schedule 2 and will be distributed in accordance with Section 7.3 of the Agreement.

6. **Liability**

6.1 Uncontrollable Forces

An Uncontrollable Force means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond the reasonable control of a Balancing Authority which could not be avoided through the exercise of Good Utility Practice.

Neither Party will be considered in default of any obligation under this Agreement or liable to the other for direct, indirect, and consequential damages if prevented from fulfilling that obligation due to the occurrence of an Uncontrollable Force. Neither Party will be considered in default of any obligation under this Agreement to the extent caused by any act, or failure to act, of any intermediary Balancing Authority. In the event of the occurrence of an Uncontrollable Force, which prevents either Party from performing any obligations under this Agreement, the affected entity shall not be entitled to suspend performance of its obligations in any greater scope or for any longer duration than is required by the Uncontrollable Force. The Parties shall each use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform, and resume full performance of its obligations hereunder.

6.2 **Liability To Third Parties**

Except as otherwise expressly provided herein, nothing in this Agreement shall be construed or deemed to confer any right or benefit on, or to create any duty to, or standard of care with reference to any third party, or any liability or obligation, contractual or otherwise, on the part of either Party.

6.3 **Liability Between the Parties**

The Parties' duties and standard of care with respect to each other, and the benefits and rights conferred on each other, shall be no greater than as explicitly stated herein. Neither Party, its directors, officers, employees, or agents, shall be liable to the other Party for any loss, damage, claim, cost, charge, or expense, whether direct, indirect, or consequential, arising from the Party's performance or nonperformance under this Agreement, except for a Party's gross negligence, or willful misconduct.

7. Miscellaneous

7.1 Exchange of Information and Confidentiality

When a Party ("Providing Party") provides information to the other Party ("Receiving Party") under this Agreement and marks such information as privileged or confidential commercial or financial information, critical energy infrastructure information, or trade secret information, the Receiving Party shall treat such information as confidential and protected from disclosure to the extent permitted by law. The Receiving Party shall promptly notify the Providing Party in writing of any request to release such information. The Parties agree to use such information only for purposes of performing each Party's obligations under this Agreement. The provisions of this Section 7.1 shall survive the termination of this Agreement.

7.2 Assignment and Successors

Either Party to this Agreement may assign its obligations under this Agreement, with the other Party's prior written consent. Such consent shall not be unreasonably withheld.

Obligations and liabilities under this Agreement shall be binding on the successors and assigns of the Parties. No assignment of this Agreement shall relieve the assigning Party from any obligation or liability under this Agreement arising or accruing prior to the date of assignment.

7.3 Notices

Any notice, demand, or request which may be given to or made upon either Party regarding this Agreement shall be made in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) calendar days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service. A Party must update the information in Schedule 3 relating to its address as that information changes. Such updates to Schedule 3 shall not constitute an amendment to this Agreement.

7.4 Waivers

Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or matter arising in connection with this Agreement. Any delay short of the statutory period of limitations, in asserting or enforcing any right under this Agreement, shall not constitute or be deemed a waiver of such right.

7.5 **Governing Law and Forum**

Subject to Section 7.6, this Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California or the laws of the United States, as applicable, except that if a dispute concerns the operation of transmission lines or facilities, the law of the state where the transmission lines or facilities are located or the laws of the United States, as applicable, will control. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement shall be brought in any of the following forums, as appropriate: any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before FERC. No provision of this Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Agreement, or any action or proceeding arising under or relating to this Agreement, is subject to the jurisdiction of FERC.

7.7 No Warranties or Representations; Disclaimer

All information, including confidential information, provided by a Party ("Providing Party") to the other Party ("Receiving Party") under this Agreement carries no warranty or representation of any kind, either express or implied. The Receiving Party receives the information "as is" and with all faults, errors, defects, inaccuracies, and omissions. The Providing Party makes no representations or warranties whatsoever with respect to the availability, timeliness, accuracy, reliability, or suitability of any information. The Receiving Party disclaims and waives all rights and remedies that it may otherwise have with respect to all warranties and liabilities of the Providing Party, expressed or implied, arising by law or otherwise, with respect to any faults, errors, defects, inaccuracies or omissions in, or availability, timeliness, reliability, or suitability of the information. Each Party assumes any and all risk and responsibility for selection and use of, and reliance on, any information provided under this Agreement.

7.8 **Severability**

If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

7.9 Section Headings

Section headings provided in this Agreement are for ease of reading and are not meant to interpret the text in each Section.

7.10 Amendments

With the exception of Schedules 1, 2, and 3, which do not require an amendment, the remainder of the Agreement may be modified from time to time by the mutual agreement of the Parties through an amendment. Amendments are subject to FERC approval and shall not take effect until FERC has accepted such amendments for filing and has made them effective. Nothing contained herein shall be construed as affecting in any way the right of the Parties to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the Federal Power Act (FPA) and pursuant to FERC's rules and regulations promulgated thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

7.11 Counterparts

This Agreement may be executed in one (1) or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

7.12 **Authority**

Each individual signing this Agreement certifies that the Party represented has duly authorized such individual to sign, bind, and obligate such Party.

Accepted and agreed to by:

California Independent System Operator	Gridforce Energy Management, LLC
Corporation	Rv:
By: Docusigned by: Eric Schmitt	By: DocuSigned by: Ulyursoll 00815463B3D94F4
Name: Eric Schmitt	Name: CJ Ingersoll
Title:	Title: President
VP, Operations	5 .
Date: 2/26/2019	Date: 2/26/2019

SCHEDULE 1

DESCRIPTION OF DYNAMIC SCHEDULING RESOURCES

[Sections 4.4.5 and 7.3]

A. Dynamic Scheduling System Resources Into the CAISO Balancing Authority Area

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Description of System Resource(s), including Associated Power Plants	Broadview 1: Broadview Energy KW, LLC (BEKW) is a 142.6 MW Wind Farm located near Clovis, New Mexico. BEKW features sixty-two 2.3 MW Siemens SWT108 turbines that collect to the Broadview Switchyard 34.5/345 kV connected to PNM's Blackwater Substation via the Western Interconnect 35 mile interconnection facility (345 kV). Gridforce Energy Management, LLC is the Host BA for the Western Interconnect facilities.
System Resource ID:	BEKWJS_5_BV1SCEDYN
PMax Values ¹ :	130 MW (of the 297 MW per the Interconnection Agreement)
CAISO Intertie:	Willow Beach (WILLOWBEACH)
Host Balancing Authority Area:	Gridforce Energy Management, LLC
Intermediary Balancing Authority Areas:	Public Service Company of New Mexico (PNM), Arizona Public Service Company (AZPS)

¹ This value represents the maximum amount of power that can be scheduled by the System Resource into the CAISO Balancing Authority Area, and is subject to limitation by Congestion on the scheduling path or System Emergencies that could reduce or eliminate the ability to schedule and transfer power from time-to-time.

Description of System Resource(s), including Associated Power Plants	Broadview 2: Broadview Energy JN, LLC (BEJN) is a 181.7 MW Wind Farm, located near Clovis, New Mexico. BEJN features seventy-nine 2.3 MW Siemens SWT108 turbines that collect to the Broadview Switchyard 34.5/345 kV connected to PNM's Blackwater Substation via the Western Interconnect 35 mile interconnection facility (345 kV). Gridforce Energy Management, LLC is the Host BA for the Western Interconnect facilities.
System Resource ID	BEJNLS_5_BV2SCEDYN
PMax Values ¹	167 MW (of the 297 MW per Interconnection Agreement)
CAISO Intertie	Willow Beach (WILLOWBEACH)
Intermediary Balancing Authority Area(s)	Public Service Company of New Mexico (PNM), Arizona Public Service Company (AZPS)

Description of System Resource(s), including Associated Power Plants	Mesquite Generating Station, Mesquite Power LLC (Block2), 625 Combine Cycle Natural Gas Unit, Located in Arlington, AZ with 2 GE 7FA 162.5MW gas turbines and 1 D11 300 MW Steam turbine connected to Switchyard 18/230 kV and 230/500 kV to the step Switchyard is connected to the point of interconnection at Hassayampa which is 2,016 feet to the facility.
System Resource ID	MSQUIT_5_SERDYN
PMax Values ¹	625 MW
CAISO Intertie	PVWEST
Intermediary Balancing Authority Area(s)	Salt River Project

B. Dynamic Scheduling System Resources Out of the CAISO Balancing Authority Area

There are no Dynamic Scheduling System Resources out of the CAISO Balancing Authority Area.

This Schedule 1, shall remain in effect until superseded by written notice from either of the Parties in accordance with Section 4.4.5 of the Agreement.

SCHEDULE 2

PSEUDO-TIE GENERATING UNIT, PSEUDO TIE Technical Information NATIVE and ATTAINING BALANCING AUTHORITY AREA Information [Section 5.9]

A. Pseudo-Tie Into the CAISO Balancing Authority Area

Technical Information

Pseudo Tie Location	410 State Road 19 Texico, NM 88135
Pseudo-Tie Generating	GRADY WIND ENERGY CENTER, LLC
Unit/Resource ID	GRADYW_5_GDYWD1
PMax	220.5 (200 Net)
Attaining Balancing Authority Area	CAISO
ridinonty riloa	
Native Balancing	CDID
Authority Area	GRID
Intertie	Millery December 2011 Control Control
Intertie ID	Willow Beach(WILLOWBEACH)

B. Pseudo-Tie Out of the CAISO Balancing Authority Area

There are no Pseudo-Ties out of the CAISO Balancing Authority Area.

This Schedule 2, shall remain in effect until superseded by written notice from either of the Parties in accordance with Section 5.9 of the Agreement.

SCHEDULE 3

NOTICES

[Section 7.3]

Gridforce:

Name of Primary

Representative: CJ Ingersoll Title: President

Street Address: Four Houston Center, 1331 Lamar Street,

Suite 560

City/State/Zip Code: Houston, Texas 77010
Email Address: cj.ingersoll@grid4ce.net

Phone: (713) 332-2906

Name of Alternate

Representative: Denise Ayers

Title: Senior Vice President

Company: Gridforce Energy Management, LLC

Address: Four Houston Center, 1331 Lamar Street,

Suite 560

City/State/Zip Code Houston, Texas 77010

Email Address: denise.ayers@grid4ce.net

Phone: (713) 332-2902

CAISO:

Name of Primary

Representative: Regulatory Contracts

Title: N/A

Address: 250 Outcropping Way City/State/Zip Code: Folsom, CA 95630

Email address: regulatorycontracts@caiso.com

Phone: (916) 608-7027 Fax: (916) 608-7292

Name of Alternative

Representative: Mr. Christopher J. Sibley

Title: Manager

Address: 250 Outcropping Way City/State/Zip Code: Folsom, CA 95630 Email address: csibley@caiso.com
Phone: (916) 608-7030 Fax: (916) 608-7292

This Schedule 3, shall remain in effect until superseded by written notice from either of the Parties in accordance with Section 7.3 of the Agreement.