# GENERATOR

# **INTERCONNECTION PROCEDURES (GIP)**

including

# GENERATOR

# **INTERCONNECTION AGREEMENT (GIA)**

4822-1222-9997v1

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#### **ARTICLE 1 DEFINITIONS**

Capitalized terms used in these Procedures have the meaning set forth below.

Adverse System Impact shall mean the threatened or actual negative effects arising out of the exceedance of technical or operational limits on conductors or other equipment that may compromise the safety and reliability of an electric system.

Affected System shall mean an electric system other than the Transmission System that may be affected by the proposed interconnection.

Affected System Operator shall mean the entity that operates an Affected System.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the Transmission System, including without limitation, WECC.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority of the Transmission System.

**Balancing Authority** shall mean, with respect to its Balancing Authority Area, the Los Angeles Department of Water and Power. The Balancing Authority maintains load resource balance within its Balancing Authority Area.

**Balancing Authority Area** shall mean the collection of generation, transmission and loads within the metered boundaries in which the Transmission System is located. Without limiting the generality of the foregoing, the boundaries of the Balancing Authority Area shall include the site of the Generating Facility.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases created by IPA and used for the Interconnection Studies.

**Business Day** shall mean Monday through Friday, excluding any day on which commercial banks in the State of Utah are closed.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation pursuant to Appendix E to the Generator Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information, including, without limitation, any such information set forth in a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated in writing as confidential by the Party supplying the information.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study finding are dependent, and if delayed or not built, could cause a need for Re-Studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Deposit Amount Schedule** shall mean the schedule of the same name attached to these Procedures, as the same may be amended from time to time in the sole discretion of IPA, setting forth the amount of various deposits required by these Procedures. Any amendment to such Schedule shall apply only to Interconnection Requests received by IPA after the effective date of the amendment

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties specified in Section 13.5, in which they will first attempt to resolve the dispute on an informal basis.

**Energy Resource Interconnection Service** shall mean the Interconnection Service that allows Interconnection Customer to connect the Generating Facility to the IPA Switchyard. Energy Resource Interconnection Service does not in and of itself convey to or entitle any person the right to transmit energy through the IPA Switchyard or to use or receive any transmission service beyond the Point of Interconnection.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes IPA to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Facilities Study** shall mean a study conducted by IPA or a third party consultant for IPA to determine a list of facilities (including IPA's Interconnection Facilities), the estimated cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission System. The scope of the study is defined in Section 8.2 of these Procedures.

**Facilities Study Agreement** shall mean an agreement for conducting the Facilities Study in the form set forth in Appendix 4 of these Procedures.

**Feasibility Study** shall mean a preliminary evaluation of the system impacts and cost of interconnecting the Generating Facility to the IPA Switchyard, the scope of which is described in Section 6.3 of these Procedures.

**Feasibility Study Agreement** shall mean an agreement for conducting the Feasibility Study in the form set forth in Appendix 2 of these Procedures.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities and not caused by an act of negligence or intentional wrongdoing of the Party claiming or seeking relief or excuse as the result of an event or condition of Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request but shall not include Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

Generator Interconnection Agreement or "GIA" shall mean a generator interconnection agreement entered into between IPA and an Interconnection Customer pursuant to these Procedures.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry 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 limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over either Party, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; <u>provided</u>, <u>however</u>, that such term does not include either Party, or any Affiliate thereof.

**In-Service Date** shall mean the date upon which Interconnection Customer reasonably expects it will be ready to begin use of IPA's Interconnection Facilities in connection with the operation, including for testing purposes, of the Generating Facility.

**Interconnection Customer** shall mean any entity that proposes to interconnect its Generating Facility with the IPA Switchyard.

**Interconnection Customer Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Interconnection, including the Last Transmission Leg (which shall be operated and maintained by IPA pursuant to the GIA), and any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the IPA Switchyard. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean IPA's Interconnection Facilities and Interconnection Customer's Interconnection Facilities.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to these Procedures, to interconnect a new Generating Facility to the IPA Switchyard, or to increase the capacity of, or make a Material Modification to the operating characteristics of an existing Generating Facility that is interconnected with the IPA Switchyard.

**Interconnection Service** shall mean the service provided by IPA associated with interconnecting Interconnection Customer's Generating Facility to the IPA Switchyard and enabling Interconnection Customer to deliver electric energy from the Generating Facility to the Point of Interconnection, pursuant to the terms of the Generator Interconnection Agreement.

**Interconnection Study** shall mean any of the following studies: the Feasibility Study, the System Impact Study, and the Facilities Study described in these Procedures.

**IPA** shall mean the Intermountain Power Agency, a political subdivision of the State of Utah.

**IPA Interconnection Facilities** shall mean all facilities and equipment from the Point of Interconnection and into the IPA Switchyard as identified in Appendix A to the GIA, including any modifications, additions or upgrades to such facilities and equipment, which shall be owned by IPA.

**IPA Switchyard** shall mean the AC switchyard owned by IPA and located at the Intermountain Generating Station site near Delta, Utah, into which Interconnection Customer's transmission line from the Generating Facility will be interconnected pursuant to these Procedures and the GIA.

**IPP Agreements** shall mean the Power Sales Contracts between IPA and the purchasers of the electric capacity and energy and the transmission capacity of IPA's Intermountain Power Project and the Construction Management and Operating Agreement between IPA and the Operating Agent relating to IPA's Intermountain Power Project.

**Joint Operating Committee** shall be a group made up of representatives from Interconnection Customer and IPA to coordinate operating and technical considerations of Interconnection Service as specified in the Generator Interconnection Agreement. In the discretion of IPA, representatives of the Joint Operating Committee of each IPA interconnection customer may meet together to discuss issues affecting all such parties.

Last Transmission Leg shall mean the last portion of Interconnection Customer's transmission line from the Generating Facility that begins at the boundary of the real property owned by IPA and ends at the Point of Interconnection.

**Los Angeles Department of Water and Power** shall mean the City of Los Angeles, a California municipal corporation, acting by and through its Department of Water and Power.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date, as determined by IPA in its sole discretion.

**NERC** shall mean the North American Electric Reliability Corporation or its successor organization.

**Network Upgrades** shall mean the additions, modifications and upgrades to equipment and facilities beyond the Point of Interconnection (including to any Affected System) that are not Interconnection Facilities such as breakers or other equipment (but not upgrades to the capacity of transmission lines that are a part of the Transmission System) to accommodate the interconnection of the Generating Facility to the Transmission System. Necessary Network Upgrades may be identified in the Interconnection Studies, but because they are not Interconnection Facilities, they will not be included in the work to be performed pursuant to Appendix A to the Generator Interconnection Agreement.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with these Procedures or the Generator Interconnection Agreement.

**Operating Agent** shall mean the Los Angeles Department of Water and Power, as operating agent for IPA in respect of the Transmission System and other facilities of IPA.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean an agreement for conducting an Optional Interconnection Study in the form set forth in Appendix 5 of these Procedures.

Party or Parties shall mean IPA and Interconnection Customer or both.

**Point of Interconnection** shall mean the point described as the point of interconnection in Appendix A to the GIA.

Procedures shall mean the Generator Interconnection Procedures set forth herein.

**Queue Position** shall mean the order of a valid Interconnection Request relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by IPA.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under these Procedures, the GIA, or efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean a meeting between representatives of Interconnection Customer and IPA, conducted for the purposes of discussing alternative interconnection options, exchanging information, including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, analyzing such information and determining potential feasible Points of Interconnection.

**Site Control** shall mean documentation provided by Interconnection Customer reasonably demonstrating that it has: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during construction. Both IPA and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Generator Interconnection Agreement. If IPA and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, IPA will provide the Interconnection Customer a written technical explanation outlining why IPA does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Surplus Interconnection Service** shall mean any unneeded portion of Interconnection Service established in a Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

**System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts, including the need for any Network Upgrades that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in these Procedures.

**System Impact Study Agreement** shall mean an agreement for conducting the System Impact Study in the form set forth in Appendix 3 of these Procedures.

**Transmission System** shall mean the facilities owned by IPA for the transmission of energy to points beyond the Point of Interconnection, including the IPA Switchyard.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

WECC shall mean Western Electricity Coordinating Council or its successor.

**WECC Criteria** shall mean those approved regional standards and Applicable Reliability Standards established and implemented by WECC, as such criteria may change from time to time.

#### **ARTICLE 2 SCOPE AND APPLICATION**

#### 2.1 Application of Generator Interconnection Procedures.

Article 2 through Article 13 of these Procedures apply to the processing of an Interconnection Request pertaining to a Generating Facility. IPA reserves the right to modify these Procedures in any manner, and any such modifications shall apply to any Interconnection Request received by IPA after the effective date of such modifications.

#### 2.2 Comparability.

IPA shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in these Procedures. IPA will use Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers.

#### 2.3 Base Case.

Within a reasonable time after written request from Interconnection Customer, IPA shall provide Interconnection Customer with the Base Case, subject to the confidentiality provisions of Article 13. IPA may require that Interconnection Customer sign a confidentiality agreement before the release of any such information.

#### 2.4 Interconnection Service.

The service for which Interconnection Customer may apply pursuant to these Procedures is Energy Resource Interconnection Service. Nothing in these Procedures shall apply to transmission service beyond the Point of Interconnection or be deemed to confer upon an Interconnection Customer any right to receive such transmission service.

### **ARTICLE 3 INTERCONNECTION REQUESTS**

#### **3.1** General.

An Interconnection Customer shall submit to IPA an Interconnection Request in the form of Appendix 1 and consistent with the provisions of Section 3.2.

Interconnection Customer shall submit a separate Interconnection Request for each site on which it proposes to construct generating facilities. Interconnection Customer must submit a deposit with each Interconnection Request. An Interconnection Request to evaluate one site at two different voltage levels shall require two Interconnection Requests. In its Interconnection Request, Interconnection Customer shall specifically state that it agrees to be bound by the provisions of these Procedures in connection with the Interconnection Request.

IPA will have a process in place to consider requests for Interconnection Service below the Generating Facility Capacity. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities and Network Upgrades, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer. If after the additional studies are complete, IPA determines that additional Network Upgrades are necessary, then IPA will: (1) specify which additional Network Upgrade costs are based on which studies; and (2) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrade costs required for safety and reliability also will be borne by the Interconnection Customer. Interconnection Customer may be subject to additional control technologies as well as testing and validation of those technologies consistent with Article 6 of the GIA. The necessary control technologies and protection systems shall be established in Appendix C of the executed.

#### **3.2** Valid Interconnection Request.

#### **3.2.1** Initiating an Interconnection Request.

To initiate an Interconnection Request, Interconnection Customer must submit to IPA all of the following: (i) a deposit in the amount specified in the Deposit Amount Schedule, all except \$25,000 of which is refundable, (ii) a completed application in the form of Appendix 1, and (iii) demonstration of Site Control or a posting of an additional deposit in the amount specified in the Deposit Amount Schedule. The Los Angeles Department of Water and Power shall promptly remit to IPA any fee payable under these Procedures received by the Los Angeles Department of Water and Power. If, after submitting the Interconnection Request and the deposit specified in clause (iii) above, Interconnection Customer demonstrates Site Control within fourteen (14) days of submitting its Interconnection Request, the additional deposit shall be refundable; otherwise, such additional deposit shall be non-refundable from and after such fourteenth (14th) day. The initial deposit shall be applied to any administrative, study, or construction costs.

The expected In-Service Date of the Generating Facility or increase in capacity of an existing Generating Facility shall not be later than the process

window for the regional expansion planning period (or in the absence of a regional planning process, the process window for IPA's expansion planning period) not to exceed seven years from the date the Interconnection Request is received by IPA, unless Interconnection Customer demonstrates that engineering, permitting and construction of the Generating Facility or increase in capacity of an existing Generating Facility will take longer than the regional expansion planning period. In no event will the In-Service Date be later than ten (10) years after submission of the Interconnection Request unless Interconnection Customer and IPA mutually agree.

### 3.2.2 Acknowledgment of Interconnection Request.

IPA shall acknowledge receipt of the Interconnection Request in writing within ten (10) Business Days after receipt of the request.

# **3.2.3** Deficiencies in Interconnection Request.

An Interconnection Request will not be considered to be a valid request until all items specified in Section 3.2.1 have been received by IPA. If an Interconnection Request fails to meet the requirements set forth in Section 3.2.1, IPA shall notify Interconnection Customer in writing within ten (10) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide IPA with the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. If Interconnection Customer fails to comply with this Section 3.2.3, IPA may deem the Interconnection Request withdrawn in accordance with Section 3.6.

# 3.3 Utilization of Surplus Interconnection Service.

IPA will provide a process that allows an Interconnection Customer to utilize or transfer Surplus Interconnection Service at an existing Point of Interconnection. The original Interconnection Customer or one of its affiliates shall have priority to utilize Surplus Interconnection service. If the existing Interconnection Customer or one of its affiliates does not exercise its priority, then that service may be made available to other potential Interconnection Customers.

# 3.3.1 Surplus Interconnection Service Requests.

Surplus Interconnection Service requests may be made by the existing Interconnection Customer whose Generating Facility is already interconnected or one of its affiliates. Surplus Interconnection Service requests also may be made by another Interconnection Customer. IPA will provide a process for evaluating Interconnection Requests for Surplus Interconnection Service. Studies for Surplus Interconnection Service shall consist of reactive power, short circuit/fault duty, stability analyses, and any other appropriate studies. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. If the Surplus Interconnection Service was not studied under off-peak conditions, off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of Surplus Interconnection Service. If the original System Impact Study is not available for the Surplus Interconnection Service, both off-peak and peak analyses may need to be performed for the existing Generating Facility associated with the request for Surplus Interconnection Service. The reactive power, short circuit/fault duty, stability, and steady-state analyses for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary.

# 3.4 OASIS Posting.

### 3.4.1

IPA will maintain, through the open access same-time information system (OASIS) of Operating Agent (or as IPA shall otherwise determine), a list of all pending Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the point where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed; (ix) any deviations from the study timelines set forth herein; (x) Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. The list will not disclose the identity of Interconnection Customer until Interconnection Customer executes a GIA.

### 3.4.2

IPA will maintain on the OASIS of Operating Agent (or as IPA shall otherwise determine), summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, updated quarterly. For each calendar quarter, IPA will calculate and post the information detailed in 3.4.2.1 through 3.4.2.4.

### 3.4.2.1 Feasibility Studies processing time.

(A) Number of Interconnection Requests that had Feasibility Studies completed by IPA during reporting quarter.

(B) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Feasibility Studies.

(C) Mean time (in days), Feasibility Studies completed by IPA during the reporting quarter, from the date IPA received the executed Feasibility Study Agreement to the date when IPA provided the completed Feasibility Study to Interconnection Customer.

#### 3.4.2.2 System Impact Studies Processing Time.

(A) Number of Interconnection Requests that had System Impact Studies completed by IPA during reporting quarter.

(B) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete System Impact Studies.

(C) Mean time (in days), System Impact Studies completed by IPA during the reporting quarter, from the date when IPA received the executed System Impact Study Agreement to the date when IPA provided the completed System Impact Study to the Interconnection Customer.

### **3.4.2.3** Facilities Studies Processing Time.

(A) Number of Interconnection Requests that had Facilities Studies completed by IPA during reporting quarter.

(B) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Facilities Studies.

(C) Mean time (in days), Facilities Studies completed by IPA during the reporting quarter, from the date when IPA received the executed Facilities Study Agreement to the date when IPA provided the completed Facilities Study to the Interconnection Customer.

# 3.4.2.4 Interconnection Service Requests Withdrawn from Interconnection Queue.

(A) Number of Interconnection Requests withdrawn from IPA's interconnection queue during the reporting quarter.

(B) Number of Interconnection Requests withdrawn from IPA's interconnection queue during the reporting quarter before completion of any interconnection studies or execution of any interconnection study agreements.

(C) Number of Interconnection Requests withdrawn from IPA's interconnection queue during the reporting quarter before completion of an Interconnection System Impact Study.

(D) Number of Interconnection Requests withdrawn from IPA's interconnection queue during the reporting quarter before completion of an Interconnection Facilities Study.

(E) Number of Interconnection Requests withdrawn from IPA's interconnection queue during the reporting quarter after execution of a Generator Interconnection Agreement.

(F) Mean time (in days), for all withdrawn Interconnection Requests, from the date when the request was determined to be valid to when IPA received the request to withdraw from the queue.

#### 3.4.3

IPA will post on OASIS of Operating Agent (or as IPA shall otherwise determine), the measures in paragraphs 3.4.2.1(A) through 3.4.2.4(F) for each calendar quarter within 30 days of the end of the calendar quarter and will keep these quarterly measures posted for a period of three (3) calendar years.

#### **3.5** Coordination with Affected Systems.

IPA will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in these Procedures. IPA will include such Affected System Operators in all meetings held with Interconnection Customer as required by these Procedures. Interconnection Customer will cooperate with IPA in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

#### 3.6 Withdrawal.

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to IPA. In addition, if Interconnection Customer fails to comply with any of the requirements of these Procedures (subject to any applicable cure rights), IPA may deem the Interconnection Request to be withdrawn and if IPA does so, it shall provide written notice to Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify IPA of its intention to pursue Dispute Resolution.

Withdrawal shall result in the loss of Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, Interconnection Customer's Interconnection Request shall be eliminated from the queue until such time as the outcome of Dispute Resolution requires restoration of its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to IPA all costs that IPA incurs with respect to that Interconnection Request prior to IPA's receipt of notice described above. Interconnection Customer must pay all monies due to IPA before it is allowed to obtain any Interconnection Study data or results.

After the withdrawal of any Interconnection Request, IPA shall (i) update the Queue Position posting on IPA's list maintained pursuant to Section 3.3 and (ii) refund to Interconnection Customer any portion of Interconnection Customer's deposit or study payments that exceeds the costs that IPA has incurred. In the event of such withdrawal, IPA, subject to the confidentiality provisions of Article 13, shall provide, at Interconnection Customer's request, all information that IPA developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## **3.7** Identification of Contingent Facilities.

IPA will post a method for identifying the Contingent Facilities to be provided to Interconnection Customer at the conclusion of the System Impact Study and included in Interconnection Customer's GIA. The method will be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the Interconnection Request. IPA will also provide, upon request of Interconnection Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and not commercially sensitive.

#### **ARTICLE 4 QUEUE POSITION**

#### 4.1 General.

IPA shall assign a Queue Position based upon the date and time of receipt of a valid Interconnection Request; provided, that if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and Interconnection Customer provides such information in accordance with Section 3.2.3, then IPA shall assign Interconnection Customer a Queue Position based on the date the application form was originally filed. Moving a Point of Interconnection shall result in a lowering of Queue Position if it is deemed a Material Modification under Section 4.4.3.

The Queue Position of each Interconnection Request will be used to determine the order of performing the Interconnection Studies and determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request.

IPA may allocate the cost of the common upgrades for clustered Interconnection Requests without regard to Queue Position.

## 4.2 Clustering.

At IPA's option, Interconnection Requests may be studied serially or in clusters for the purpose of the System Impact Study.

Clustering shall be implemented on the basis of Queue Position. If IPA elects to study Interconnection Requests using Clustering, all Interconnection Requests received within a period not to exceed one hundred and eighty (180) calendar days, hereinafter referred to as the "Queue Cluster Window" shall be studied together. The deadline for completing all System Impact Studies for which a System Impact Study Agreement has been executed during a Queue Cluster Window shall be in accordance with Section 7.3, for all Interconnection Requests assigned to the same Queue Cluster Window. IPA may study an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Generating Facility.

Clustering System Impact Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of IPA's capabilities at the time of each study.

The Queue Cluster Window shall have a fixed time interval based on fixed annual opening and closing dates. Any changes to the established Queue Cluster Window interval and opening or closing dates shall be announced with a posting on IPA's list maintained pursuant to Section 3.3 beginning at least one hundred and eighty (180) calendar days in advance of the change and continuing thereafter through the end date of the first Queue Cluster Window that is to be modified.

# 4.3 Transferability of Queue Position.

Interconnection Customer may transfer its Queue Position to another entity up to two (2) times and only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

### 4.4 Modifications.

Interconnection Customer shall submit to IPA, in writing, any modifications it wishes to make to any information provided in the Interconnection Request. Interconnection Customer shall retain its Queue Position only if the modifications are in accordance with the provisions of this Article 4, or are determined not to be Material Modifications. All costs associated with any modifications shall be the sole responsibility of Interconnection Customer.

Notwithstanding the foregoing, during the course of the Interconnection Studies, either Interconnection Customer or IPA may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, or the ability of IPA to accommodate the Interconnection Request. To the extent the identified changes are reasonably acceptable to IPA and

Interconnection Customer, IPA shall proceed in accordance with such changes and perform any reassessment necessary to do so in accordance with Section 6.5, Section 7.5 and Section 8.4, as applicable, and Interconnection Customer shall retain its Queue Position.

#### 4.4.1 **Prior to System Impact Study Agreement.**

Prior to the execution of the System Impact Study Agreement, modifications permitted under this Section are: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed project, through either (1) a decrease in plant size or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1) accomplished by applying IPA-approved injection-limiting equipment; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. Any proposed incremental increase in Generating Facility output will be assigned a Queue Position at the end of the queue for the purposes of cost allocation and study analysis.

### 4.4.2 Prior to Facilities Study Agreement.

Prior to the execution of the Facility Study Agreement, the modifications permitted under this Section are: (a) an additional 15 percent decrease of electrical output of the proposed project through either (1) a decrease in plant size (MW), or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1) accomplished by applying IPA-approved injection-limiting equipment and (b) modifying Generating Facility technical parameters associated with modifications to Generating Facility technology and transformer impedances.

### 4.4.3 Material Modifications.

If Interconnection Customer proposes to make any modification other than those specifically permitted by Sections 4.4.1 and 4.4.2, Interconnection Customer shall first request that IPA evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, IPA shall evaluate the proposed modifications and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those permitted under this Article 4, Article 6 or Section 7.1, shall constitute a Material Modification. If IPA determines that a proposed modification is a Material Modification, Interconnection Customer shall proceed with a new Interconnection Request for such modification. Upon receipt from Interconnection Customer of a request for modifications permitted under this Article 4, IPA shall commence and perform any necessary additional studies as soon as practicable.

# ARTICLE 5 PROCEDURES FOR INTERCONNECTION REQUESTS SUBMITTED PRIOR TO EFFECTIVE DATE OF PROCEDURES.

#### 5.1 Queue Position for Pending Requests.

#### 5.1.1

As of the effective date of these Procedures, IPA has received the requests for interconnection rights that are described in Appendix 6. To the extent that the parties making such requests comply with the provisions of Section 5.1.2, each will be granted a Queue Position as of the effective date of these Procedures reflecting the order of the requests listed on Appendix 6.

# 5.1.2 Transition Period.

Interconnection Customers who have submitted the requests identified in Appendix 6 shall transition to these Procedures within a reasonable period of time not to exceed sixty (60) calendar days. In the event that an Interconnection Customer who has submitted a request identified in Appendix 6 does not file an Interconnection Request conforming to these Procedures within such sixty (60)-day period, such Interconnection Customer shall have no rights, and IPA shall have no obligations under the request described in Appendix 6.

# 5.1.3 Other Rights.

Except as provided in Section 5.1.1, nothing in these Procedures shall be construed as denying or otherwise affecting any rights or obligations of, or requirements applicable to, any party having or claiming to have interconnection rights at the IPA Switchyard under any written agreement in existence prior to the effective date of these Procedures.

# **ARTICLE 6 SCOPING AND FEASIBILITY STUDY**

### 6.1 Scoping Meeting.

Within twenty (20) Business Days after IPA's acknowledgement of a valid Interconnection Request pursuant to Section 3.2.3, IPA shall establish a date reasonably agreeable to Interconnection Customer for the Scoping Meeting. Such date shall be no later than thirty (30) calendar days from receipt of the valid Interconnection Request, unless otherwise mutually agreed by the Parties.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. IPA and Interconnection Customer will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting, (vi) for wind or solar facilities, generation profile data, and (vii) if the Generating Facility is or, as a hybrid, includes solar photovoltaic technology, a completed Attachment A to Appendix 8. IPA and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. At IPA's sole discretion, a consultant approved by IPA, may be brought to the meeting and will be responsible for conducting the Feasibility Study. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.2, and one or more available alternative Point(s) of Interconnection.

#### 6.2 Feasibility Study Agreement.

Unless otherwise agreed, within ten (10) Business Days after the Scoping Meeting, IPA shall provide to Interconnection Customer a Feasibility Study Agreement substantially in the form of Appendix 2, pursuant to which IPA, or a consultant approved by IPA, will conduct a Feasibility Study at Interconnection Customer's sole cost and expense. Interconnection Customer shall execute and deliver to IPA the Feasibility Study Agreement no later than thirty (30) calendar days after its receipt.

On or before the delivery of the executed Feasibility Study Agreement to IPA, Interconnection Customer shall provide the technical data specified in Appendix 1, Attachment A.

If the Feasibility Study discloses any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by Interconnection Customer, IPA, or a consultant approved by IPA, and acceptable to both Interconnection Customer and IPA, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and further studies shall be completed pursuant to Section 6.5, as applicable. For the purpose of this Section 6.2, if IPA and Interconnection Customer cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Feasibility Study Agreement, as determined pursuant to Section 6.2, shall be the substitute.

If Interconnection Customer and IPA agree to forgo the Feasibility Study, IPA will initiate a System Impact Study under Article 7 of these Procedures.

## 6.3 Scope of Feasibility Study.

The Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Transmission System.

The Feasibility Study will consider the Base Case as well as all generating facilities that, on the date the Feasibility Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the IPA Switchyard; and (iv) have no Queue Position but have initiated Dispute Resolution pursuant to Section 13.5. The Feasibility Study will consist of a power flow and short circuit analysis. The Feasibility Study will provide a list of facilities and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct any required facilities or improvements.

# 6.4 Feasibility Study Procedures.

IPA, or a consultant approved by IPA, shall utilize existing studies to the extent practicable when it performs the Feasibility Study. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete the Feasibility Study no later than forty-five (45) calendar days after the execution by both Parties of the Feasibility Study Agreement. At the request of Interconnection Customer or at any time IPA, or a consultant approved by IPA, determines that it will not meet the time frame specified above for completing the Feasibility Study, IPA shall notify Interconnection Customer as to the schedule status of the Feasibility Study. If IPA, or a consultant approved by IPA, is unable to complete the Feasibility Study within the time period specified above, it shall notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

IPA shall study the Interconnection Request at the level of service requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns.

# 6.4.1 Meeting with IPA.

Within twenty (20) Business Days of providing the Feasibility Study report to Interconnection Customer, IPA and Interconnection Customer shall meet to discuss the results of the Feasibility Study. If a consultant approved by IPA was used to conduct the Feasibility Study, that consultant will also attend the meeting to discuss the results of the study.

### 6.5 Reassessment.

If reassessment of the Feasibility Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to Section 4.4, or re-designation of the Point of Interconnection pursuant to Section 6.2, IPA shall notify Interconnection Customer in writing. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete such reassessment within forty-five (45) calendar days from the date of the notice subject to extension in the manner specified in Section 6.4. All costs associated with a reassessment shall be borne by Interconnection Customer.

## **ARTICLE 7 SYSTEM IMPACT STUDY**

#### 7.1 System Impact Study Agreement.

Unless otherwise agreed, within ten (10) Business Days after the delivery of the Feasibility Study to Interconnection Customer, IPA shall provide to Interconnection Customer a System Impact Study Agreement substantially in the form of Appendix 3 pursuant to which IPA, or a consultant approved by IPA, will conduct a System Impact Study at Interconnection Customer's sole cost and expense. IPA may draw upon and apply any remainder of the Interconnection Customer's initial deposit to perform the study or have a consultant approved by IPA perform the study. In the event that the remainder of the initial deposit is not sufficient to cover the actual costs of such study, including any costs for Reassessment in accordance with Section 7.5, upon receipt of an invoice from IPA for a good faith estimate of the costs to complete such study, Interconnection Customer shall pay to IPA the amount of such estimate within fifteen (15) days and prior to IPA, or a consultant approved by IPA, proceeding or continuing with such Interconnection Customer shall execute the System Impact Study study. Agreement and deliver the executed System Impact Study Agreement to IPA no later than thirty (30) calendar days after its receipt, along with demonstration of Site Control or the posting of a deposit in addition to that already made in Section 3.2.1(iii) in the amount specified in the Deposit Amount Schedule, which shall be refundable without interest if and when Interconnection Customer demonstrates Site Control or withdraws its application.

If Interconnection Customer does not provide all required technical data when it delivers the executed System Impact Study Agreement, IPA shall notify Interconnection Customer of any deficiency within five (5) Business Days of the receipt of the executed System Impact Study Agreement. Interconnection Customer shall have ten (10) Business Days to cure the deficiency; provided, however, that if the deficiency is either a failure to deliver the executed System Impact Study Agreement or a failure to pay any additionally invoiced deposit specified above, the cure period shall not apply. If Interconnection Customer fails to cure the deficiency within the period specified above, IPA may deem the Interconnection Request withdrawn in accordance with Section 3.5.

If the System Impact Study discloses any unexpected result(s) not contemplated during the Scoping Meeting or in the Feasibility Study, a substitute Point of Interconnection identified by Interconnection Customer, IPA, or a consultant approved by IPA, and acceptable to the Interconnection Customer and IPA, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and reassessments shall be completed pursuant to Section 7.5, as applicable. If IPA and Interconnection Customer cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives specified in the Feasibility Study Agreement, as approved pursuant to Section 6.1, be the substitute Point of Interconnection.

#### 7.2 Scope of System Impact Study.

The System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the Transmission System. The System Impact Study will consider the Base Case as well as all generating facilities that, on the date the System Impact Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have initiated Dispute Resolution pursuant to Section 13.5.

The System Impact Study will consist of short circuit, stability, power flow, reactive margin, and, if deemed necessary by IPA, harmonics and/or subsynchronous resonance (SSR) analyses. The System Impact Study will state the assumptions upon which it is based; state the results of the analyses; and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. For purposes of determining necessary Interconnection facilities and Network Upgrades, the System Impact Study shall consider the level of Interconnection service requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns. The System Impact Study will provide a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimate of facilities or improvements.

#### 7.3 System Impact Study Procedures.

IPA, or a consultant approved by IPA, shall coordinate the System Impact Study with any Affected System that is affected by the Interconnection Request pursuant to Section 3.4 above. IPA, or a consultant approved by IPA, shall utilize existing studies to the extent practicable when it performs the study. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete the System Impact Study within ninety (90) calendar days after the execution by both Parties of the System Impact Study Agreement. If IPA uses Clustering, IPA, or a consultant approved by IPA, shall use Reasonable Efforts to deliver a completed System Impact Study within ninety (90) calendar days after the close of the Queue Cluster Window.

At the request of Interconnection Customer, or at any time IPA, or a consultant approved by IPA, determines that it will not meet the required time frame for completing the System Impact Study, IPA shall notify Interconnection Customer as to the schedule status of the System Impact Study. If IPA, or a consultant approved by IPA, is unable to complete the System Impact Study within the specified time period, it shall notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

#### 7.4 Meeting with IPA.

Within ten (10) Business Days of providing the System Impact Study to Interconnection Customer, IPA and Interconnection Customer shall meet to discuss the results of the System Impact Study. If a consultant approved by IPA was used to conduct the System Impact Study, that consultant will also attend the meeting to discuss the results of the study.

#### 7.5 Reassessment.

If Reassessment of the System Impact Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to Section 4.4, or re-designation of the Point of Interconnection pursuant to Section 7.1, IPA shall notify Interconnection Customer in writing. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete such reassessment within sixty (60) calendar days from the date of notice, subject to extension in the manner specified in Section 7.3. All costs of associated with a reassessment shall be borne by Interconnection Customer.

#### **ARTICLE 8 FACILITIES STUDY**

#### 8.1 Facilities Study Agreement.

Unless otherwise agreed, within ten (10) Business Days after the delivery of the System Impact Study to Interconnection Customer, IPA shall provide to Interconnection Customer a Facilities Study Agreement substantially in the form of Appendix 4, pursuant to which IPA, or a consultant approved by IPA, will conduct a Facilities Study at Interconnection Customer's sole cost and expense. IPA may draw upon any remainder of the Interconnection Customer's initial deposit to perform the Interconnection Facilities Study or have a consultant approved by IPA perform the study. In the event that the remainder of the initial deposit is insufficient to cover the actual costs of the study, including any costs for Reassessment in accordance with Section 8.4, upon receipt of an invoice from IPA for a good faith estimate of the costs to complete such study, Interconnection Customer shall pay to IPA the amount of such estimate within thirty (30) days and prior to IPA, or a consultant approved by IPA, proceeding or continuing with such study. Any difference between study payments and the actual cost of the studies shall be paid to IPA or refunded to Interconnection Customer, as appropriate.

Interconnection Customer shall execute the Facilities Study Agreement and deliver the executed Facilities Study Agreement to IPA no later than thirty (30) calendar days after its receipt, together with the required technical data and any additionally invoiced deposit specified above.

#### 8.2 Scope of Facilities Study.

The Facilities Study shall specify the nature of, and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the System Impact Study in accordance with Good Utility Practice and NERC/WECC reliability standards to physically and electrically connect the Generating Facility to the IPA Switchyard. The Facilities Study may identify any necessary Network Upgrades and shall identify (i) the electrical switching configuration of the connection equipment, including, without limitation, the transformer, switchgear, meters, and other station equipment; (ii) the nature and estimated cost of any IPA Interconnection Facilities necessary to accomplish the interconnection; and (iii) an estimate of the time required to complete the construction and installation of such facilities. The Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the Generating Facility Capacity.

#### 8.3 Facilities Study Procedures.

IPA, or a consultant approved by IPA, shall coordinate the Facilities Study with any Affected System pursuant to Section 3.4 above. IPA, or a consultant approved by IPA, shall utilize existing studies to the extent practicable in performing the Facilities Study. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete the Facilities Study and issue a draft Facilities Study report to Interconnection Customer within 120 calendar days for a cost estimate that is within +/- 20% and 180 calendar days for a cost estimate that is within +/- 10% after execution by both Parties of the Facilities Study Agreement.

At the request of Interconnection Customer, or at any time IPA, or a consultant approved by IPA, determines that it will not meet the time frame specified above for completing the Facilities Study, IPA shall notify Interconnection Customer as to the schedule status of the Facilities Study. If IPA, or a consultant approved by IPA, is unable to complete the draft Facilities Study within the specified time period, IPA shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Within ten twenty (20) Business Days of providing a draft Facilities Study to Interconnection Customer, IPA and Interconnection Customer shall meet to discuss the draft Facilities Study. If a consultant approved by IPA was used to conduct the Facilities Study, that consultant will also attend the meeting to discuss the results of the study.

Interconnection Customer may, within thirty (30) calendar days after receipt of the draft report, provide written comments to IPA. IPA, or a consultant approved by IPA, shall issue the final Facilities Study report within twenty-five (25) Business Days after receipt of Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. IPA, or a consultant approved by IPA, may reasonably extend such fifteen-day period upon notice to Interconnection Customer if Interconnection Customer's comments require IPA, or a consultant approved by IPA, to perform additional analyses or make other significant modifications prior to the issuance of the final Facilities Study report.

#### 8.4 Reassessment.

If Reassessment of the Facilities Study is required due to a higher queued project dropping out of the queue or a modification of a higher queued project pursuant to Section 4.4, IPA shall so notify Interconnection Customer in writing. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete such reassessment within sixty (60) calendar days from the date of notice, subject to extension in the manner specified in Section 8.3. All costs associated with a reassessment shall be borne by Interconnection Customer.

## **ARTICLE 9 OPTIONAL INTERCONNECTION STUDY**

### 9.1 Optional Interconnection Study Agreement.

On or after the date when Interconnection Customer receives the System Impact Study, Interconnection Customer may request, and IPA, or a consultant approved by IPA, shall perform, at Interconnection Customer's sole cost and expense, a reasonable number of Optional Studies. The request shall describe the assumptions that Interconnection Customer wishes IPA, or a consultant approved by IPA, to study within the scope described in Section 9.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, IPA shall provide to Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5, pursuant to which IPA, or a consultant approved by IPA, will conduct the Optional Interconnection Study at Interconnection Customer's sole cost and expense.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) IPA's estimate of the cost of the Optional Interconnection Study. To the extent known by IPA, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the

above, IPA, or a consultant approved by IPA, shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a deposit in the amount specified in the Deposit Amount Schedule, which shall be managed separately from Interconnection Customer's initial deposit.

#### 9.2 Scope of Optional Interconnection Study.

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify IPA Interconnection Facilities and Network Upgrades, and the estimated cost thereof, that may be required to provide Interconnection Service based upon the results of the Optional Interconnection Study. IPA, or a consultant approved by IPA, shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the Interconnection Service. IPA, or a consultant approved by IPA, shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

#### 9.3 **Optional Interconnection Study Procedures.**

IPA, or a consultant approved by IPA, shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If IPA, or a consultant approved by IPA, is unable to complete the Optional Interconnection Study within such time period, IPA shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to IPA or refunded to Interconnection Customer's initial deposit.

### ARTICLE 10 ENGINEERING & PROCUREMENT ("E&P") AGREEMENT.

Prior to executing a GIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request that IPA enter into an E&P Agreement with Interconnection Customer that authorizes IPA to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. IPA shall determine, in its sole discretion, whether to enter into an E&P Agreement, and the terms and conditions of any E&P Agreement shall be acceptable to IPA in its sole discretion. The E&P Agreement is an optional procedure and it will not alter Interconnection Customer's Queue Position or In-Service Date.

Any E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs. Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, IPA may elect: (i) to take title to the equipment, in which event IPA shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

#### **ARTICLE 11 GENERATOR INTERCONNECTION AGREEMENT (GIA)**

#### **11.1** Delivery of Additional Information and Draft GIA.

Within ten (10) calendar days after delivery of the final Facilities Study to Interconnection Customer pursuant to Article 8, Interconnection Customer shall deliver to IPA any additional information reasonably requested in writing by IPA at the time of delivery of the Final Facilities Study (including but not limited to a copy of any power sale agreement related to the output of the Generating Facility), which information is reasonably necessary to allow IPA to complete a draft GIA.

Within thirty (30) calendar days after delivery of the final Facilities Study to Interconnection Customer pursuant to Article 8 (which period shall be extended day-for-day for each day of delay by Interconnection Customer in delivering the information requested pursuant to the preceding paragraph), IPA shall deliver to Interconnection Customer a draft GIA, together with draft appendices completed to the extent practicable. The draft GIA shall be substantially in the form of IPA's standard form GIA, attached as Appendix 7.

#### 11.2 Negotiation.

Notwithstanding Section 11.1, Interconnection Customer and IPA may, if they mutually agree, begin negotiations concerning the appendices to the GIA at any time after execution of the Facilities Study Agreement. IPA and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than sixty (60) calendar days after delivery of the draft GIA to Interconnection Customer pursuant to Section 11.1. If either Interconnection Customer or IPA determines that negotiations are at an impasse, the Party making such determination may request termination of the negotiations and initiate Dispute Resolution procedures pursuant to Section 13.5. If either Party

requests termination of the negotiations, but within thereafter neither Party has initiated Dispute Resolution, IPA may deem the Interconnection Request withdrawn in accordance with Section 3.5. If Interconnection Customer has not executed the GIA or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty (60) calendar days after delivery to it of the draft GIA, the Interconnection Request may be deemed withdrawn in accordance with Section 3.5.

#### **11.3** Execution Conditions.

Within fifteen (15) Business Days of receiving the final GIA, and prior to, and as a condition precedent to IPA's execution of the GIA, Interconnection Customer shall provide IPA with (A) reasonable evidence of continued Site Control or (B) if Site Control has not been demonstrated by reasonable evidence, additional security in the amount specified in the Deposit Amount Schedule, which shall be applied toward future construction costs, as specified in the GIA. At the same time, Interconnection Customer also shall provide reasonable evidence that one or more of the following milestones in the development of the Generating Facility has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Generating Facility; or (v) application for an air, water, or land use permit.

# ARTICLE 12 CONSTRUCTION OF IPA'S INTERCONNECTION FACILITIES AND NETWORK UPGRADES

#### 12.1 Schedule.

IPA and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of IPA's Interconnection Facilities. The installation of any Network Upgrades shall be negotiated with the party whose assets or systems are the subject of the Network Upgrades. IPA will, at the sole cost and expense of Interconnection Customer, use Reasonable Efforts to assist Interconnection Customer with the implementation of any resulting agreements.

#### 12.2 Amended System Impact Study.

The System Impact Study will be amended to determine the facilities necessary to support the requested In-Service Date. This amended study will include those transmission and generating facilities that are expected to be in service on or before the requested In-Service Date.

#### **ARTICLE 13 MISCELLANEOUS**

#### 13.1 Confidentiality.

For a period of three (3) years after the disclosure by a Party to the Other Party of Confidential Information, and, except as otherwise provided in this Article 13, each Party shall hold in confidence and shall not disclose to any person Confidential Information delivered or exchanged pursuant to these Procedures. Interconnection Customer and IPA, in engaging in any activities pursuant to these Procedures, shall be bound by these confidentiality provisions as if the same were set forth in a written agreement between them. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

#### 13.1.1 Scope.

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party; (6) is required, in accordance with Section 13.1.6 of these Procedures, to be disclosed by any Governmental Authority; (7) is otherwise required to be disclosed by law or subpoena, including all public records/open meetings laws of the State of California or the State of Utah, or is necessary in any legal proceeding establishing rights and obligations under these Procedures; (8) is otherwise permitted to be disclosed by consent of the disclosing Party; or (9) is necessary to fulfill its obligations under these Procedures or as a transmission service provider or a Balancing Area operator including disclosing the Confidential Information to any regional transmission organization or independent transmission system operator or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party to which the request or demand was given shall notify the other Party in writing of such request or demand. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

#### 13.1.2 Release of Confidential Information.

Neither Party shall release or disclose Confidential Information received from the other Party to any other person, except to its directors, officers, employees, consultants, or to parties who may be, or are considering, providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need to know basis in connection with these Procedures, unless such person has first been advised of the confidentiality provisions of this Article 13 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 13.

#### 13.1.3 Rights.

Each Party retains all rights, title and interest in the Confidential Information that such Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **13.1.4** No Warranties.

By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### 13.1.5 Standard of Care.

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under these Procedures or its regulatory requirements.

#### 13.1.6 Disclosure Required by Law or Order.

If a court or a Government Authority or entity with the right, power and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, or such Confidential Information is required to be disclosed by any law, including all open records/open meetings laws of the State of California or the State of Utah, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of these Procedures. Notwithstanding the absence of a protective order or waiver, a Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose and if such Party is under a deadline imposed by law for the disclosure of such Confidential Information, such Party shall not be required to wait beyond such deadline to disclose such information in order to await the outcome of any such action to obtain a protective order. Except with respect to information permitted or required to be disclosed pursuant to this Section, each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### 13.1.7 Destruction.

Except for information subject to a request described in Section 13.1.6, each Party shall, within ten (10) calendar days of receipt of a written request from the other Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

#### 13.1.8 Remedies.

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's breach of its obligations under this Article 13. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this Article 13, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this Article 13, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 13.

### 13.1.9 No Breach.

Notwithstanding this ARTICLE 13 or any other provision of these Procedures, Interconnection Customer agrees and acknowledges that disclosure by IPA, the Los Angeles Department of Water and Power or the Intermountain Power Service Corporation pursuant to the public records/open meetings laws of the State of California or the State of Utah shall not be a breach, and none of IPA, the Los Angeles Department of Water and Power, the Intermountain Power Service Corporation or any of their respective boards, directors, officers, agents, representatives, employees, assigns and successors in interest shall have any liability in connection therewith.

#### 13.1.10 NERC/WECC Requirements.

In addition to the foregoing provisions under this Section 13.1, Interconnection Customer acknowledges that IPA is subject to certain data sharing requirements imposed by NERC and WECC. Interconnection Customer consents to data sharing with NERC or WECC pursuant to the requirements imposed by NERC and WECC including data sharing pursuant to requirements that conflict with any applicable data sharing or confidentiality agreements to which IPA and the Interconnection Customer are parties.

#### **13.2** Performance by Operating Agent.

The Parties recognize that the Los Angeles Department of Water and Power, pursuant to an agreement with IPA, acts as the Operating Agent for IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, and that the Los Angeles Department of Water and Power, in such capacity as Operating Agent, is responsible for planning, negotiating, designing, constructing, insuring, administering, operating and maintaining the IPA Switchyard and the Transmission System and such other facilities of IPA. Accordingly, consistent with such agreements with IPA, the Los Angeles Department of Water and Power, as Operating Agent acting on behalf of IPA, is to perform and carry out the responsibilities of IPA under these Procedures.

#### **13.3** Performance by Intermountain Power Service Corporation.

The Parties further recognize that under an agreement with IPA and the Los Angeles Department of Water and Power as Operating Agent, Intermountain Power Service Corporation performs certain operating and maintenance work pertaining to IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, under the direction of the Los Angeles Department of Water and Power as Operating Agent. Accordingly, consistent with such agreement with IPA and the Los Angeles Department of Water and Power, Intermountain Power Service Corporation may perform and carry out certain operation and maintenance work with respect to the IPA Interconnection Facilities, as well as the IPA Switchyard and the Transmission System, as provided for under the applicable provisions of these Procedures.

#### **13.4** Obligation for Costs.

Interconnection Customer shall pay all costs associated with the Interconnection Studies in the manner specified in the applicable study agreement. Any difference between the study deposit applicable to any Interconnection Study and the actual cost of such Interconnection Study shall, except as otherwise provided herein, be paid by or refunded to Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request. Any invoices for Interconnection Studies shall include an itemized accounting of such costs. Interconnection Customer shall pay any invoices within the time specified in the applicable study agreement or, if not specified therein, within twenty (20) calendar days of receipt of an invoice therefor. IPA shall not be obligated to perform or continue to perform any Interconnection Study unless Interconnection Customer has paid all undisputed amounts in compliance herewith and with the applicable study agreement.

#### 13.5 Disputes.

#### 13.5.1 Submission.

In the event either Party has a dispute with the other Party, or asserts a claim that arises out of or in connection with performance under these Procedures, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of these Procedures.

#### 13.5.2 External Arbitration Procedures.

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules"); provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 13, the terms of this Article 13 shall prevail.

#### **13.5.3** Arbitration Decisions.

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of these Procedures but shall have no power to modify or change any of these Procedures in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act.

#### 13.5.4 Costs.

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

#### **13.6 Bond Financing.**

Notwithstanding anything in these Procedures to the contrary, IPA shall not be required to perform any obligation hereunder or take any action in furtherance thereof that, in the sole opinion of IPA's bond counsel, creates a risk that the use of any portion of the IPA Switchyard (or any other assets of IPA) in the manner provided in these Procedures will be treated as "private business use" under (and as defined in) section 141(b)(6) of the Internal Revenue Code; provided, however, that the foregoing shall not be applicable if Interconnection Customer first pays to IPA all costs and expenses of mitigating the effects of such private business use, including but not limited to the costs and expenses of IPA taking appropriate remedial action as directed by its bond counsel, in its bond counsel's sole opinion required to eliminate such private business use, unless IPA shall reasonably determine to otherwise make provision for such remediation of such private business use.

#### 13.7 IPP Agreements.

Nothing in these Procedures shall be construed as changing, waiving or otherwise affecting any rights, obligations or requirements provided for under the IPP Agreements.

#### **13.8** Governing Law and Venue.

This GIP and the GIA, and all agreements hereunder shall be interpreted, governed by, and enforced in accordance with the laws of the State of Utah, as if executed and to be performed wholly within the State of Utah, without regard to its conflict of laws principles.

#### **13.9** Non-Jurisdictional Entity.

Notwithstanding the form of this GIP or the GIA, IPA is a non-public utility under section 201(f) of the Federal Power Act, 16 U.S.C. § 824(f), and is subject to FERC jurisdiction only in limited circumstances pursuant to 16 U.S.C. § 824i.

#### 13.10 Conformance with NERC and WECC Reliability Requirements.

IPA will require all Interconnection Customers to abide by the Applicable Reliability Standards and WECC Criteria including, but not limited to, the following:

- (a) Coordination of joint studies of new facilities and their impacts on the interconnected transmission systems.
- (b) Notification of new or modified facilities to others (those responsible for the reliability of the interconnected transmission systems) as soon as feasible.
- (c) Voltage level and MW and MVAR capacity or demand at point of connection.
- (d) Breaker duty and surge protection.
- (e) System protection and coordination.
- (f) Metering and telecommunications.
- (g) Grounding and safety issues.
- (h) Insulation and insulation coordination.
- (i) Voltage, Reactive Power, and power factor control.
- (j) Power quality impacts.

- (k) Equipment Ratings.
- (l) Synchronizing of facilities.
- (m) Maintenance coordination.
- (n) Operational issues (abnormal frequency and voltages).
- (o) Inspection requirements for existing or new facilities.
- (p) Communications and procedure during normal and emergency operating conditions.

Each of the items listed above will be addressed in IPA's study(ies), as applicable to the specific interconnection request. More general requirements are identified within various sections of this GIP.

# **DEPOSIT AMOUNT SCHEDULE**

<b>GIP Section Reference</b>	Amount of Deposit or Fee
Section 3.2.1(i) – Interconnection Request	$$250,000^{1}$
Section 3.2.1(iii) – Interconnection Request Site Control	\$10,000
Section 6.2 – Feasibility Study	Included in initial deposit to extent any remaining; otherwise estimate of actual costs
Section 7.1 – System Impact Study	Included in initial deposit to extent any remaining; otherwise estimate of actual costs
Section 7.1 – System Impact Study Site Control (if Site Control has still not been shown to IPA's satisfaction)	\$50,000 <sup>2</sup>
Section 8.1 – Facilities Study	Included in initial deposit to extent any remaining; otherwise estimate of actual costs
Section 9.1 – Optional Interconnection Study	\$10,000
Section 11.3 – Generator Interconnection Agreement Execution Conditions (deposit if sufficient evidence of Site Control still not provided)	\$250,000

<sup>&</sup>lt;sup>1</sup> \$25,000 of this initial deposit is nonrefundable.

 $<sup>^2</sup>$  Refundable upon proof of Site Control or with drawal of application.  $_{\rm 4822-1222-9997v1}$ 

#### APPENDIX 1 to GIP INTERCONNECTION REQUEST FOR A GENERATING FACILITY

- 1. The undersigned Interconnection Customer submits this request to interconnect its Generating Facility with the IPA Switchyard.
- 2. This Interconnection Request is for (check one):
  - \_\_\_\_\_ A proposed new Generating Facility.
  - An increase in the generating capacity or a Material Modification of an existing Generating Facility.
- 3. The type of interconnection service requested is Energy Resource Interconnection Service
- 4. Interconnection Customer provides the following information:
  - a. Address or location or the proposed new Generating Facility site or, in the case of an existing Generating Facility, the name and specific location of the existing Generating Facility;
  - b. Maximum summer at \_\_\_\_\_ degrees C and winter at \_\_\_\_\_ degrees C megawatt electrical output of the proposed new Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;
  - c. General description of the equipment configuration;
  - d. Commercial Operation Date (Day, Month, and Year);
  - e. In-Service Date;
  - f. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;
  - g. Approximate location of the proposed Point of Interconnection and Interconnection Customer's transmission facilities;
  - h. Interconnection Customer Data (set forth in Attachment A;
  - i. One-line diagram/configuration layout;
- j. Requested capacity (in MW) of Interconnection Services (if lower than the Generating Facility Capacity); and

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- j. If the proposed Generating Facility is a wind or solar or hybrid facility, an acknowledgment of and agreement to comply with the provisions of Appendix 8.
- 5. Applicable deposit amount as specified in Section 3.2.1.(i) of the GIP, all except \$25,000 of which is refundable.
- 6. Evidence of Site Control as specified in the GIP (check one) Is attached to this Interconnection Request
  - Will be provided at a later date in accordance with these Procedures
- 7. This Interconnection Request shall be submitted to the representative indicated below:

[To be completed by IPA]

8. Representative of Interconnection Customer to contact:

[To be completed by Interconnection Customer]

9. This Interconnection Request is submitted by:

Name of Interconnection Customer:

By (signature):

Name (type or print):

Title:

Date: \_\_\_\_\_

Attachment A to Appendix 1 Interconnection Request

## **GENERATING FACILITY DATA**

#### **UNIT RATINGS**

kVA	°F	Voltage	2
Power Factor			
Speed (RPM)			Connection (e.g. Wye)
Short Circuit Ratio			Frequency, Hertz
Stator Amperes at Rate	ed kVA		Field Volts
Max Turbine MW		<u>°</u> F	_

# COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA

Inertia Constant, H =	kW sec/kVA
Moment-of-Inertia, $WR^2 =$	lb. ft. <sup>2</sup>

#### **REACTANCE DATA (PER UNIT-RATED KVA)**

DIRECT AXIS

**QUADRATURE AXIS** 

$X_{dv}$		$X_{qv}$	
$X_{di}$		$X_{qi}$	
$X'_{dv}$		X' <sub>qv</sub>	
X'di		X'qi	
X" <sub>dv</sub>		X"qv	
X" <sub>di</sub>		X"qi	
$X2_v$			
$X2_i$			
$\rm X0_v$			
$Xl_m$			
	X <sub>di</sub> X' <sub>dv</sub> X' <sub>di</sub> X'' <sub>dv</sub> X'' <sub>di</sub> X2 <sub>v</sub> X2 <sub>i</sub> X0 <sub>v</sub>	X <sub>di</sub>	X <sub>di</sub> X <sub>qi</sub> X' <sub>dv</sub> X' <sub>qv</sub> X' <sub>dv</sub> X' <sub>qv</sub> X' <sub>di</sub> X' <sub>qi</sub> X'' <sub>dv</sub> X'' <sub>qv</sub> X'' <sub>qv</sub> X'' <sub>qv</sub> X'' <sub>qv</sub> X'' <sub>qv</sub> X2 <sub>v</sub> X'' <sub>qi</sub> X2 <sub>i</sub> X0 <sub>v</sub>

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#### FIELD TIME CONSTANT DATA (SEC)

Open Circuit	T' <sub>do</sub>	 T'qo	
Three-Phase Short Circuit Transient	T' <sub>d3</sub>	 T'q	
Line to Line Short Circuit Transient	T'd2	 -	
Line to Neutral Short Circuit Transient	T'd1		
Short Circuit Subtransient	T" <sub>d</sub>	 T"q	
Open Circuit Subtransient	T" <sub>do</sub>	 T" <sub>qo</sub>	

#### **ARMATURE TIME CONSTANT DATA (SEC)**

Three Phase Short Circuit	T <sub>a3</sub>	
Line to Line Short Circuit	$T_{a2}$	
Line to Neutral Short Circuit T <sub>a</sub>	ıl	

NOTE: If requested information is not applicable, indicate by marking "N/A."

#### MW CAPABILITY AND PLANT CONFIGURATION GENERATING FACILITY DATA

#### ARMATURE WINDING RESISTANCE DATA (PER UNIT)

Positive	$R_1$	
Negative	$R_2$	
Zero	$R_0$	

Rotor Short Time Thermal Capacity  $I_2^2t =$ \_\_\_\_\_\_ Field Current at Rated kVA, Armature Voltage and PF = \_\_\_\_\_\_ amps Field Current at Rated kVA and Armature Voltage, 0 PF = \_\_\_\_\_\_ amps Three Phase Armature Winding Capacitance = \_\_\_\_\_\_ microfarad Field Winding Resistance = \_\_\_\_\_\_ ohms \_\_\_\_\_ °C Armature Winding Resistance (Per Phase) = \_\_\_\_\_\_ ohms \_\_\_\_\_ °C

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#### **CURVES**

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves. Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

#### **GENERATOR STEP-UP TRANSFORMER DATA RATINGS**

Capacity/	Self-cooled/ Maximum Nameplate kVA		
Voltage Ratio(Gen	erator Side/System side/Ter	•	
/	/	kV	
Winding Connection	ons (Low V/High V/Tertiary	y V (Delta or Wye))	
/_	/		
Fixed Taps Availab	ble		
Present Tap Setting	5		

#### **IMPEDANCE**

Positive	Z <sub>1</sub> (on self-cooled kVA rating)	%	X/R

Zero  $Z_0$  (on self-cooled kVA rating) % X/R

## **EXCITATION SYSTEM DATA**

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

#### **GOVERNOR SYSTEM DATA**

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

#### WIND GENERATORS

Number of generators to be interconnected pursuant to this Interconnection Request:

Inverter manufacturer, model name, number, and version:

List of adjustable setpoints for the protective equipment or software:

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet or other compatible formats, such as IEEE and PTI power flow models, must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device, then they shall be provided and discussed at Scoping Meeting.

# **INDUCTION GENERATORS**

(*) Field Volts:
(*) Field Amperes:
(*) Motoring Power (kW):
(*) Neutral Grounding Resistor (If Applicable):
(*) I <sub>2</sub> <sup>2</sup> t or K (Heating Time Constant):
(*) Rotor Resistance:
(*) Stator Resistance:
(*) Stator Reactance:
(*) Rotor Reactance:
(*) Magnetizing Reactance:
(*) Short Circuit Reactance:
(*) Exciting Current:
(*) Temperature Rise:
(*) Frame Size:
(*) Design Letter:
(*) Reactive Power Required In Vars (No Load):
(*) Reactive Power Required In Vars (Full Load):
(*) Total Rotating Inertia, H: Per Unit on KVA Base

Note: Please consult IPA prior to submitting the Interconnection Request to determine if the information designated by (\*) is required.

#### APPENDIX 2 to GIP FEASIBILITY STUDY AGREEMENT

This Feasibility Study Agreement ("<u>Agreement</u>") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_, by and between \_\_\_\_\_\_, a \_\_\_\_\_, organized and existing under the laws of the State of \_\_\_\_\_ ("<u>Interconnection Customer</u>"), and Intermountain Power Agency, a political subdivision of the State of Utah ("<u>IPA</u>"). Each such entity may be referred to in the singular herein as a "<u>Party</u>" and together as "<u>Parties</u>."

#### RECITALS

**WHEREAS,** Interconnection Customer proposes to develop the Generating Facility described in the Interconnection Request dated \_\_\_\_\_; and

**WHEREAS,** Interconnection Customer desires to interconnect the Generating Facility with the IPA Switchyard; and

**WHEREAS**, Interconnection Customer has requested that IPA perform a Feasibility Study to assess the feasibility of interconnecting the Generating Facility to the IPA Switchyard; and

WHEREAS, IPA has offered this Agreement to Interconnection Customer, and Interconnection Customer has accepted this Agreement on the terms and conditions set forth herein;

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

#### ARTICLE 1 DEFINED TERMS; PROCEDURES

1.1 <u>Capitalized Terms</u>. Unless specifically defined herein, when used in this Agreement, terms with initial capitalization shall have the meaning specified in the IPA Standard Generator Interconnection Procedures (the "Procedures"), as the same may be modified from time to time.

1.2 <u>Application of Procedures</u>. Except to the extent this Agreement expressly conflicts with the Procedures, the terms of the Procedures shall apply to the performance of this Agreement by the Parties.

#### ARTICLE 2 FEASIBILITY STUDY

2.1 <u>Performance of Study</u>. IPA shall cause to be performed a Feasibility Study with respect to Interconnection Customer's Interconnection Request in a manner consistent with Section 6 of the Procedures.

2.2 <u>Study Assumptions</u>. The assumptions used in conducting the Feasibility Study shall be as specified in the Procedures and in Attachment A to this Agreement.

2.3 <u>Technical Information</u>. The Feasibility Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as the same has been or may be modified in the Scoping Meeting. IPA reserves the right to request additional technical information from Interconnection Customer to the extent reasonably necessary to conduct the Feasibility Study consistent with this Agreement, Good Utility Practice and the Procedures.

2.4 <u>Study Report</u>. The Feasibility Study report shall provide the following information: (a) a preliminary identification of any circuit breaker short circuit capability limits that may be exceeded as a result of the interconnection; (b) a preliminary identification of any thermal overload or voltage limit violations that may result from the interconnection; and (c) a preliminary description and non-binding estimate of the cost of facilities required to interconnect the Generating Facility to the IPA Switchyard and to address any identified short circuit and power flow issues.

#### ARTICLE 3 DEPOSIT AND PAYMENT

3.1 <u>Initial Deposit and Draws</u>. Concurrently with the execution of this Agreement, Interconnection Customer shall pay to IPA a deposit in the amount specified in the Procedures, against which IPA will draw in order to reimburse IPA for the costs incurred in connection with its performance of this Agreement.

3.2 <u>Invoices</u>. After any draw is made against the deposit, IPA shall reasonably document the costs incurred by it in connection with its performance of this Agreement that were the subject of the draw and shall invoice Interconnection Customer for such amount as is required to restore the deposit to its original amount. Interconnection Customer shall pay the amount invoiced in full within twenty (20) calendar days after receiving such invoice.

3.3 <u>Payment and Assurances</u>. If the amounts invoiced under <u>Section 3.2</u> are not timely paid, IPA will cease work under this Agreement, and shall not resume work unless and until Interconnection Customer has either paid such amounts or has provided reasonable assurances acceptable to IPA that all amounts due and to become due under this Agreement will be timely paid including, if IPA so requests, the posting of an additional deposit.

3.4 <u>Refund of Deposit</u>. If, upon termination of this Agreement or completion of the Feasibility Study, there is any unapplied amount of the deposit held by IPA pursuant to this Agreement, IPA shall return the balance of the deposit to Interconnection Customer within ten (10) Business Days or, if so directed by Interconnection Customer, apply the remaining amount of such deposit to future deposits or costs to be incurred pursuant to the Procedures or the GIA.

#### ARTICLE 4 TERMINATION

4.1 <u>Failure to Provide Assurances</u>. If Interconnection Customer does not provide the reasonable payment assurances described in <u>Section 3.3</u> within ten (10) Business Days of demand therefor by IPA, then IPA may, in addition to its right to suspend work pursuant to <u>Section 3.3</u>, immediately terminate this Agreement.

4.2 <u>Customer Termination</u>. Interconnection Customer may terminate this Agreement upon ten (10) Business Days' notice to IPA.

4.3 <u>Payment</u>. The termination of this Agreement shall not relieve Interconnection Customer of the obligation to pay all amounts due under this Agreement, including, but not limited to, all costs incurred by IPA in connection with the termination hereof.

#### ARTICLE 5 MISCELLANEOUS

5.1 <u>Confidentiality</u>. The Parties agree to be bound by the provisions of Section 13.1 of the Procedures as if the same were fully set forth herein.

## 5.2 <u>Indemnification</u>.

Interconnection Customer undertakes and agrees to indemnify and hold a. harmless IPA, Intermountain Power Service Corporation, the Operating Agent, and all of their respective boards, owners, members, directors, officers, agents, representatives, employees, assigns and successors in interest (the "Indemnified Parties"), and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including, without limitation, reasonable attorneys' fees and disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including, without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto or third persons arising as a result of, or caused in whole or in part by any: (i) breach or default under this Agreement on the part of Interconnection Customer; or (ii) negligent act, error, omission or willful misconduct incidental to, related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of Interconnection Customer or any of Interconnection Customer's boards, owners, members, directors, managers, officers, agents, representatives, employees or subcontractors of any tier, except to the extent arising from the gross negligence or willful misconduct of Indemnified Parties.

b. Interconnection Customer undertakes and agrees to indemnify and hold harmless Indemnified Parties and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including without limitation, reasonable attorneys' fees, disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto, or third persons in any manner arising by reason of any negligent act, error or omission incident related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, owners, members, directors, officers, agents, representatives, employees, or subcontractors of any tier (including the Intermountain Power Service Corporation), except to the extent arising from the gross negligence or willful misconduct of IPA, the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, officers, agents, representatives or employees.

c. Interconnection Customer agrees that it shall not directly or indirectly assert any claim against IPA or seek to have IPA indemnify or reimburse Interconnection Customer for any loss, cost or damage with respect to which Interconnection Customer has a duty of indemnification pursuant to subsection a. or b. of this Section 5.2.

5.3 <u>Consequential Damages</u>. Except with respect to liabilities arising from third-party claims for which Interconnection Customer is required to indemnify an Indemnified Party, in no event shall either Party be liable to the other Party under any provision of this Agreement for any indirect, incidental, punitive or consequential damages, losses, damages, costs or expenses including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; <u>provided</u>, <u>however</u>, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be indirect, incidental, punitive or consequential damages hereunder.

5.4 <u>Performance by Operating Agent</u>. The Parties recognize that the Los Angeles Department of Water and Power, pursuant to an agreement with IPA, acts as the Operating Agent for IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, and that the Los Angeles Department of Water and Power, in such capacity as Operating Agent, is responsible for planning, negotiating, designing, constructing, insuring, administering, operating and maintaining the IPA Switchyard and the Transmission System and such other facilities of IPA. Accordingly, consistent with such agreements with IPA, the Los Angeles Department of Water and Power, as Operating Agent acting on behalf of IPA, is to perform and carry out the obligations of IPA under this Agreement.

5.5 <u>Performance by Intermountain Power Service Corporation</u>. The Parties further recognize that under an agreement with IPA and the Los Angeles Department of Water and Power as Operating Agent, Intermountain Power Service Corporation performs certain operating and maintenance work pertaining to IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, under the direction of the Los Angeles Department of Water and Power as Operating Agent. Accordingly, consistent with such agreement with IPA and the Los Angeles Department of Water and Power, Intermountain Power Service Corporation may perform and carry out certain operation and maintenance work with respect to the IPA

Interconnection Facilities, as well as the IPA Switchyard and the Transmission System, as provided for under the applicable provisions of this Agreement.

5.6 <u>Assignment</u>. This Agreement may be assigned by either Party only upon the express written consent of the other Party.

5.7 <u>Amendment</u>. No amendment of this Agreement or any of the Appendices hereto shall be effective or binding unless it is set forth in a written instrument that is duly executed and delivered by both of the Parties.

5.8 <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of Utah without regard to Utah's laws or rules governing conflicts of law.

5.9 <u>Venue</u>. All litigation arising out of or relating to this Agreement shall be brought only in the United States District Court for the District of Utah, if jurisdiction should there exist, or, if such jurisdiction is lacking, then only in the Third Judicial District Court for Salt Lake County, Utah, and the Parties irrevocably agree to submit to the personal jurisdiction of each such court.

5.10 <u>Attorneys' Fees and Costs</u>. In any action to enforce the terms of this Agreement, each Party shall be responsible for its own attorneys' fees and costs.

5.11 <u>Representations</u>. Interconnection Customer represents and warrants that: (a) it has all requisite power and authority to enter into this Agreement and to perform each of its terms and covenants, (b) it is not restricted or prohibited, contractually or otherwise, from entering into and performing this Agreement, (c) the execution and performance of this Agreement by Interconnection Customer will not constitute a violation or breach of any other agreement between it and any other person or entity, and (d) this Agreement is a valid and binding obligation of Interconnection Customer.

5.12 <u>Entire Agreement</u>. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. This Agreement may be amended only by a written document signed by the Parties. Each Party acknowledges that it was represented by counsel in the negotiation of this Agreement and that it has been authorized to execute this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

## Intermountain Power Agency, by its Operating Agent

By: \_\_\_\_\_

Title:	

Date: \_\_\_\_\_

# [Interconnection Customer]

Ву: \_\_\_\_\_

Title: \_\_\_\_\_

Date:

### ASSUMPTIONS USED IN CONDUCTING THE FEASIBILITY STUDY

The Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

A Feasibility Study will consist of a power flow analysis and short-circuit analysis, each of which will be conducted and evaluated in accordance with the delivery provisions set forth in Appendix 2 of the GIP.

Power Flow will be performed by using the General Electric (GE) **PSLF 16.1** 

Short-Circuit Study will be conducted by using the Siemens PTI version 29

Note: All information below shall be considered preliminary at this time as it is subject to detailed design and verification later

#### Article 1 **One-line Diagram ( to be provided by the requestor)**

#### Article 2 Interconnection Transmission Line using 100 MVA base

Line Name	R1 p.u.	Х1 p.u	B p.u	R0 p.u	X0 p.u.	Length (miles)	Conductor Type & Size

#### Article 3 Station Transformer

Transformer Name	MVA Base	R1 on 100 MVA base	base	R0 on 100 MVA base	base		

Vnorm (from)	Vnorm (to)	Tap (from)	Tap (to)	Variable Tap	Tap (max)	Tap (min)	Tap Step Size

# Article 4 Transmission Component Ratings

Transmission Component	Normal Rating (MVA)	Long-Term Emergency Rating (MVA)	Short-Term Emergency Rating (MVA)

Article 5 Generator Power Flow Data

Unit	Rate (MVA)	X"1/X"2/X"0 for Short-Circuit on GEN rated MVA base (in pu)	Pmax MW	Pmin MW	Qmax MVars	Qmin MVars	Regulated Bus

Unit	X"1/X"2/X"0 for Short-Circuit on 100 MVA base (in pu)

Unit	Generating Facility Auxiliary Load

# Article 6 Reactive Power Compensation for Wind Plant

Shunt Capacitor Power Compensation	Size (MVA)

Shunt Reactor Power Compensation	Size (MVA)

#### APPENDIX 3 to GIP SYSTEM IMPACT STUDY AGREEMENT

#### Between [Interconnection Customer] and The Intermountain Power Agency

This System Impact Study Agreement ("<u>Agreement</u>") is made and entered into this \_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_, organized and existing under the laws of the State of \_\_\_\_\_ ("<u>Interconnection Customer</u>"), and Intermountain Power Agency, a political subdivision of the State of Utah ("<u>IPA</u>"). Each such entity may be referred to in the singular herein as a "<u>Party</u>" and together as "<u>Parties</u>."

#### RECITALS

**WHEREAS,** Interconnection Customer proposes to develop the Generating Facility described in the Interconnection Request dated \_\_\_\_\_; and

**WHEREAS,** Interconnection Customer desires to interconnect the Generating Facility with the IPA Switchyard; and

**WHEREAS,** Interconnection Customer has requested that IPA perform a System Impact Study to assess the impact on the Transmission System of interconnecting the Generating Facility to the IPA Switchyard; and

WHEREAS, IPA has offered this Agreement to Interconnection Customer, and Interconnection Customer has accepted this Agreement on the terms and conditions set forth herein;

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

#### ARTICLE 1 DEFINED TERMS; PROCEDURES

1.1 <u>Capitalized Terms</u>. Unless specifically defined herein, when used in this Agreement, terms with initial capitalization shall have the meaning specified in the IPA Standard Generator Interconnection Procedures (the "Procedures"), as the same may be modified from time to time.

1.2 <u>Application of Procedures</u>. Except to the extent this Agreement expressly conflicts with the Procedures, the terms of the Procedures shall apply to the performance of this Agreement by the Parties.

#### ARTICLE 2 SYSTEM IMPACT STUDY

2.1 <u>Performance of Study</u>. IPA shall cause to be performed a System Impact Study with respect to Interconnection Customer's Interconnection Request in a manner consistent with Section 7 of the Procedures.

2.2 <u>Study Assumptions</u>. The assumptions used in conducting the System Impact Study shall be as specified in the Procedures and in Attachment A to this Agreement.

2.3 <u>Technical Information</u>. The System Impact Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as the same has been or may be modified in the Scoping Meeting or in connection with the System Impact Study. IPA reserves the right to request additional technical information from Interconnection Customer to the extent reasonably necessary to conduct the System Impact Study consistent with this Agreement, Good Utility Practice and the Procedures.

2.4 <u>Study Report</u>. The System Impact Study report shall provide the following information: (a) identification of any circuit breaker short circuit capability limits that may be exceeded as a result of the interconnection; (b) identification of any thermal overload or voltage limit violations that may result from the interconnection; (c) identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; (d) identification of any magnitude and impacts of harmonics resulting from the interconnection; (e) if required by IPA, identification of any impacts of subsynchronous resonance (SSR) resulting from the interconnection; and (f) description and non-binding estimate of the cost of facilities (including, at the option of IPA, Network Upgrades) required to interconnect the Generating Facility to the IPA Switchyard and to address any identified short circuit, stability and power flow issues.

#### ARTICLE 3 DEPOSIT AND PAYMENT

3.1 <u>Initial Deposit and Draws</u>. Concurrently with the execution of this Agreement, Interconnection Customer shall pay to IPA a deposit in the amount specified in the Procedures, against which IPA will draw in order to reimburse IPA for the costs incurred in connection with its performance of this Agreement.

3.2 <u>Invoices</u>. After any draw is made against the deposit, IPA shall reasonably document the costs incurred by it in connection with its performance of this Agreement that were the subject of the draw and shall invoice Interconnection Customer for such amount as is required to restore the deposit to its original amount. Interconnection Customer shall pay the amount invoiced in full within fifteen (15) calendar days after receiving such invoice.

3.3 <u>Payment and Assurances</u>. If the amounts invoiced under <u>Section 3.2</u> are not timely paid, IPA will cease work under this Agreement, and shall not resume work unless and until Interconnection Customer has either paid such amounts or has provided reasonable assurances acceptable to IPA that all amounts due and to become due under this Agreement will be timely paid including, if IPA so requests, the posting of an additional deposit. 3.4 <u>Refund of Deposit</u>. If, upon termination of this Agreement or completion of the System Impact Study, there is any unapplied amount of the deposit held by IPA pursuant to this Agreement, IPA shall return the balance of the deposit to Interconnection Customer within ten (10) Business Days or, if so directed by Interconnection Customer, apply the remaining amount of such deposit to future deposits or costs to be incurred pursuant to the Procedures or the GIA.

#### ARTICLE 4 TERMINATION

4.1 <u>Failure to Provide Assurances</u>. If Interconnection Customer does not provide the reasonable payment assurances described in <u>Section 3.3</u> within ten (10) Business Days of demand therefor by IPA, then IPA may, in addition to its right to suspend work pursuant to <u>Section 3.3</u>, immediately terminate this Agreement.

4.2 <u>Customer Termination</u>. Interconnection Customer may terminate this Agreement upon ten (10) Business Days' notice to IPA.

4.3 <u>Payment</u>. The termination of this Agreement shall not relieve Interconnection Customer of the obligation to pay all amounts due under this Agreement, including, but not limited to, all costs incurred by IPA in connection with the termination hereof.

#### ARTICLE 5 MISCELLANEOUS

5.1 <u>Confidentiality</u>. The Parties agree to be bound by the provisions of Section 13.1 of the Procedures as if the same were fully set forth herein.

#### 5.2 <u>Indemnification</u>.

Interconnection Customer undertakes and agrees to indemnify and hold a. harmless IPA, Intermountain Power Service Corporation, the Operating Agent, and all of their respective boards, owners, members, directors, officers, agents, representatives, employees, assigns and successors in interest (the "Indemnified Parties"), and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including, without limitation, reasonable attorneys' fees and disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including, without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto or third persons arising as a result of, or caused in whole or in part by any: (i) breach or default under this Agreement on the part of Interconnection Customer; or (ii) negligent act, error, omission or willful misconduct incidental to, related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of Interconnection Customer or any of Interconnection Customer's boards, owners, members, directors, managers, officers, agents, representatives, employees or subcontractors of any tier, except to the extent arising from the gross negligence or willful misconduct of Indemnified Parties.

Interconnection Customer undertakes and agrees to indemnify and hold b. harmless Indemnified Parties and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including without limitation, reasonable attorneys' fees, disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto, or third persons in any manner arising by reason of any negligent act, error or omission incident related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, owners, members, directors, officers, agents, representatives, employees, or subcontractors of any tier (including the Intermountain Power Service Corporation), except to the extent arising from the gross negligence or willful misconduct of IPA, the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, officers, agents, representatives or employees.

c. Interconnection Customer agrees that it shall not directly or indirectly assert any claim against IPA or seek to have IPA indemnify or reimburse Interconnection Customer for any loss, cost or damage with respect to which Interconnection Customer has a duty of indemnification pursuant to subsection a. or b. of this Section 5.2.

5.3 <u>Consequential Damages</u>. Except with respect to liabilities arising from third-party claims for which Interconnection Customer is required to indemnify an Indemnified Party, in no event shall either Party be liable to the other Party under any provision of this Agreement for any indirect, incidental, punitive or consequential damages, losses, damages, costs or expenses including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; <u>provided</u>, <u>however</u>, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be indirect, incidental, punitive or consequential damages hereunder.

5.4 <u>Performance by Operating Agent</u>. The Parties recognize that the Los Angeles Department of Water and Power, pursuant to an agreement with IPA, acts as the Operating Agent for IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, and that the Los Angeles Department of Water and Power, in such capacity as Operating Agent, is responsible for planning, negotiating, designing, constructing, insuring, administering, operating and maintaining the IPA Switchyard and the Transmission System and such other facilities of IPA. Accordingly, consistent with such agreements with IPA, the Los Angeles Department of Water and Power, as Operating Agent acting on behalf of IPA, is to perform and carry out the obligations of IPA under this Agreement.

5.5 <u>Performance by Intermountain Power Service Corporation</u>. The Parties further recognize that under an agreement with IPA and the Los Angeles Department of Water and Power as Operating Agent, Intermountain Power Service Corporation performs certain operating and

maintenance work pertaining to IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, under the direction of the Los Angeles Department of Water and Power as Operating Agent. Accordingly, consistent with such agreement with IPA and the Los Angeles Department of Water and Power, Intermountain Power Service Corporation may perform and carry out certain operation and maintenance work with respect to the IPA Interconnection Facilities, as well as the IPA Switchyard and the Transmission System, as provided for under the applicable provisions of this Agreement

5.6 <u>Assignment</u>. This Agreement may be assigned by either Party only upon the express written consent of the other Party.

5.7 <u>Amendment</u>. No amendment of this Agreement or any of the Appendices hereto shall be effective or binding unless it is set forth in a written instrument that is duly executed and delivered by both of the Parties.

5.8 <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of Utah without regard to Utah's laws or rules governing conflicts of law.

5.9 <u>Venue</u>. All litigation arising out of or relating to this Agreement shall be brought only in the United States District Court for the District of Utah, if jurisdiction should there exist, or, if such jurisdiction is lacking, then only in the Third Judicial District Court for Salt Lake County, Utah, and the Parties irrevocably agree to submit to the personal jurisdiction of each such court.

5.10 <u>Attorneys' Fees and Costs</u>. In any action to enforce the terms of this Agreement, each Party shall be responsible for it own attorneys' fees and costs.

5.11 <u>Representations</u>. Interconnection Customer represents and warrants that: (a) it has all requisite power and authority to enter into this Agreement and to perform each of its terms and covenants, (b) it is not restricted or prohibited, contractually or otherwise, from entering into and performing this Agreement, (c) the execution and performance of this Agreement by Interconnection Customer will not constitute a violation or breach of any other agreement between it and any other person or entity, and (d) this Agreement is a valid and binding obligation of Interconnection Customer.

5.12 <u>Entire Agreement</u>. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. This Agreement may be amended only by a written document signed by the Parties. Each Party acknowledges that it was represented by counsel in the negotiation of this Agreement and that it has been authorized to execute this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

# Intermountain Power Agency, by its Operating Agent

By: \_\_\_\_\_

Title:

Date:

[Interconnection Customer]

By: \_\_\_\_\_

Title:

Date: \_\_\_\_\_

# ASSUMPTIONS USED IN CONDUCTING INTERCONNECTION SYSTEM IMPACT STUDY

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study unless waived by Interconnection Customer<sup>3</sup>, subject to any permitted modifications in accordance with Section 4.4 of the GIP and any revised Attachment A to Appendix 2 submitted by Interconnection Customer, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied:

Designation of alternative Point(s) of Interconnection and configuration which IPA will evaluate only if a re-designation is required, subject to Sections 6.1, 7.1 and 7.5 of the GIP:

Dynamic data (to be provided by Interconnection Customer) for each generator, governor, exciter, power system stabilizer, wind turbine and/or solar photovoltaic facility must be supplied in GE PSLF format.

[The above assumptions are to be completed by Interconnection Customer, and any other assumptions that might be provided by Interconnection Customer and/or IPA should be listed in the space below]

A System Impact Study will consist of power flow and transient analysis, and a short-circuit analysis. Each of these studies will be conducted and evaluated in accordance with the data provided in Appendices 1 and 2 and provisions as set forth in Appendix 3 of the GIP.

Power Flow and Transient Studies will be performed using the latest GE PSLF program in-line with WECC base cases.

<sup>&</sup>lt;sup>3</sup> If the Interconnection Feasibility Study has been waived by the Interconnection Customer in accordance with Section 6.2 of the GIP, then the System Impact Study will be based upon the Scoping Meeting held on and any assumptions contained within the Interconnection Customer's response to any and

Short-Circuit Study will be conducted using ASPEN software.

<u>Note</u>: All information below shall be considered preliminary at this time as it is subject to detailed design and verification later

# 1. <u>One-line Diagram/Configuration Layout:</u>

(To be provided by the Interconnection Customer)

# 2. <u>Interconnection Transmission Line Description</u>

Interconnection Line	R1 p.u. on 100 MVA base	X1 p.u on 100 MVA base	B p.u on 100 MVA base	R0 p.u on 100 MVA base	X0 p.u. on 100 MVA base

Interconnection Line	Lengt h (mi.)	Conductor Type & Size	Normal Rating (MVA)	Emergency Rating (MVA)

## **R1**, **X1**, **B** = positive sequence ,

## R0, X0 = zero sequence

# 3. <u>Generator Step Up Transformer Equivalent</u>

- Transformer winding vector group connection diagrams (ex: D-Y, Y-D, Y-Y, Y-D-Y);
- Neutral grounding impedance(s) if applied (ohms)

Transformer Name	Xfmr Rating (MVA)	Sec. on	Sec. on	R1 Pri. to tert. on 100 MVA base*	tert. on	to tert.	X1 Sec. to tert. on 100 MVA base*	Tertiary Winding Voltage* *
		Sec. on	Sec. on	R0 Pri. to tert. on 100 MVA base*	tert. on	to tert.	X0 Sec. to tert. on 100 MVA base*	

Vnorm (from)	Vnorm (to)	Tap (from)	Tap (to)	Variable Tap	Tap (max)	Tap (min)	Tap Step size

\* transformer tertiary winding (if applicable) \*\* with delta tertiary in service (if applicable)

# R1, X1 = positive sequence, R0, X0 = zero sequence

# 4. <u>Collector System Cable Equivalent Impedance (one line for each collector feeder)</u>

R1 p.u. on 100 MVA base	X1 p.u. on 100 MVA base	B p.u on 100 MVA base	R0 p.u on 100 MVA base	X0 p.u. on 100 MVA base	Rating (MVA) Cont. & Emergency

# 5. <u>Collector Substation Transformers</u>

- Transformer winding vector group connection diagrams (ex: D-Y, Y-D, Y-Y)
- Neutral grounding impedance(s) if applied (ohms and winding(s))

Transformer Name	Transformer Rating (MVA)	R1 p.u. on 100 MVA base	X1 p.u. on 100 MVA base	R0 p.u. on 100 MVA base	X0 p.u. on 100 MVA base			
	Vnorm (from)	Vnorm (to)	Tap (from)	Tap (to)	Variable Tap	Tap (max)	Tap (min)	Tap Step Size

# 6. <u>Generator Equivalent</u>

	voltag e	power	X"1 on 100 MVA Base (pu)	100 MVA	100 MVA	MW	Qmax MVars	-	•
Unit	(kV)								

In the case	In the case of power electronic sources, steady state current limit for short circuit currents (A at								
				rated v	/oltage)				
			-	-	-				

\*Qmax indicated is indicative of maximum reactive capability at Pmax

X"1 = Positive Sequence (first cycle),

X"2 = Negative Sequence (first cycle)

X'0 = Zero Sequence (includes any neutral grounding impedance if applied)

# 7. <u>Plant-level Reactive Power Compensation</u>

Shunt Capacitor Power Compensation	Size (MVAR)
Shunt Reactor Power Compensation	Size (MVAR)

# 8. <u>Dynamic Data (To be provided by the requestor)</u>

All the appropriate dynamic data for each generator, governor, exciter, power system stabilizer, and/or wind turbine, photo-voltaic, and energy storage must be supplied in the GE PSLF format.

# The dynamic model data provided shall be WECC approved model.

# 9. Additional Data for Harmonic Study

- a. Inverter specification (Electrical Characteristics) sheet
- b. Harmonic Frequency Spectrum of the inverter
- c. Main Transformer MVA rating under normal operating conditions

#### **APPENDIX 4 to GIP**

#### FACILITIES STUDY AGREEMENT

#### Between Interconnection Customer and The Intermountain Power Agency

This Facilities Study Agreement ("<u>Agreement</u>") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_, by and between \_\_\_\_\_\_, a \_\_\_\_\_, organized and existing under the laws of the State of \_\_\_\_\_ ("<u>Interconnection Customer</u>"), and Intermountain Power Agency, a political subdivision of the State of Utah ("<u>IPA</u>"). Each such entity may be referred to in the singular herein as a "<u>Party</u>" and together as "<u>Parties</u>."

#### RECITALS

**WHEREAS,** Interconnection Customer proposes to develop the Generating Facility described in the Interconnection Request dated \_\_\_\_\_; and

**WHEREAS,** Interconnection Customer desires to interconnect the Generating Facility with the IPA Switchyard; and

**WHEREAS,** Interconnection Customer has requested that IPA perform a Facilities Study to specify the cost of interconnecting the Generating Facility to the IPA Switchyard; and

WHEREAS, IPA has offered this Agreement to Interconnection Customer, and Interconnection Customer has accepted this Agreement on the terms and conditions set forth herein;

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

#### ARTICLE 1 DEFINED TERMS; PROCEDURES

1.1 <u>Capitalized Terms</u>. Unless specifically defined herein, when used in this Agreement, terms with initial capitalization shall have the meaning specified in the IPA Standard Generator Interconnection Procedures (the "Procedures"), as the same may be modified from time to time.

1.2 <u>Application of Procedures</u>. Except to the extent this Agreement expressly conflicts with the Procedures, the terms of the Procedures shall apply to the performance of this Agreement by the Parties.

#### ARTICLE 2 FACILITIES STUDY

2.1 <u>Performance of Study</u>. IPA shall cause to be performed a Facilities Study with respect to Interconnection Customer's Interconnection Request in a manner consistent with Section 8 of the Procedures.

2.2 <u>Study Assumptions</u>. The assumptions used in conducting the Facilities Study shall be as specified in the Procedures and in Attachment A and the data provided in Attachment B to this Agreement.

2.3 <u>Technical Information</u>. The Facilities Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as the same has been or may be modified in the Scoping Meeting, the System Impact Study, and Attachment B to this Agreement. IPA reserves the right to request additional technical information from Interconnection Customer to the extent reasonably necessary to conduct the Facilities Study consistent with this Agreement, Good Utility Practice and the Procedures.

2.4 <u>Study Report</u>. The Facilities Study report shall provide the following information: (a) a description and estimated costs (consistent with Attachment A) of facilities, work and equipment (including, at the option of IPA, Network Upgrades) necessary to interconnect the Generating Facility to the IPA Transmission System; (b) the configuration of the interconnection equipment; (c) the nature and cost of any IPA Interconnection Facilities associated with the interconnection; and (d) an estimate of the time required to complete the work associated with the interconnection.

#### ARTICLE 3 DEPOSIT AND PAYMENT

3.1 <u>Initial Deposit and Draws</u>. Concurrently with the execution of this Agreement, Interconnection Customer shall pay to IPA a deposit in the amount specified in the Procedures, against which IPA will draw in order to reimburse IPA for the costs incurred in connection with its performance of this Agreement.

3.2 <u>Invoices</u>. After any draw is made against the deposit, IPA shall reasonably document the costs incurred by it in connection with its performance of this Agreement that were the subject of the draw and shall invoice Interconnection Customer for such amount as is required to restore the deposit to its original amount. Interconnection Customer shall pay the amount invoiced in full within twenty (20) calendar days after receiving such invoice.

3.3 <u>Payment and Assurances</u>. If the amounts invoiced under <u>Section 3.2</u> are not timely paid, IPA will cease work under this Agreement, and shall not resume work unless and until Interconnection Customer has either paid such amounts or has provided reasonable assurances acceptable to IPA that all amounts due and to become due under this Agreement will be timely paid including, if IPA so requests, the posting of an additional deposit.

3.4 <u>Refund of Deposit</u>. If, upon termination of this Agreement or completion of the Facilities Study, there is any unapplied amount of the deposit held by IPA pursuant to this

Agreement, IPA shall return the balance of the deposit to Interconnection Customer within ten (10) Business Days or, if so directed by Interconnection Customer, apply the remaining amount of such deposit to future deposits or costs to be incurred pursuant to the Procedures or the GIA.

## ARTICLE 4 TERMINATION

4.1 <u>Failure to Provide Assurances</u>. If Interconnection Customer does not provide the reasonable payment assurances described in <u>Section 3.3</u> within ten (10) Business Days of demand therefor by IPA, then IPA may, in addition to its right to suspend work pursuant to <u>Section 3.3</u>, immediately terminate this Agreement.

4.2 <u>Customer Termination</u>. Interconnection Customer may terminate this Agreement upon ten (10) Business Days' notice to IPA.

4.3 <u>Payment</u>. The termination of this Agreement shall not relieve Interconnection Customer of the obligation to pay all amounts due under this Agreement, including, but not limited to, all costs incurred by IPA in connection with the termination hereof.

## ARTICLE 5 MISCELLANEOUS

5.1 <u>Confidentiality</u>. The Parties agree to be bound by the provisions of Section 13.1 of the Procedures as if the same were fully set forth herein.

5.2 <u>Indemnification</u>.

Interconnection Customer undertakes and agrees to indemnify and hold a. harmless IPA, Intermountain Power Service Corporation, the Operating Agent, and all of their respective boards, owners, members, directors, officers, agents, representatives, employees, assigns and successors in interest (the "Indemnified Parties"), and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including, without limitation, reasonable attorneys' fees and disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including, without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto or third persons arising as a result of, or caused in whole or in part by any: (i) breach or default under this Agreement on the part of Interconnection Customer; or (ii) negligent act, error, omission or willful misconduct incidental to, related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of Interconnection Customer or any of Interconnection Customer's boards, owners, members, directors, managers, officers, agents, representatives, employees or subcontractors of any tier, except to the extent arising from the gross negligence or willful misconduct of Indemnified Parties.

Interconnection Customer undertakes and agrees to indemnify and hold b. harmless Indemnified Parties and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including without limitation, reasonable attorneys' fees, disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto, or third persons in any manner arising by reason of any negligent act, error or omission incident related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, owners, members, directors, officers, agents, representatives, employees, or subcontractors of any tier (including the Intermountain Power Service Corporation), except to the extent arising from the gross negligence or willful misconduct of IPA, the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, officers, agents, representatives or employees.

c. Interconnection Customer agrees that it shall not directly or indirectly assert any claim against IPA or seek to have IPA indemnify or reimburse Interconnection Customer for any loss, cost or damage with respect to which Interconnection Customer has a duty of indemnification pursuant to subsection a. or b. of this Section 5.2.

5.3 <u>Consequential Damages</u>. Except with respect to liabilities arising from third-party claims for which Interconnection Customer is required to indemnify an Indemnified Party, in no event shall either Party be liable to the other Party under any provision of this Agreement for any indirect, incidental, punitive or consequential damages, losses, damages, costs or expenses including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; <u>provided</u>, <u>however</u>, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be indirect, incidental, punitive or consequential damages hereunder.

5.4 <u>Performance by Operating Agent</u>. The Parties recognize that the Los Angeles Department of Water and Power, pursuant to an agreement with IPA, acts as the Operating Agent for IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, and that the Los Angeles Department of Water and Power, in such capacity as Operating Agent, is responsible for planning, negotiating, designing, constructing, insuring, administering, operating and maintaining the IPA Switchyard and the Transmission System and such other facilities of IPA. Accordingly, consistent with such agreements with IPA, the Los Angeles Department of Water and Power, as Operating Agent acting on behalf of IPA, is to perform and carry out the obligations of IPA under this Agreement.

5.5 <u>Performance by Intermountain Power Service Corporation</u>. The Parties further recognize that under an agreement with IPA and the Los Angeles Department of Water and Power as Operating Agent, Intermountain Power Service Corporation performs certain operating and

maintenance work pertaining to IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, under the direction of the Los Angeles Department of Water and Power as Operating Agent. Accordingly, consistent with such agreement with IPA and the Los Angeles Department of Water and Power, Intermountain Power Service Corporation may perform and carry out certain operation and maintenance work with respect to the IPA Interconnection Facilities, as well as the IPA Switchyard and the Transmission System, as provided for under the applicable provisions of this Agreement.

5.6 <u>Assignment</u>. This Agreement may be assigned by either Party only upon the express written consent of the other Party.

5.7 <u>Amendment</u>. No amendment of this Agreement or any of the Appendices hereto shall be effective or binding unless it is set forth in a written instrument that is duly executed and delivered by both of the Parties.

5.8 <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of Utah without regard to Utah's laws or rules governing conflicts of law.

5.9 <u>Venue</u>. All litigation arising out of, or relating to this Agreement, shall be brought only in the United States District Court for the District of Utah, if jurisdiction should there exist, or, if such jurisdiction is lacking, then only in the Third Judicial District Court for Salt Lake County, Utah, and the Parties irrevocably agree to submit to the personal jurisdiction of each such court.

5.10 <u>Attorneys' Fees and Costs</u>. In any action to enforce the terms of this Agreement, each Party shall be responsible for it own attorneys' fees and costs.

5.11 <u>Representations</u>. Interconnection Customer represents and warrants that: (a) it has all requisite power and authority to enter into this Agreement and to perform each of its terms and covenants, (b) it is not restricted or prohibited, contractually or otherwise, from entering into and performing this Agreement, (c) the execution and performance of this Agreement by Interconnection Customer will not constitute a violation or breach of any other agreement between it and any other person or entity, and (d) this Agreement is a valid and binding obligation of Interconnection Customer.

5.12 <u>Entire Agreement</u>. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. This Agreement may be amended only by a written document signed by the Parties. Each Party acknowledges that it was represented by counsel in the negotiation of this Agreement and that it has been authorized to execute this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

# Intermountain Power Agency, by its Operating Agent

By: \_\_\_\_\_

Title:
--------

Date:
-------

## [Interconnection Customer]

Ву: \_\_\_\_\_

Title:	

## INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE FACILITIES STUDY

IPA shall use Reasonable Efforts to complete the study and issue a draft Facilities Study report to Interconnection Customer within the following number of days after receipt of an executed copy of this Facilities Study Agreement:

- one hundred twenty (120) calendar days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) calendar days with no more than a +/- 10 percent cost estimate contained in the report

Notwithstanding any margin of error identified above for any cost estimate, Interconnection Customer shall be responsible for any and all costs related or connected to the Interconnection Request, Transmission Provider's Interconnection Facilities and necessary upgrades, Common Facilities, and Interconnection Customer's Interconnection Facilities.

### DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER WITH THE FACILITIES STUDY AGREEMENT

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new ring bus or existing IPA station. Number of generation connections:

On the one line diagram indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line diagram indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance? \_\_\_\_Yes \_\_\_\_No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? <u>Yes</u> No (Please indicate on one line diagram).

What type of control system or PLC will be located at Interconnection Customer's Generating Facility?

What protocol does the control system or PLC use?

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection facilities:

Line length from Generating Facility to the IPA Switchyard.

Bus length from Generating Facility to the Interconnection.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with IPA.

Service area in which Generating Facility is located

Please provide proposed schedule dates:

Begin Construction	Date:
Generator step-up transformer receives back feed power	Date:
Generation Testing	Date:
Commercial Operation	Date:

### APPENDIX 5 to GIP OPTIONAL INTERCONNECTION STUDY AGREEMENT

### Between Interconnection Customer and The Intermountain Power Agency

### RECITALS

**WHEREAS,** Interconnection Customer proposes to develop the Generating Facility described in the Interconnection Request dated \_\_\_\_\_; and

WHEREAS, Interconnection Customer desires to interconnect the Generating Facility with the IPA Switchyard; and

WHEREAS, IPA has performed a System Impact Study in connection with Interconnection Customer's request to interconnect the Generating Facility to the IPA Switchyard and Interconnection Customer now wishes to have IPA conduct an Optional Interconnection Study Agreement; and

WHEREAS, IPA has offered this Agreement to Interconnection Customer, and Interconnection Customer has accepted this Agreement on the terms and conditions set forth herein;

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

### ARTICLE 1 DEFINED TERMS; PROCEDURES

1.1 <u>Capitalized Terms</u>. Unless specifically defined herein, when used in this Agreement, terms with initial capitalization shall have the meaning specified in the IPA Standard Generator Interconnection Procedures (the "Procedures"), as the same may be modified from time to time.

1.2 <u>Application of Procedures</u>. Except to the extent this Agreement expressly conflicts with the Procedures, the terms of the Procedures shall apply to the performance of this Agreement by the Parties.

### ARTICLE 2 OPTIONAL INTERCONNECTION STUDY

2.1 <u>Performance of Study</u>. IPA shall cause to be performed an Optional Interconnection Study with respect to Interconnection Customer's Interconnection Request in a manner consistent with Section 9 of the Procedures.

2.2 <u>Study Assumptions</u>. The assumptions used in conducting the Optional Interconnection Study shall be as specified in the Procedures and in Attachment A to this Agreement.

2.3 <u>Technical Information</u>. The Optional Interconnection Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as the same has been or may be modified in the Scoping Meeting and the additional information provided by Interconnection Customer consistent with Section 9 of the Procedures. IPA reserves the right to request additional technical information from Interconnection Customer to the extent reasonably necessary to conduct the Optional Interconnection Study consistent with this Agreement, Good Utility Practice and the Procedures.

2.4 <u>Study Report</u>. The Optional Interconnection Study report shall provide the following information: (a) sensitivity analysis based on the assumptions specified by Interconnection Customer pursuant to this Agreement; and (b) the IPA Interconnection Facilities and any Network Upgrades, and the estimated cost thereof, that may be required to provide Interconnection Service.

### ARTICLE 3 DEPOSIT AND PAYMENT

3.1 <u>Initial Deposit and Draws</u>. Concurrently with the execution of this Agreement, Interconnection Customer shall pay to IPA a deposit in the amount specified in the Procedures, against which IPA will draw in order to reimburse IPA for the costs incurred in connection with its performance of this Agreement.

3.2 <u>Invoices</u>. After any draw is made against the deposit, IPA shall reasonably document the costs incurred by it in connection with its performance of this Agreement that were the subject of the draw and shall invoice Interconnection Customer for such amount as is required to restore the deposit to its original amount. Interconnection Customer shall pay the amount invoiced in full within thirty (30) calendar days after receiving such invoice.

3.3 <u>Payment and Assurances</u>. If the amounts invoiced under <u>Section 3.2</u> are not timely paid, IPA will cease work under this Agreement, and shall not resume work unless and until Interconnection Customer has either paid such amounts or has provided reasonable assurances acceptable to IPA that all amounts due and to become due under this Agreement will be timely paid including, if IPA so requests, the posting of an additional deposit.

3.4 <u>Refund of Deposit</u>. If, upon termination of this Agreement or completion of the Optional Interconnection Study, there is any unapplied amount of the deposit held by IPA pursuant to this Agreement, IPA shall return the balance of the deposit to Interconnection Customer within

ten (10) Business Days or, if so directed by Interconnection Customer, apply the remaining amount of such deposit to future deposits or costs to be incurred pursuant to the Procedures or the GIA.

### ARTICLE 4 TERMINATION

4.1 <u>Failure to Provide Assurances</u>. If Interconnection Customer does not provide the reasonable payment assurances described in <u>Section 3.3</u> within ten (10) Business Days of demand therefor by IPA, then IPA may, in addition to its right to suspend work pursuant to <u>Section 3.3</u>, immediately terminate this Agreement.

4.2 <u>Customer Termination</u>. Interconnection Customer may terminate this Agreement upon ten (10) Business Days' notice to IPA.

4.3 <u>Payment</u>. The termination of this Agreement shall not relieve Interconnection Customer of the obligation to pay all amounts due under this Agreement, including, but not limited to, all costs incurred by IPA in connection with the termination hereof.

### ARTICLE 5 MISCELLANEOUS

5.1 <u>Confidentiality</u>. The Parties agree to be bound by the provisions of Section 13.1 of the Procedures as if the same were fully set forth herein.

5.2 <u>Indemnification</u>.

Interconnection Customer undertakes and agrees to indemnify and hold a harmless IPA, Intermountain Power Service Corporation, the Operating Agent, and all of their respective boards, owners, members, directors, officers, agents, representatives, employees, assigns and successors in interest (the "Indemnified Parties"), and, at the option of Interconnection Customer, either defend (by using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including, without limitation, reasonable attorneys' fees and disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including, without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto or third persons arising as a result of, or caused in whole or in part by any: (i) breach or default under this Agreement on the part of Interconnection Customer; or (ii) negligent act, error, omission or willful misconduct incidental to, related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of Interconnection Customer or any of Interconnection Customer's boards, owners, members, directors, managers, officers, agents, representatives, employees or subcontractors of any tier, except to the extent arising from the gross negligence or willful misconduct of Indemnified Parties.

b. Interconnection Customer undertakes and agrees to indemnify and hold harmless Indemnified Parties and, at the option of Interconnection Customer, either defend (by

using counsel reasonably acceptable to and approved in advance by the affected Indemnified Party) or reimburse defense costs incurred by an Indemnified Party from and against any and all suits, causes of action, claims, charges, damages, demands, judgments, civil and criminal fines and penalties, costs, expenses (including without limitation, reasonable attorneys' fees, disbursements and court costs) and losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including without limitation, to Interconnection Customer's boards, owners, members, directors, officers, agents, representatives and employees, or damage to or destruction of any property of either Party hereto, or third persons in any manner arising by reason of any negligent act, error or omission incident related to or connected with the performance of this Agreement or the interconnection or any other matter contemplated by or provided for under this Agreement on the part of the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, owners, members, directors, officers, agents, representatives, employees, or subcontractors of any tier (including the Intermountain Power Service Corporation), except to the extent arising from the gross negligence or willful misconduct of IPA, the Operating Agent or the Intermountain Power Service Corporation, or their respective boards, officers, agents, representatives or employees.

c. Interconnection Customer agrees that it shall not directly or indirectly assert any claim against IPA or seek to have IPA indemnify or reimburse Interconnection Customer for any loss, cost or damage with respect to which Interconnection Customer has a duty of indemnification pursuant to subsection a. or b. of this Section 5.2.

5.3 <u>Consequential Damages</u>. Except with respect to liabilities arising from third-party claims for which Interconnection Customer is required to indemnify an Indemnified Party, in no event shall either Party be liable to the other Party under any provision of this Agreement for any indirect, incidental, punitive or consequential damages, losses, damages, costs or expenses including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; <u>provided</u>, <u>however</u>, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be indirect, incidental, punitive or consequential damages hereunder.

5.4 <u>Performance by Operating Agent</u>. The Parties recognize that the Los Angeles Department of Water and Power, pursuant to an agreement with IPA, acts as the Operating Agent for IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, and that the Los Angeles Department of Water and Power, in such capacity as Operating Agent, is responsible for planning, negotiating, designing, constructing, insuring, administering, operating and maintaining the IPA Switchyard and the Transmission System and such other facilities of IPA. Accordingly, consistent with such agreements with IPA, the Los Angeles Department of Water and Power, as Operating Agent acting on behalf of IPA, is to perform and carry out the obligations of IPA under this Agreement.

5.5 <u>Performance by Intermountain Power Service Corporation</u>. The Parties further recognize that under an agreement with IPA and the Los Angeles Department of Water and Power as Operating Agent, Intermountain Power Service Corporation performs certain operating and maintenance work pertaining to IPA's generation and transmission facilities, including the IPA Switchyard and the Transmission System, under the direction of the Los Angeles Department of

Water and Power as Operating Agent. Accordingly, consistent with such agreement with IPA and the Los Angeles Department of Water and Power, Intermountain Power Service Corporation may perform and carry out certain operation and maintenance work with respect to the IPA Interconnection Facilities, as well as the IPA Switchyard and the Transmission System, as provided for under the applicable provisions of this Agreement.

5.6 <u>Assignment</u>. This Agreement may be assigned by either Party only upon the express written consent of the other Party.

5.7 <u>Amendment</u>. No amendment of this Agreement or any of the Appendices hereto shall be effective or binding unless it is set forth in a written instrument that is duly executed and delivered by both of the Parties.

5.8 <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of Utah without regard to Utah's laws or rules governing conflicts of law.

5.9 <u>Venue</u>. All litigation arising out of, or relating to this Agreement, shall be brought only in the United States District Court for the District of Utah, if jurisdiction should there exist, or, if such jurisdiction is lacking, then only in the Third Judicial District Court for Salt Lake County, Utah, and the Parties irrevocably agree to submit to the personal jurisdiction of each such court.

5.10 <u>Attorneys' Fees and Costs</u>. In any action to enforce the terms of this Agreement, each Party shall be responsible for it own attorneys' fees and costs.

5.11 <u>Representations</u>. Interconnection Customer represents and warrants that: (a) it has all requisite power and authority to enter into this Agreement and to perform each of its terms and covenants, (b) it is not restricted or prohibited, contractually or otherwise, from entering into and performing this Agreement, (c) the execution and performance of this Agreement by Interconnection Customer will not constitute a violation or breach of any other agreement between it and any other person or entity, and (d) this Agreement is a valid and binding obligation of Interconnection Customer.

5.12 <u>Entire Agreement</u>. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. This Agreement may be amended only by a written document signed by the Parties. Each Party acknowledges that it was represented by counsel in the negotiation of this Agreement and that it has been authorized to execute this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

## Intermountain Power Agency, by its Operating Agent

By: \_\_\_\_\_

Date:
-------

### [Interconnection Customer]

By: \_\_\_\_\_

Title:	

Attachment A to Appendix 5 Optional Interconnection Study Agreement

# ASSUMPTIONS USED IN CONDUCTING THE OPTIONAL INTERCONNECTION STUDY

Appendix 5 – Page 7

### APPENDIX 6 to GIP EXISTING INTERCONNECTION REQUESTS

Appendix 6 – Page 1

Queue Number	Request Date	Request Date Max Summer MW Output	Max Winter MW Output	Location	Interconnection Facility	In-Service Date	Facility Type	Status
							Solar (300 MW)	HS completed. SIS restudy completed. FS
130904000000	Q44 09/04/13	300	300	Delta, UT	(I) IPP 345kV Switchyard	Dec-18	BESS (150 MW)	restudy in progress
							Solar (300 MW)	
15082500000	Q49 08/25/15	300	300	Delta, UT	(I) IPP 345kV Switchyard	Jan-20	BESS (300 MW)	HS completed. FS restudy in progress
							Solar (400 MW)	SIS completed. HS completed. Facilities Study
160105000000	Q50 01/05/16	400	400	Delta, UT	(I) IPP 345kV Switchyard	Jan-21	BESS (400 MW)	in progress.
							Solar (400 MW)	
160105000001	Q51 01/05/16	400	400	Delta, UT	(I) IPP 345kV Switchyard	Jan-22	BESS (400 MW)	in progress.
							Solar (324 MW)	SIS completed. HS completed. Facilities Study
160114000000	Q52 01/14/16	324	324	Delta, UT	(I) IPP 345kV Switchyard	Dec-18	BESS (194 MW)	in progress.
							Solar (285 MW)	
160728000000	Q53 07/28/16	285	285	Delta, UT	(I) IPP 345kV Switchyard	Jun-19	BESS (285 MW)	SIS restudy completed. FS in progress
							Solar 300MW	
180319000000	Q64 03/19/18	300	300	Beaver City, Utah	(I) 345kV Milford (IPP)	Nov-20	BESS 100MW	SIS restudy in progress
							Solar 400MW	
200501200000	Q77 04/13/20	400	400	Delta, UT	(I) IPP 345kV Switchyard	Jun-23	BESS 240MW	SIS Agreement executed
210928000000	Q83 09/28/21	220	220	Delta, UT	(I) IPP 345kV Switchyard	Oct-24	220MW ACES	Application received
181212000001	TQ01 12/12/2018	N/A	N/A	Carbon County, Wyoming (I) IPP 345kV Switchyard	(I) IPP 345kV Switchyard	Dec-22	AC	SIS in progress

### APPENDIX 7 to GIP STANDARD GENERATOR INTERCONNECTION AGREEMENT

### APPENDIX 8 to GIP INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT OR SOLAR GENERATING PLANT

This appendix sets forth procedures specific to a wind generating plant or to a solar generating plant. All other requirements of this GIP continue to apply to interconnections of a wind generating plant or solar generating plant.

### A. Special Procedures Applicable to Wind Generators

The wind plant Interconnection Customer, in completing the Interconnection Request required by this GIP, may provide to IPA a set of preliminary electrical design specifications depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the queue and receive the base case data as provided for in this GIP.

No later than six months after submitting an Interconnection Request completed in this manner, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow IPA to complete the System Impact Study.

### B. Special Procedures Applicable to Solar Power Generation

The solar plant Interconnection Customer, in completing the Interconnection Request of this GIP, may provide to IPA a set of preliminary electrical design specifications depicting the solar plant as a single equivalent inverter-based solar power generation in terms of its megawatt output (MW or Real Power). Upon satisfying these and other applicable Interconnection Request conditions, the solar power plant may enter the queue and receive the base case data as provided for in this GIP.

No later than six months after submitting an Interconnection Request completed in this manner, the solar power plant Interconnection Customer must submit the following: (i) completed detailed electrical design specifications; (ii) a WECC approved standard study model (standard model) if available. If the standard model for a given solar generation technology is not yet available, then the Interconnection Customer can provide vendor-specific, user-written or an equivalent model with a source code algorithm in General Electric's Engineer Programming Control Language (EPCL) that can be compiled at run time by Power System Load Flow (PSLF) platform's internal compiler; however, once a standard model becomes available, the Interconnection Customer should begin furnishing such standard model; and (iii) other data (including collector system layout data) needed to allow IPA to complete the System Impact Study.

# Attachment A to Appendix 8 Interconnection Data for Solar Photovoltaic Generating Plants

Solar Photovoltaic (PV) Specifications
Technologies: Thin Film PV_Monocrystalline PVPolycrystalline PV
Other (Specify below)
Manufacturer, Model Name,and Number
Total Number of PV Panels
Rated Maximum Power Output (kW)       Summer         Winter Nominal Voltage (DC)       V
Inverter Specifications
Manufacturer, Model Name, and Number Version Number
Total Number of Inverters
Volta ge (DC) Input Range V Maximum Voc (DC) V
Number of Phases
AC Voltage RangeV
Maximum Output Current per PhaseA Maximum Continuous Output Power kW Nominal Output FrequencyHz
Power Factor
Total Harmonic Distortion (THD)%

Appendix 8 – Page

<b>Isolation Transformer Specification</b>	Isolation	Transformer	Specification
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Low Side and High Side Voltages	<u> </u>	kV		
MVA Base_MVA Emergency Rating MVA Reactar		RatingMVA		p.u
TransformerConnectionN	Number of Trans	formers		
<b>Equipment Certifications</b>				
List the above components of the S	Solar Facility tha	at are currently cer	tified:	
Equipment Type Certifying E	ntity			
1				
2				
3.				

### **Certification and Standards**

- 1. IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems.
- 2. UL 1703 Standard for Safety, Flat-Plate Photovoltaic Modules and Panels
- 3. UL 1741 Standard for Inverters, Converters, and Controllers for Use in Independent Power Systems
- 4. IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems.