

**2019**  
**Renewable Energy**  
**and Storage**  
**Request for Proposals**

**Black Hills Colorado Electric, LLC**

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### **Notice of Disclaimer**

The information contained in this Request for Proposals (“RFP”) has been prepared solely to assist bidders in deciding whether or not to submit a proposal. Black Hills Colorado Electric, LLC (“Black Hills” or the “Company”) does not represent this information to be comprehensive or to contain all of the information that a bidder may need to consider in order to submit a proposal. Black Hills, its members, affiliates and their respective employees, shareholders, officers, directors, customers, agents, attorneys and advisors do not make any current or future representation, promise or warranty, express or implied, as to the accuracy, reliability or completeness of the information contained herein, or in any document or information made available to a bidder, whether or not the aforementioned parties knew or should have known of any errors or omissions, or were responsive for their inclusion in, or omission from, this RFP.

The Company reserves the right to modify, supplement, or withdraw this RFP at any time, whether due to changes in law or otherwise, and including by issuing one or more addenda to this RFP during this solicitation, which addenda shall become a part of this RFP. No part of this RFP and no part of any subsequent correspondence by the Company, its members, affiliates, or their respective employees, shareholders, officers, directors, customers, agents, attorneys and advisors shall be taken as providing legal, financial or other advice or as establishing a contract or contractual obligation. Contractual obligations on the part of the Company will arise only if and when definitive agreements have been approved and executed by the appropriate parties having the authority to approve and enter into such agreements. The Company reserves the right to request from a bidder information that is not explicitly detailed in this document, obtain clarification from bidders concerning proposals, conduct contract development discussions with selected bidders, conduct discussions with members of the bid evaluation team and other support resources as described in this RFP and in compliance with all FERC Code of Conduct rules, and provide data to and conduct discussions with the Independent Evaluator (“IE”) as necessary for the IE to satisfy its obligations to the Colorado Public Utilities Commission (“CPUC” or “Commission”).

The Company reserves the right to withdraw and terminate this RFP at any time prior to the execution of a contract. The Company further reserves the right, at its sole and exclusive discretion, to waive irregularities and informalities in any that is submitted, or receive and open proposals received after the specified time of closing.

All proposals submitted to the Company pursuant to the RFP shall become the exclusive property of the Company and may be used for any reasonable purpose by the Company. The Company shall consider materials provided by bidders in response to this RFP to be confidential only if such materials are clearly designated as “Confidential.” Bidders should be aware that their proposal, even if marked “Confidential,” may be subject to discovery and disclosure in regulatory or judicial proceedings that may or may not be initiated by the Company.

Any verbal communication with any employee of the Company, or any of its members, affiliates, or their respective employees, shareholders, officers, directors, customers, agents, attorneys and advisors concerning this RFP is not binding and shall in no way alter any term or condition of the RFP. The CPUC's rules on confidentiality will apply. *See* 4 CCR 723-1-1000–1103. Consistent with these rules and other applicable confidentiality rules, the Company may use any information it receives in appropriate regulatory proceedings.

The Company will, in its sole discretion and without limitation, evaluate proposals and proceed in the manner the Company deems appropriate, which may include deviation from the Company's expected evaluation process, the waiver of any requirements and the request for additional information. The Company reserves the right to reject any, all or portions of any proposal received for failure to meet any criteria set forth in this RFP or otherwise and to accept proposals other than the lowest cost proposal. The Company also may decline to enter into any agreement with any bidder, terminate negotiations with any bidder or abandon the RFP process in its entirety at any time, for any reason and without notice thereof. Bidders that submit proposals agree to do so without legal recourse against the Company, its members, affiliates, or their respective employees, shareholders, officers, directors, customers, agents, attorneys and advisors for rejection of their proposals or for failure to execute an agreement for any reason. The Company, its members, affiliates, or their respective employees, shareholders, officers, directors, customers, agents, attorneys and advisors shall not be liable to any bidder or other party in law or equity for any reason whatsoever for any acts or omissions arising out of or in connection with this RFP. By submitting its proposal, each bidder waives any right to challenge any valuation by the Company of its proposal or any determination of the Company to select or reject its proposal. Each bidder, in submitting its proposal, irrevocably agrees and acknowledges that it is making its proposal subject to and in agreement with the terms of this RFP.

Each bidder shall be liable for all of its costs incurred to prepare, submit, respond or negotiate its proposal and any resulting agreement and for any other activity related thereto, and the Company shall not be responsible for any of the bidder's costs.

**THIS RFP IS FOR THE SOLICITATION OF BIDS FOR ELIGIBLE ENERGY RESOURCES, INCLUDING SECTION 123 RESOURCES, AND STORAGE OF AN AMOUNT OF UP TO 200 MW. THE COMPANY RESERVES THE RIGHT NOT TO PROPOSE TO ACQUIRE ANY RESOURCES AND MAY WITHDRAW AND TERMINATE THIS RFP AT ANY TIME PRIOR TO THE EXECUTION OF A CONTRACT.**

## ***1. Introduction***

Black Hills Colorado Electric, LLC (“Black Hills” or the “Company”), an indirect subsidiary of Black Hills Corporation, is issuing this Request for Proposals (“RFP”).

The Company is seeking to acquire projects of up to 200 MW of eligible energy resources (as defined in C.R.S. § 40-2-124, including Section 123 Resources) and storage (stand-alone storage or storage combined with renewable energy) through this solicitation,<sup>1</sup> the capacity of which will be valued appropriate to resource type. The competitive bid process will allow all eligible resources an opportunity to bid, and be compared. This will enable the determination of the most cost-effective resource. In this RFP, the Company has included the bid policies and model contracts necessary for the acquisition of a resource through a competitive bidding process. Importantly, the Company is only seeking to acquire projects in a portfolio that yield customer savings every year.

Bidders to this RFP who propose a resource that they believe meets the definition of a Section 123 resource should indicate in their proposal why the bidder believes the resource qualifies as a Section 123 Resource. The Company will review the bidder’s Section 123 Resource claims, determine whether in the Company’s estimation the claim is valid, and report its findings and the bidder’s claims in its 120-Day Report.

The term “Section 123 Resource” is in reference to C.R.S. § 40-2-123(1)(a) which states as follows:

The commission shall give the fullest possible consideration to the cost-effective implementation of new clean energy and energy-efficient technologies in its consideration of generation acquisitions for electric utilities, bearing in mind the beneficial contributions such technologies make to Colorado’s energy security, economic prosperity, environmental protection, and insulation from fuel price increases.

These “new clean energy and energy-efficient technologies” are referred to as “Section 123 resources.” In Decision No. C08-559, the Colorado Public Utilities Commission (“Commission”) found that the acquisition of Section 123 resources that are also eligible energy resources (as those resources are defined in C.R.S. 40-2-124(1)(a)) are not subject to the retail rate impact rule of C.R.S. 40-2-124(1)(g).

The Commission clarified in Decision No. C08-1153 the definition of Section 123 adopted by the Commission. That clarified definition is as follows:

...an eligible energy resource will be considered a new clean energy, or energy efficient technology, or a demonstration project if it is clean and incorporates one or more technologies, representing a substantial portion of its overall installed cost, that have not

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<sup>1</sup> Any new eligible energy resource that is paired with storage shall be limited at any given time to the lesser of: (a) the nameplate capacity of the renewable generation facility, and (b) a maximum of 200 MW.

been regularly commercially demonstrated, up to the point in time the resource is formally bid, or if not bid, acquired.

Subsequently, the ERP Rules were amended and the following definition of the term “Section 123 Resources” was added (Rule 3602(q)):

“Section 123 resources” mean new energy technology or demonstration projects, including new clean energy or energy-efficient technologies under § 40-2-123(1)(a), C.R.S. and § 40-2-123(1)(c), C.R.S. and Integrated Gasification Combined Cycle projects under § 40-2-123(2).

The Commission further clarified in Decision No. C13-0094 in Docket No. 11A-869E, Public Service Company of Colorado’s 2011 ERP that, per the statutory language, a Section 123 resource must be both *new* and *clean* and added:

A clean project must demonstrate that it would likely cause a decrease in greenhouse gas emissions (e.g., carbon dioxide) or significantly reduce other pollutants. A clean project may also result in reduced water usage.

Subsequently, Senate Bill 13-252, signed into law on June 5, 2016, amended C.R.S. § 40-2-124, the Renewable Energy Standard, to encourage the deployment of methane capture technologies and stated that pyrolysis resources are eligible energy resources if the Commission determines that the electricity generated by those resources is greenhouse gas neutral and added the following definition:

“Greenhouse Gas Neutral”, with respect to electricity generated by a coal mine methane or synthetic gas facility, means that the volume of greenhouse gases emitted into the atmosphere from the conversion of fuel to electricity is no greater than the volume of greenhouse gases that would have been emitted into the atmosphere over the next five years, beginning with the planned date of operation of the facility, if the fuel had not been converted to electricity, where greenhouse gases are measured in terms of carbon dioxide equivalent.”

In addition, Senate Bill 13-252 defined pyrolysis:

“Pyrolysis” means the thermochemical decomposition of material at elevated temperatures without the participation of oxygen.

The Company is also interested in pursuing proposals for utility ownership of generation resources. Affiliate-developed and owned proposals may also be evaluated as part of this solicitation. The Company invites proposals from all potential suppliers who are capable of meeting the conditions of this RFP.



## ***1.1 Regulatory Context***

The Colorado Public Utilities Commission (“CPUC” or “Commission”) has adopted Electric Resource Planning (“ERP”) rules that establish a process to determine the need for additional electric resources by Commission jurisdictional electric utilities including the Company. This solicitation is unique in that it is part of an amendment the Company is proposing to its last Commission-approved ERP.<sup>2</sup>

This RFP is being held to permit the Company the opportunity to increase the amount of renewable energy on its system with immediate and annual savings to customers by displacing higher cost power supplies with lower cost renewable energy and energy storage supplies. The Company will follow the same concepts governing a typical ERP process, including issuing an RFP that results in the selection of a set of electric resources in a cost-effective resource portfolio, taking into consideration projected system needs, reliability of proposed resources, beneficial contributions of new clean energy and energy-efficient technologies, expected generation loading characteristics, and various risk factors.

A set of electric resources will be selected that results in a cost-effective resource portfolio, taking into consideration projected system needs, reliability of proposed resources, beneficial contributions of new clean energy and energy-efficient technologies, expected generation loading characteristics, and various risk factors.

The Company is applying the ERP rule 3612 that requires an Independent Evaluator (“IE”) conduct a review of Black Hills’ evaluation of proposals received in response to a competitive solicitation. The Company will work cooperatively with the IE and shall provide the IE immediate and continuing access to all documents and data reviewed, used, or produced by the utility in this solicitation and evaluation process.

The Company is applying the ERP rules that prescribe a timeline for performing competitive resource acquisitions. The Company will notify bidders within fifteen days of the due date for bid submission whether their bid complies with the RFP’s bid submission requirements. The Company will make a 30-day report to the Commission on RFP response and will make a communication to bidders within forty-five days after bid receipt on whether their bid was advanced to computer-based modeling (see “Required Communications” below).

Black Hills will file its bid evaluation report within 120 days after receipt of bids. Within thirty days after the Company files its 120-day report the IE will provide a report to the Commission containing their analysis of whether the utility conducted a fair bid solicitation and bid evaluation process. Within forty-five (45) days after the

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<sup>2</sup> On June 3, 2016, Black Hills submitted its last ERP in Proceeding No. 16A-0436E. On January 17, 2017, the presiding Administrative Law Judge issued Recommended Decision No. R17-0039, granting the Company’s ERP, as modified by a Settlement Agreement. The Phase I became effective by operation of law. On February 9, 2018, the Company submitted its 120-day report as part of the Phase II process, selecting a 60-MW wind project as the winning bid. On June 14, 2018, the Commission issued its Phase II Decision No. C18-0462, approving the resource selection.

Company files its 120-day report, parties to the resource plan proceeding may file comments on the Company's report and the IE's report with the Commission. The Commission will then complete its evaluation and issue a decision as to the Company's preferred plan to meet the identified need.

The ERP Rules further provide that Black Hills (1) make a communication to bidders concerning bid disclosure and bid model representation dispute resolution; (2) provide the form of nondisclosure agreement; and (3) require of bidders that they provide bidder contact and employment metric information.

### **Required Communications**

#### ***Bid Information Disclosure***

Black Hills notifies bidders that, upon completion of the competitive acquisition process begun with this RFP,<sup>3</sup> Black Hills will post on its website the following information from all bids and utility proposals: bidder name; bid price and utility cost; generation technology type; size of facility; contract duration or expected useful life of facility for utility proposals; and whether the proposed purchased power agreement includes an option for the utility to purchase the bid facility during or at the end of the contract term.

#### ***Model Representation and Dispute Resolution***

Black Hills will, within 45 days of bid receipt, provide notice in writing by electronic mail to the bidder whether its bid is advanced to computer-based modeling to evaluate the cost or the ranking of the bid resource, and, if not advanced, the reasons why Black Hills will not further evaluate the bid using computer-based modeling.

With its notice, Black Hills will also provide bidders the modeling inputs and assumptions that reasonably relate to their bid resource or to the transmission of electricity from their proposed facility to Black Hills. These modeling inputs and assumptions will explain how the bid facility will be represented in the computer-based modeling, i.e., what costs will be assumed with respect to the bid facility including costs that Black Hills assesses the bid for transmission interconnection, gas supply, integration costs, etc. In the event that the modeling inputs and assumptions contain confidential or highly confidential information, Black Hills will request that the bidder execute a nondisclosure agreement prior to receiving the information.

Within seven calendar days after receiving the modeling inputs and assumptions the bidder will notify Black Hills in writing by electronic mail the specific details of any potential dispute regarding its bid's modeling inputs and assumptions. The bidder must attempt to resolve any dispute with Black Hills. If the bidder and Black Hills cannot resolve the dispute within three calendar days, Black Hills will immediately notify the Commission with a filing in the Commission docket. If the bidder is not already a party

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<sup>3</sup> Completion of the resource acquisition process is defined as the execution of all agreements, if any, for the solicited resources.

to the proceeding, the bidder will file a notice of intervention as of right pursuant to paragraph 1401(b) of the Commission's Rules of Practice and Procedure, within one business day of Black Hills filing the notice of dispute to the Commission, for the limited purpose of resolving the disputed modeling inputs and assumptions.

An Administrative Law Judge ("ALJ") will expeditiously schedule a technical conference at which Black Hills and the bidder shall present their dispute for resolution. The ALJ will enter an interim order determining whether corrections to the bid's modeling inputs and assumptions are necessary. If the ALJ determines that corrections to the bid's modeling inputs and assumptions are necessary, Black Hills will, within three business days of the issuance of the ALJ's interim decision, provide the corrected information to both the bidder and the Independent Evaluator. In its 120-day report, Black Hills will confirm, by performing additional modeling as necessary, that the bid resource is fairly and accurately represented.

### ***Nondisclosure Agreement***

The form of nondisclosure agreement necessary to obtain access to confidential and highly confidential modeling inputs and assumptions is included as Attachment D.

### ***Required Bidder Information***

Black Hills requires that each bidder in its Form 2 provide the contact name of the owner or developer designated to receive notice of whether the bid is advanced to computer-based modeling.

Black Hills requires that bidders provide employment metric information for the bid to be eligible for this RFP. See the requirements for the Employment Metrics Narrative Topic.

## ***1.2 Resource Assessment***

The purpose of this solicitation is to address the selection of projects of up to 200 MW of eligible energy resources, including Section 123 Resources, and storage that increase the penetration of renewable energy on the Company's system. Resources selected will be part of a portfolio that provides customer bill savings during each year. This competitive bid process will allow all eligible energy resources an opportunity to bid and be compared, enabling the determination of the most cost-effective resource to fill this resource need. In this RFP, as provided in ERP rule 3611, the Company has included the bid policies, RFPs, and model contracts necessary for the acquisition of a resource through a competitive bidding process.

The Company proposes to issue an RFP for renewable energy and storage so that the bids can be evaluated and presented to the Commission. The Company may opt not to acquire any energy resources depending on (among other things) the quality of bids received, the status of other resource acquisitions that are planned or currently underway, regional transmission availability, and the feasibility, viability and cost-effectiveness of the bids received.

### ***1.3 Compliance with the ERP Rule 3611(g) Written Bidding Policy Requirement***

As provided in Rule 3611(g) of the ERP rules, the written bidding policy that the Company will use to ensure that proposals are solicited and evaluated in a fair and reasonable manner is set forth in Section 5 and includes the following elements:

**Assumptions.** Assumptions underlying the evaluation process (General Planning Assumptions).

**Criteria.** The criteria by which the Company shall evaluate proposals submitted in response to this RFP.

**Models.** The Company will utilize spreadsheet-based models, as well as proprietary software to evaluate proposals considered as part of the resource acquisition plan, as generally described in Section 5 of this RFP.

## ***2. Project Information***

### ***2.1 Eligible Project Structures***

Bidders to this RFP may propose a PPA structure, a build and transfer to Company ownership option, a utility self-build, or a PPA structure with a build transfer option. A Model PPA is provided as Attachment F. The Company understands that bidders may desire to modify and supplement the Model PPA when submitting their proposals, and anticipates negotiating with selected bidders in an effort to develop documents acceptable to all parties. Concerning bidders that propose the inclusion of storage, as described in Section 4.3.1., they are strongly encouraged to describe or list any changes to the Model PPA to reflect the operating characteristics of the storage device.

### ***2.2 Eligible Project Resources***

Eligible projects under this RFP must qualify as an eligible energy resource, as defined in C.R.S. § 40-2-124, including Section 123 Resources,<sup>4</sup> or involve storage (stand-alone storage or storage combined with renewable energy). Eligible proposals may be for new, to-be-built resources, or for existing resources. Eligible projects that include storage combined with a new eligible energy resource shall be limited at any given time to the lesser of: (a) the nameplate capacity of the renewable generation facility, and (b) a maximum of 200 MW.

### ***2.3 Pricing***

The Company is only seeking to acquire projects that as a portfolio yield customer savings every year.

The pricing template is included in Form 6 of Attachment A.

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<sup>4</sup> The term “Section 123 Resource” is in reference to C.R.S. § 40-2-123(1)(a).

All pricing must be in terms of current year dollars, also referred to as escalated or nominal dollars. For example, a \$25 per megawatt-hour (“MWh”) energy price bid for 2030 means that in 2030, energy from the facility will be purchased at a rate of \$25/MWh at the metered point of delivery.

If a bidder believes that escalating its PPA pricing according to movements in an index will reduce its overall bid price, the bidder may take an appropriate exception on Form 6 and provide an alternate price that would be escalated from a fixed schedule or a known, published and widely recognized index that is closely related to the appropriate generation segment of the power industry. A bidder that wishes to propose such alternate pricing tied to an index must submit one pricing form in escalated or nominal dollars and another pricing form tied to an index meeting the requirements of the preceding sentence and must describe the index used and how it serves to reduce the overall bid price.

Bidders will be responsible for procuring transmission service and all transmission and scheduling costs needed to deliver power from the proposed resource to the point of delivery on the Company’s transmission system. Proposals that rely upon supply resources located outside of the Company’s system must provide for the delivery of the full capacity amount to the Company’s transmission system. The Company is not currently a network customer of any other transmission provider and, therefore, if transmission is required on any other transmission provider’s system, it must be Firm Point-to-Point Transmission. Said transmission service shall be continuously reserved for the duration of the capacity transaction.

Proposals must include initial estimated costs for any new or upgraded interconnection facilities required for the interconnection of the proposed resources to applicable interconnection provider’s system and all costs for transmission required from the generation facility to the proposed point of interconnection with the Company’s transmission system. If Firm Point-to-Point transmission service is required and not obtained prior to the time the bidder submits its proposal, the burden will be on the bidder to identify all known fixed and variable costs for delivery to the Company’s system as well as any known transmission constraints. All pricing in bidders’ proposals should reflect those costs (if applicable) at the time of submittal.

For proposals with an active Small or Large Generator Interconnection Procedures (“LGIP”) request, the bidder should provide the LGIP identifier(s) associated with the project in their proposal. The Company stresses that bidders do not need to have an active SGIP or LGIP request, and the Company highly recommends that bidders wait to submit any SGIP or LGIP request until the Company submits its 120-Day Report, indicating the portfolio of bids recommended for acquisition. Bidders should clearly indicate the cost of any interconnection by listing each component of the interconnection facilities as a separate and distinct line item in their proposals. Bidders should also clearly indicate the costs of each transmission component required to deliver power to the point of delivery on the Company’s transmission system.

To assist bidders with the listing of their cost of transmission, the Company will post on the RFP website managed by the Accion Group a listing of cost assumptions that the Company will use to complete interconnection and transmission upgrade assessments.

Bidders are highly encouraged to review these assumptions prior to submitting bids. The RFP website is accessible here: <https://blackhills2020.accionpower.com>.

If a bidder is accepted for further consideration after Step 2.B. of the evaluation process set forth in Section 5.2, the Company's Transmission Function will conduct transmission studies associated with the bidder's proposal, to the extent applicable, after receipt of which the bidder must resubmit within fifteen (15) days its pricing information for its proposal to the Company. For ease of comparison, pricing on Form 6 should include all of the price components up to the point of delivery on the Company's transmission system. The Company will consider the transmission costs required by, or imposed on the system by a particular resource as part of the bid evaluation criteria.

All bidders must complete Form 6 which requires them to provide (i) the price (e.g., \$/MWh) for each year of the term of the PPA taking into account existing tax credits or any other credits the project is eligible to generate and (ii) the price (e.g., \$/MWh) for each year of the term of the PPA if the project is not eligible to generate such credits.

A renewable energy credit ("REC") results from 1 MWh of renewable energy. Under the terms of any transaction, all RECs from a proposed project must be conveyed to the Company. All other environmental benefits associated with the generation must also be conveyed to the Company. All proposals must include in their pricing the transfer to the Company of 100% of the environmental benefits and RECs associated with the energy that the Company purchases through the PPA.

Projects bid in response to this solicitation may have "Clean Power Attributes," meaning any and all RECs, allowances, offsets, credits, imputed reductions in any "greenhouse gases" or other pollutants (including any reduction, displacement or offset of emissions resulting from fuel combustion at another location), environmental air quality credits or any other attributes or benefits, whether choate or inchoate and whether or not having any specified or identifiable value, that are generated by, created in connection with or otherwise deemed or treated by any person as existing as a result of the construction, operation or existence of the Facility or the generation, sale or transmission of the Renewable Energy, in each case during the Term, whether resulting from (i) any past, present, or future local, regional, state, federal or international environmental, energy or other legislation, regulation or other pact, treaty or agreement that in any way identifies, defines or values clean power generation (or similar terms) or any of the foregoing attributes, (ii) the anticipation by any person(s) of any such legislation, regulation or other pact, treaty or agreement, (iii) Black Hills' current marketing program or any successor green pricing program or other environmental or renewable energy credit trading program, (iv) any program, tracking system, market or other action or mechanism by any person(s) to identify, value, transfer or trade any such attributes, or (v) any combination of the foregoing. All proposals must include in their pricing the transfer to the Company of 100% of the Clean Power Attributes associated with the energy that the Company purchases through the PPA.

Bidders are not required to acquire and include regulation services with any bids. In general, so long as the bidder can obtain firm transmission support and scheduling services for the intermittent generation, the Company is able to supply regulation services either through its generation resources if the project is located within the

Company's electric service territory or through the services the Company obtains from Public Service Company of Colorado. The cost of this firm transmission and any costs of scheduling and system set-up will be the responsibility of the bidder. Bidders for projects not directly connected to the Black Hills system will be allowed to acquire and include in their bids regulation services; bidders will have the choice of obtaining regulation services through a third-party provider, balancing authority, or Black Hills when submitting bids for intermittent resources. The Company will provide the IE with the cost of providing regulation services for any bidders that elect to obtain regulation services through Black Hills. This cost will be added to these bids. If bidders elect to obtain regulation services from a third-party provider or balancing authority, bidders should include and specify these costs in any bids. This will allow for comparison of all bids requiring regulation services on a neutral basis.

Finally, as applicable, bidders must make arrangements to provide resource forecasting services on a day ahead and hour ahead time frame. This service will include the expected hourly outputs from the facility day ahead pursuant to the WECC prescheduling calendar and reevaluate forecast intraday on an hour ahead basis.

#### ***2.4 Regulatory Approvals***

Within 120 days of the Company's receipt of bids in its competitive acquisition process, the Company will file a report with the Commission describing the cost-effective resource plans and assessing the costs and benefits from the potential acquisition of resources. Upon Commission approval of the resource acquisition, Company actions consistent with that approval are presumed prudent. However, the Company reserves the right to: (1) inform the Commission that the Company could not reach agreement with the proponent of a selected resource; (2) request Commission approval of any agreements it enters into with successful bidders that vary in any material respect from the Model PPA; and (3) to terminate any agreement if the Company fails to receive Commission approval of submitted agreements.

#### ***2.5 Contract Lengths***

Bidders may propose contract term lengths between 5 and 20 years. One of the Company's objectives with respect to term lengths is to avoid the concurrent expiration of multiple contracts and to avoid or minimize the adverse financial impact of finance lease, and Variable Interest Entity-related obligations.

#### ***2.6 Right of First Offer***

The Model PPA includes a Right of First Offer ("ROFO") which specifies, in addition to other terms and conditions, that the Company may purchase the facility if and when the facility owner is interested in selling the facility to a third party during the term of the PPA. In addition, while not required under the Model PPA, bidders, at their option, may offer the Company an end-of-term or other purchase option that specifies that the Company can purchase the facility (or the stock of the facility owner) for its appraised fair market value at a specified time or times during, or at the end of, the PPA term.

## ***2.7 Contract Accounting***

All contracts proposed to be entered into as a result of this RFP will be assessed by the Company for appropriate accounting and/or tax treatment. Bidders shall be required to supply promptly to the Company any and all information that the Company requires in order to make such assessments.

The Company has specific concerns regarding proposals received in response to this RFP that could result in either (i) a contract that must be accounted for by the Company as a finance lease or an operating lease<sup>5</sup> pursuant to ASC 842, or (ii) consolidation of the seller or assets owned by the seller onto the Company's balance sheet due to Variable Interest Entity<sup>6</sup> ("VIE") issues as set forth in ASC 810. The following shall therefore apply to any proposal submitted pursuant to this RFP:

- The Company is unwilling to be subject to any accounting or tax treatment that results from a PPA's finance lease or VIE treatment. As a result, all bidders are required to state in their proposal(s): (i) that the bidder has reviewed and considered applicable accounting standards in regard to finance leases and variable interest entities, i.e., ASC 842 Leases, ASC 810 Consolidations, (ii) a summary of any changes that the bidder proposes to the Model PPA in order to attempt to address these items, and (iii) to the bidder's knowledge and belief, the bidder's proposal should not result in such treatment as of the date of the proposal.
- As applicable, the Company will not execute a PPA without confirmation from the Company's external Auditors that the PPA will not be classified as either a finance lease or a VIE.

By submitting a proposal, each bidder agrees to make available to the Company at any point in the bid evaluation process any and all financial data associated with the bidder, the facility included in the proposal and/or the PPA or other contracts that the Company requires to verify independently the bidder's accounting declarations or certifications required above. Such information may include, but shall not be limited to, data supporting the economic life (both initial and remaining) of the facility, the fair market value of the facility, and any and all other costs (including debt specific to the asset being proposed) associated with the bidder's proposal. Financial data contained in the bidder's financial statements (e.g. income statements, balance sheets, etc.) may also be required to provide additional information.

## ***2.8 Company or Company Affiliate Developed Proposals***

The Company or affiliates of the Company may independently develop proposals

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<sup>5</sup> "Finance Lease" and "Operating Lease" shall have the meaning as set forth in ASC 842 Lease as issued and amended from time to time by the Financial Accounting Standards Board.

<sup>6</sup> "Variable Interest Entity" or "VIE" shall have the meaning as set forth in ASC 810 Consolidation as issued and amended from time to time by the FASB.



to submit into this RFP process. As discussed above, the Company and its affiliates reserve the right to develop, independently or in partnership, proposals for consideration as part of the overall solicitation. Also, bidders are encouraged to consider submitting proposals that offer partial or total ownership by the Company of assets.

### ***3. Delivery and Interconnection Information***

#### ***3.1 General information***

Bids that propose to interconnect to the Company's transmission system and that do not have an existing Large Generator Interconnection Agreement ("LGIA"), Small Generator Interconnection Agreement ("SGIA"), or an existing interconnection queue position will be studied by Black Hills to estimate electric interconnection and delivery requirements and costs.<sup>7</sup>

The Company stresses that bidders do not need to have an active SGIP or LGIP request, and the Company highly recommends that bidders wait to submit any SGIP or LGIP request until the Company submits its 120-Day Report, indicating the portfolio of bids recommended for acquisition.

Bids that propose to interconnect to the Company's distribution system will be studied pursuant to CPUC rules 3667 or 3900 depending upon facility size.

To assist bidders with the listing of their cost of transmission, the Company will post on the RFP website managed by the Accion Group a listing of cost assumptions that the Company will use to complete interconnection and transmission upgrade assessments. Bidders are highly encouraged to review these assumptions prior to submitting bids. The RFP website is accessible here: <https://blackhills2020.accionpower.com>.

#### ***3.2 Certificated Transmission Upgrades***

If the Company has received a certificate of public convenience and necessity to construct a transmission upgrade, whether the transmission line is to an Energy Resource Zone or for another purpose, the cost of the upgrade will not be included in the evaluation of proposals that use those upgrades.

### ***4. Proposal Content Requirements and Submission Procedure***

#### ***4.1 Schedule Estimate***

An indicative schedule for this RFP process is provided below. The Company reserves the right to adjust this schedule appropriately, including, but not limited to, for changes to the regulatory calendar. The date for the issuance of this RFP is December 13, 2020.

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<sup>7</sup> Note that the Company will apply the appropriate study procedure (i.e. LGIP or SGIP) during any formal interconnection study process. For purposes of RFP bid evaluation, the Company has provided the LGIA form in Appendix G as the vehicle to obtain interconnection information necessary for its due diligence reviews.

Date	Action/Deadline
12/6/19	Pre-Bid Conference
12/13/19	Issuance of RFP
2/15/2020	RFP Bids Due
2/15/2020	RFP Bid Evaluation Begins
6/22/2020	120-Day Report (Rule 3613(d))
7/13/2020	Independent Evaluator Report
7/27/2020	Intervenor Comments on 120-Day Report
8/10/2020	Company Response Comments
9/9/2020	Commission Decision on Phase II Issues
11/9/2020	Execution of Agreement(s)

As listed in the above table, the Company is requiring that execution of any agreement (such as a PPA) take place within 61 days of the Commission's Decision that is expected September 9, 2020.

#### ***4.2 Minimum Requirements for Proposals***

This section describes the minimum requirements that all proposals must satisfy to be eligible for this solicitation. Unless the Company in its sole discretion elects otherwise, proposals that do not comply with these requirements will be deemed ineligible and will not be considered further. The Company reserves the right to reject any and all bids.

Proposals must meet the eligibility requirements identified previously in this RFP.

Proposals must include all applicable content requirements described in this RFP and the attachments, including clear and complete written descriptions of all information requested, and completed forms.

Proposals must clearly specify all pricing terms in accordance with the pricing section of this RFP. The Company reserves the right to reject proposals with pricing that is subject to change.

For bidders proposing a PPA, proposals must describe the bidder's exceptions and/or changes to the Model PPA. **Bidders who are presenting a project that includes storage are strongly encouraged to describe or list their changes to the Model PPA,**

**as described in Section 4.3.1.**

Proposals must clearly demonstrate compliance with all power delivery requirements.

Bidders must demonstrate, to the satisfaction of the Company that they can meet the security requirements contained in the Model PPA. If a bidder submits an Equity Proposal, the bidders must propose equivalent security requirements and demonstrate that they can meet such requirements.

Proposals must clearly demonstrate any financing requirements and an indicative financing structure (construction and permanent) for any proposed resources that will be delivered under the proposals.

Each bidder must present clear and sufficient proof that it has or can secure an adequate and confirmed supply of turbines, panels or other technology sufficient (at a minimum) to support the generation resources included in its bid.

In addition to the foregoing, for proposals involving existing supply side resources, proposals must:

- Demonstrate availability of the facility by including:
  - A written acknowledgment by the existing power purchaser of the date of termination of the existing purchase power agreement and confirmation that there are no contract provisions that would prevent the re-contracting of the resource with the Company;
  - A written release or provide for security acceptable to the Company covering any obligations or potential liability associated with the existing purchase power agreement that could potentially interfere with the delivery of the amount of capacity and energy included in the bid;
  - Include the year each unit was installed, the rated capacity of each, the forced outage rate, the scheduled outage rate, the fuel type, the average heat rate (Btu/kWh), and all run time restrictions, including a detailed maintenance and repair history of the facility;
  - Include a detailed dispatch history of the facility; and
  - Include a discussion of any air and other permit extensions and transmission extensions required to be obtained in connection with the proposal.

In addition to the foregoing, for proposals involving new construction, proposals must:

- Demonstrate an acceptable level of development and technology risk, as determined by the Company;

- Demonstrate that the bidder's project development team has successfully completed the development, construction and commissioning of at least one utility scale and utility grade project with characteristics similar to the proposed project; and
- Demonstrate that the bidder's project will qualify for any applicable tax credits.

Bidders must provide the bid fee (described in Section 4.8 below) for each bid submitted.

It is the Company's expectation that the Company will have first rights to the proposed project during the proposal review and approval process. In support of this, bidders must provide any and all information which would restrict the bidder from providing the Company with exclusive rights to negotiate a PPA for the proposed project. Such restrictions could include, but are not limited to, prior active submission or participation in other RFPs, exclusivity rights granted to other parties, rights of first offer or refusal, purchase options, and active auctions for the project as applicable. Absent inclusion of restrictions in a response, all **proposals submitted shall be binding upon bidders, if accepted by the Company as the selected or back-up bidder(s), until twelve months after the Company's receipt of bids in its competitive acquisition process. No proposals may be withdrawn during such 12-month period. Negligence on the part of a bidder in preparing the proposal confers no right of withdrawal after the time fixed for the submission of proposals.**

#### ***4.3 Proposal Content Requirements***

This section outlines the content and format requirements for all proposals submitted in response to this RFP. Unless the Company in its sole discretion elects otherwise, proposals that do not include the information requested in this section will be deemed ineligible for further evaluation, unless the information requested is not applicable or relevant to a given bid.

Although these requirements assist the Company in assessing bids, the Company reserves the right to conduct any further due diligence it considers necessary to evaluate bids. The Company also reserves the right and holds the expectation that it will perform any and all due diligence required to achieve satisfactory knowledge of the proposal prior to entering into any agreement.

##### ***4.3.1 Proposal Format and Narrative Topics***

The first section of each proposal must contain an Executive Summary that provides an overview of the bid's characteristics, including any unique aspects or benefits. The second section of the proposal must include the applicable set of forms included in Attachment A. These forms will contain essential information about each bid. A separate set of forms and related information must be submitted for each proposal. The third section of the proposal must include other proposal information, which must be presented in narrative form under specific topic headings, with each topic heading

beginning on a new page.

A complete proposal will include the following components:

- Executive Summary;
- Complete set of applicable forms;
- Form attachments (as necessary to elaborate on form information)
- Narrative Topics Discussion (topics described below); and
- Requested maps and electronic data

The proposal forms and topic headings are described below.

### **Proposal Forms**

Form 1	Bid Certification
Form 2	Bid Submittal
Form 3	Project Information
Form 4	Developments and Siting Status
Form 5-1	Photovoltaic Project Data
Form 5-2	Wind Project Data
Form 5-3	Solar Thermal, Biomass, Storage and Other Project Data
Form 6	Pricing
Form 7	Legal and Financial
Form 8	Environmental
Form 9	Energy and Fuel Delivery
Form 10	Experience and Qualifications
Form 11	Project Status and Schedule
Form 12	Representation Authorization
Form 13	Exceptions to Model PPA
Form 14	Construction Milestones
Form 15	Capacity and Energy Profile

Attachment A and the proposal forms include special instructions for completing the forms. Some information may be requested on more than one form. Although such requests may be redundant, bidders must provide the information requested on each applicable form.

### **Narrative Topics – All Resources**

In addition to completed forms, each proposal must also include a thorough written discussion of each of the following topics. The narrative topics should be organized under the following headings, with each heading beginning on a separate page.

***Financial Information.*** All proposals must provide two years of audited financial statements or the equivalent for bidders and other responsible parties (including any entities that would provide parent guaranties of the bidders' obligations), and as appropriate describe the plan for financing the proposed project during construction and

operation for the proposal. Proposals must explain in detail the plan for meeting the security requirements outlined in the Model PPA (or equivalent requirement in any Equity Contract) and must set forth the credit rating (if any) of any entities that would provide parent guaranties of the bidders' obligations. Proposals must also include an organization chart showing the entities that own the bidders and a description of the bidders' organization structure (including primary and secondary businesses). Financial information may be provided primarily in electronic format so long as at least one (1) hard copy of the financial information is provided with the each proposal.

***Financing.*** All proposals must provide specific information regarding any necessary financing or refinancing including information regarding expected financing sources, whether the project will be financed as a recourse or non-recourse project, the percentages of debt and equity financing, the expected cost of debt and the financing commitments that the bidder has obtained. Proven access to financing must be established for bids to be seriously considered in response to this RFP.

***Operations and Maintenance ("O&M") Plan.*** Bidders shall summarize their O&M plans and labor arrangements for the generation facilities associated with their proposals. Such plans shall include the bidder's plan and timeline for responding to the loss of generators, turbines, transformers and other major plant components. Consistent with this O&M Plan requirement, any bid for utility-ownership proposals (*i.e.* utility self-build or build-transfer) shall include all project costs, including estimated O&M. If a utility ownership proposal received from a bidder does not include estimated O&M costs, then the Company shall seek an estimate of O&M costs from the bidder or impute generic estimated O&M costs to the bid in the evaluation process. Estimated or imputed O&M costs for utility-ownership proposals shall be included in the 120-Day Report and designated as highly confidential. This estimate will be included in the evaluation of any utility-ownership proposal to allow for appropriate comparisons with any PPA proposals. These costs will be evaluated for purposes of bid evaluation only and not for purposes of rate recovery.

***Exceptions to Model PPA.*** In support of the Company's efforts to complete project evaluation, approval and contract negotiations in a timely manner, bidders are encouraged to review and provide their comments to the Model PPA. To the extent that the validity of a bidder's proposal and/or the bidder's ability to execute a PPA is contingent upon material changes to the language in the Model PPA, bidders must specifically identify the terms in the Model PPA they propose to change and should summarize their proposed changes to such terms.

Concerning bidders that propose the inclusion of storage, they are strongly encouraged to describe or list any changes to the Model PPA to reflect the operating characteristics of the storage device. In particular, to ensure proper evaluation of storage, bidders should specifically describe the restrictions of Black Hills' ability to dispatch the charging and discharging of the facility. If there are any dispatch restrictions associated with a storage facility, those should be explained. Bidders of storage facilities that do not describe any such dispatch restrictions bear the risk of incomplete modelling.

Bidders are advised that the Commission stated in Decision C09-0004 that, "With

respect to any disadvantages in negotiations created by contract modifications, we find that contract changes may indeed place a bidder in a disadvantaged position, depending upon the change requested. For example, if a bidder proposes to remove a term that protects ratepayer interests, then other bids that retain this term will maintain an advantage over a bid with the term removed.” To the extent that a bidder wishes to propose changes to the Model PPA that (if accepted by the Company) would reduce the bidder’s proposed pricing, the proposal should specifically identify such changes and the associated price reduction. To the extent practicable, bidders should develop exhibits, schedules, attachments and other supplemental documents required by the Model PPA. Bidders also must complete and submit Form 13 (Exceptions to the Model PPA.)

### ***Narrative Topics - Existing Resources***

In addition to completed forms, each proposal involving existing resources must also include a thorough written discussion of each of the following topics. The narrative topics should be organized under the following headings, with each heading beginning on a separate page:

***Operating and Maintenance History.*** All proposals for the sale of capacity and energy from existing generating facilities must describe the plant operating and maintenance history, including a description of the material warranty claims, material casualties, forced outages, material issues that have arisen under project-related permits, material matters or disputes that have arisen under project-related agreements, material litigation, allegations or notices of violations of law, including any environmental laws and completed and pending environmental remediation activities and other matters material to the generating facility. Such proposals must provide information on the plant’s condition and a description of preventative and corrective maintenance programs.

***Dispatch History.*** All proposals for the sale of capacity and energy from existing generating facilities must include the dispatch history of the facilities.

***Permitting Plan.*** Proposals must describe all federal, state and local permits and approvals or extensions that will be required. Proposals must report on the status of all such permit applications and any feedback from permitting agencies. Proposals must provide the status of all required environmental permit applications and any feedback bidders have received from permitting agencies.

### ***Narrative Topics – New Facilities***

In addition to completed forms, each proposal for new facilities must also include a thorough written discussion of each of the following topics. The narrative topics should be organized under the following headings, with each heading beginning on a separate page.

***Development Experience.*** All proposals must describe the bidder’s qualifications and experience in developing, constructing, commissioning and operating generation facilities similar to the proposed facility, including the experience, qualifications and safety record of key personnel who will manage development and an overview of utility scale and utility grade projects the bidder has developed during the last 5 years. If

an EPC team is in place, the proposal should identify the members of the team; if such a group is not in place, the proposal must set forth the bidder's plan for assembling such team (including process and timing).

***Project Description and Development Schedule.*** All proposals for the construction of new generation facilities must set out a description of the proposed project, including a description of, and plans for, the proposed site and rights of way, water supply and other utilities services, equipment configuration, fuel supply and transportation, transmission and interconnection (including identifying the point of interconnection), construction and equipment procurement, opportunities for future expansion of the project, required permits, the nameplate capacity of the resource in MW, the bidder's key consultants (if known) for wind or other permitting studies, and the bidder's construction contractors and prime subcontractors (if known). Such proposals must provide a detailed Gantt chart of project development activities developed using Microsoft Project or similar software (note that .pdf file type is acceptable for submittal) that includes (at a minimum) entering major equipment and construction subcontracts, target completion dates for financing, engineering, permitting, equipment procurement, construction, startup and commissioning, and guaranteed dates for substantial completion. Proposals must describe the overall development strategy that will ensure that the project can be developed in time to meet the proposed commercial operation date.

In addition, proposals must describe what steps a bidder will take and how the bidder will manage the project in order to manage the expected continued increase in the cost of project construction. Bidders should describe what steps they have taken or will take to mitigate the risk to themselves as well as the Company and its customers of increases in component, commodity, equipment and other project costs (including but not limited to currency risk) between the time of the bid and the proposed in-service date for the project.

For Section 123 projects involving the use of fuels, bidders should provide as much detail as possible regarding the fuel source including details on any potential contracts that fix fuel volume, quality, and/or pricing over the term of the proposed PPA on a delivered and/or non-delivered basis.

***Equipment Description.*** Proposals should indicate for all major equipment (i) the name of the manufacturer and other vendors, (ii) models, (iii) key metrics and characteristics of the equipment, (iv) planned delivery dates, (v) contracting status, (vi) performance history of the equipment, and (vii) any unique benefits or values associated with (or other relevant information about) the proposed technology as opposed to other technologies in its class. In addition to the foregoing (to the extent not included in such information), proposals must indicate the following information: (i) rating and capabilities, (ii) number, (iii) proposed configuration and size, and (iv) the order status of the panels or turbines (e.g., whether the panels/turbines have been ordered or are in the manufacturer's queue).

***Operation and Maintenance.*** Bidders shall describe operations and maintenance practices and services, which practices and services must demonstrate compliance with



prudent utility practices and equipment manufacturer recommendations. Bidders will identify the warranties to be provided by the bidder and by any equipment manufacturers. This requirement shall apply to all bids, including any bid for utility-ownership proposals (*i.e.* build-transfer).

***Real Property Acquisition Description and Plan.*** Proposals must provide a description of the status of real property acquisition for the project that is sufficient for the Company to assess the progress and sufficiency of the real property rights required for the successful development of the project. Bidders should be able to demonstrate site control for a period equal to or greater than the useful life of the facility. Bidders are required to execute the Attachment G Form Site Control Affidavit to demonstrate site control. Data provided in the narrative description should include, as relevant, completeness and sufficiency of the bidder's real property rights, including but not limited to:

- The status of current site ownership;
- The plan for acquiring any and all currently uncontrolled necessary real property rights to the project;
- Acreage of real property required for the project;
- Any subdivision or zoning modifications and all city or county land use permits that will be required, such as conditional use, special use or other similar permits and approvals, which will be required for any phase of development, construction, or operations of the project;
- A plan for achieving the foregoing subdivisions, modifications and permits, and a report on the status of such modifications and permits (including the status of any pending applications, any expected difficulties or delays with respect to modifications or permits, and feedback from permitting agencies, community or neighborhood groups); and
- A description of existing and planned land uses in all directions surrounding the proposed development site.

***Permitting Plan.*** Proposals must describe all federal, state and local permits and approvals that will be required (other than land use permits included in the Real Property Acquisition Description and Plan), including, but not limited to, federal environmental assessments under the National Environmental Policy Act ("EA/EIS"), wastewater discharge permits, hazardous waste permits, and no hazard permits/determinations from the Federal Aviation Administration. Proposals must also provide written documentation evidencing that consultation has occurred with appropriate governmental agencies (for example, the Colorado Division of Wildlife or the U.S. Fish and Wildlife Service) responsible for reviewing potential project development impacts to state and federally listed wildlife species, as well as species and habitats of concern. Proposals must report on the status of all such permit applications and any feedback from permitting agencies. Proposals must provide the status of all required environmental permit applications and any feedback bidders have received from permitting agencies.

***Transmission Plan.*** All proposals must include a description of the bidder's plan to transmit power from the project to the proposed point of interconnection or delivery on the Black Hills transmission system. The information should include a

description and expected route of any radial transmission line dedicated principally to the project, including a summary of the status of obtaining requisite easements. If any new FERC-regulated transmission or any upgrades to non-Black Hills transmission will be required to deliver power from the project to the proposed point of delivery (“New Transmission”), the proposal also must include a complete description of the required New Transmission including: (i) the owner and developer of the New Transmission; (ii) the complete expected route for the New Transmission; (iii) the voltage and capacity of the New Transmission; (iv) the status of planning, permitting, financing, and construction of the New Transmission, to the extent known to the bidder; (v) the location of the interconnection of the project into the New Transmission; (vi) whether the bidder’s project, if successful, would be sufficient for the New Transmission to be built without the participation of other power projects or other third parties; (vii) if not, what other projects would need to be built, in what time frame, to allow the New Transmission to be built in time for the bidder to meet its scheduled in-service date; and (viii) a one-line diagram including the proposed project, any New Transmission, and the point-of-interconnection on the Black Hills transmission system.

***Community/State Reaction Assessment.*** Each bidder must present a current assessment of, and a plan for continuing to monitor, local community and state reaction to the project, and a plan to work with the local community on project issues. Such plan might include the following elements:

- An assessment of any local zoning or land use regulatory issues, and a timeframe for resolution of any such issues;
- A list of the references used to assess the community reaction, and the methodology used to draw conclusions;
- A list of key local contacts interviewed and their opinions;
- An assessment of the local community reaction at the time of the bid;
- An action plan for working with the local community/state to successfully complete the project; and
- A description of the bidder’s proposed conflict resolution methodology.

***Section 123 Resource.*** Respondents should indicate whether or not they believe their project meets the requirements of a Section 123 resource. If Respondent claims that its project is a Section 123 resource, it should provide sufficient justification for that claim.

***Employment Metrics.*** Respondents shall include descriptions of each best value employment metric described below as it relates to the bid project:

- The availability of training programs, including training through apprenticeship programs registered with the United States Department of Labor’s office of apprenticeship and training or by state apprenticeship councils recognized by that office;
- The employment of Colorado labor as compared to importation of out-of-state workers;
- Long-term career opportunities; and
- Industry-standard wages, health care, and pension benefits.

**Water Use.** All proposals must provide the consumptive water use in gallons/MWh.

**Non-Quantifiable Externality Benefits.** Respondents may include a qualitative assessment and discussion of how their proposed project incorporates the following non-energy factors including, but not limited to:

- Economic development;
- Resource diversification; and
- Environmental benefits.

**Energy Production Profile Data.** Proposals must include a description of any energy production profile data gathered by, or in the possession of, the bidder. However, bidders should not provide on-site meteorological data in their initial bid submissions. Upon request, bidders must be prepared to provide the Company with the underlying meteorological data with the understanding that the Company may engage an external consultant for an independent verification and evaluation of the generation resource.

Proposals also must answer the following questions concerning projections of wind generation:

- How was wind data collected, certified and correlated to a reference point?
- Who provided this service?
- What is the hub height of the reference turbine?
- How was wind data manipulated to get to hub height?
- What is the wind shear, and how was it calculated?
- What is the confidence level of the forecast, e.g., P50, P90 or P99 data?
- What is the basis year of the underlying data? Was it a high, average or low year?
- How was the wind data transformed into generation output? Is this a typical year?
- What derates were used for such factors as array losses, line losses, forced outages, blade degradation, and other factors?
- What is the final, resultant derate from the nameplate MW of the proposed wind farm?

Proposals also must answer the following questions concerning projections of solar generation:

- What is the confidence level of the forecast, e.g., P50, P90 or P99 data?
- Who provided this service?
- What is the basis year of the underlying data?
- Was it satellite or ground based sources?
- What is the annual capacity degradation factor?
- What derates were used for such factors as array losses, line losses, forced outages, and other factors?
- What is the final, resultant derate from the nameplate MW of the proposed

facility?

#### **4.4 Pre-Bid Conference**

Time: 10 A.M. (MT)

Date: 12-6-19

Location: Black Hills Energy, 1515 Arapahoe St., Tower 1 – Suite 1200, Denver, CO

Interested parties and bidders are encouraged to provide questions to the Company's RFP Project Manager in writing by through the IE's website prior to the meetings so that issues may be addressed in a timely manner.

A summary of the bid conference proceedings, including submitted questions and answers, will be prepared by the Company and e-mailed to all prospective bidders within three weeks after the conference through the IE's website.

#### **4.5 Proposal Submission Deadline**

Without exception, all bids must be submitted by 4:00 p.m. Mountain Time on February 15, 2020. Because bids will not be accepted after 4:00 p.m. Mountain Time on February 15, 2020, it is recommended that bidders avoid potential issues with bid submittal by submitting their bids on February 14, 2020.

All bids must be transmitted electronically at the following website: <https://blackhills2020.accionpower.com>. Proposals received later than the due date and time indicated will be rejected.

#### **4.6 Information Policy**

To obtain additional information about this RFP, bidders may only submit electronic requests to: <https://blackhills2020.accionpower.com>. Questions or requests can only be transmitted and will only be accepted via the RFP website.

The IE will maintain a log of all inquiries and the Company will coordinate the preparation of electronic responses through the IE. Once a response is prepared, the Company will forward the response to the IE and the IE will post the responses on the project website. The RFP project website is: <https://blackhills2020.accionpower.com>.

The Company has established this information policy to ensure that all bidders have the same knowledge about the bidding process.

#### **4.7 Bid Evaluation Fees**

All bidders that meet the eligibility requirements described in the written bidding policy will be required to pay to the Company a bid evaluation fee of: **(1) \$3,000 for projects of the size of 0-10 MW; or (2) \$10,000 for projects of the size greater than 10 MW**. The bid evaluation fee is required for each proposal submitted. The bid evaluation fee will be used to offset the expenses incurred in evaluating the bid. Separate

fees will be required for any required transmission interconnection evaluations. Proposals that do not satisfy the requirements for a single proposal may be evaluated as multiple proposals, each of which would be subject to a separate bid evaluation fee. For purposes of clarification, each proposal that triggers interconnection studies for multiple points or levels of interconnection would be deemed separate proposals for each such point or level. If the Company deems a bidder's proposal to constitute multiple proposals, the Company will notify the bidder and allow it to elect to pay the additional bid fee(s) or to revise its proposal to comply with the Company's requirements for a single proposal.

Bid evaluation fees will be accepted until 4:00 p.m. Mountain Time on February 15, 2020. Instructions for bid fee payment will be emailed to a bidder upon submission of a bid through the RFP website at: <https://blackhills2020.accionpower.com>. Bid evaluation fees shall be non-refundable.

#### ***4.8 Clarification of Proposals***

While evaluating proposals, the Company may request clarification of, or additional information about, any item in the proposal. Such requests will be sent to bidders through the IE's website, and bidders are required to provide an electronic response to the IE's website within three (3) business days, or the Company may deem the bidder to be non-responsive and either suspend or terminate evaluation of the proposal. Bidders are encouraged to provide an alternate point of contact to ensure a timely response to clarification questions.

#### ***4.9 Confidentiality***

Respondents are allowed to identify information in their proposals that bidders claim should be considered to be confidential or proprietary. Nonetheless, the Company reserves the right to release all proposals to its affiliates (other than any affiliates submitting a bid) and to its and such affiliates' agents, advisors, consultants, and the IE for purposes of proposal evaluation. The Company will, to the extent required by law, advise each agent, advisor or consultant that receives such claimed confidential information of its obligations to protect such information. In addition, all information, regardless of its confidential or proprietary nature, will be subject to review by the Commission and other governmental authorities and courts with jurisdiction, and may be subject to legal discovery. It is not the Company's intent to enter into any separate confidentiality, nondisclosure, or similar agreements as a condition to receiving a bidder's proposal.

Notwithstanding the above paragraph and as indicated in Section 1.1, upon completion of the competitive acquisition process Black Hills will post on its website the following information from all bids and utility proposals: bidder name; bid price and utility cost; generation technology type; size of facility; contract duration or expected useful life of facility for utility proposals; and whether the proposed purchased power agreement includes an option for the utility to purchase the bid facility during or at the end of the contract term.

Upon completion of the competitive acquisition process in accordance with ERP rule 3613(i), and consistent with the above requirement for website posting of bids and utility proposals as provided in ERP rule 3613(k), protected information that was filed in Commission proceeding will be refiled as non-confidential or public information as specified in the Commission order described below. To satisfy this requirement Black Hills will file a proposal that addresses the public release of all confidential and highly confidential information related to bids for potential resources and resources the utility proposed to build and own as a rate base investment. At a minimum, Black Hills will address its 120-day report (described in Section 5.2, Step 5), the IE's report (also described in Section 5.2, Step 5), and all documents related to these reports filed by Black Hills, the parties, or the IE. Black Hills will file its proposal in the Commission proceeding within 14 months after the receipt of bids in its competitive acquisition process. Parties will have 30 calendar days after Black Hills files its proposal to file responses. Black Hills then may reply to any responses filed within ten calendar days. The Commission will issue an order specifying to Black Hills and other parties the documents that shall be refiled as public information.

#### ***4.10 Addenda to RFP***

Any additional responses required from bidders by any addenda to this RFP shall become part of each proposal. Bidders must list all addenda received at the bottom of the Proposal Certification Form.

### ***5. Evaluation and Criteria***

#### ***5.1 Written (Electronic) Bidding Process***

Proposal evaluation will be conducted as part of the Company's Renewable Advantage docket before the Colorado Public Utilities Commission.

The evaluation process will include an assessment of both economic and non-economic criteria. The economic evaluation will be conducted primarily using proprietary modeling software and spreadsheet analysis tools. Non-economic factors will be assessed through a due diligence process that will gauge the relative risks and benefits of the proposal, based on the factors described below. The Company also will cooperate with, and provide access to information provided by bidders to an IE as provided in ERP rule 3612.

The following paragraphs provide the general steps which the Company intends to follow to evaluate proposals.

#### ***5.2 Bid Evaluation Process***

A bid evaluation team, made up of various work groups within the Company, affiliates of the Company, and any consultants hired by the Company to assist with the bid evaluation (collectively, the "Bid Evaluation Team"), will evaluate and select bids, and subject matter experts from the Company, its affiliates and consultants may directly contact bidders during the bid evaluation stage. In the event the Company or any

affiliates submit a bid, the Company or affiliate bidding teams will be identified, a written separation and confidentiality policy will be instituted, and communications between the Bid Evaluation Team and the Bidding Team(s) will be **only** in the same manner that other bidders may communicate with the Company in connection with this RFP.

The Bid Evaluation Team may conduct scenario and sensitivity analyses of proposals to evaluate risks and strategic value. The results of these analyses may be considered in the Company's evaluation of proposals, including the selection of proposal(s) for a short list, if applicable.

### ***Step 1 – Initial Eligibility Screening***

The information provided in each bid will first be evaluated for completeness and consistency with and responsiveness to the proposal content requirements outlined in Section 4.3 of this RFP.

Preliminary due diligence will also be conducted at this stage to identify any “fatal flaws” associated with a bid, such as run time restrictions or an unacceptably high level of risk due to the size, age or condition of an existing facility or the level of development or technology risk of a new facility, including without limitation permitting issues and transmission constraints.

As a result of this screening review, the Company may either eliminate bids from further consideration, or contact bidders to clarify information or request additional information. Given the short amount of time allotted to evaluate the bids, the Company will limit follow up contacts to only those bids that meet the minimum eligibility requirements described in Section 2.2.

Notification will be provided to bidders whose proposals are rejected in this initial screening.

### ***Step 2 – Transmission Assessment and Initial Economic Evaluation***

Following Step 1, the Company will notify each bidder that has one or more proposals that have satisfied the eligibility screening described in Step 1. While not entirely concurrent, the activities described in Steps 2.A., 2.B., and 2.C. below will overlap to some extent.

#### ***A. Interconnection Cost Estimates***

Based on the results of Step 1, the Company will forward bids that do not have an existing LGIA or an existing interconnection queue position to the Company's Transmission Function where interconnection cost estimates will be developed, if applicable. The Company's Transmission Function will provide estimates of interconnection costs for use in the Company's evaluation of the proposals. The Company will provide these cost estimates to the bidders so that they can update their bid pricing. Such bidders must submit final bid pricing back to the Company within 15 calendar days

of the date the interconnection cost estimates are provided to such bidders.

### ***B. Transmission Upgrade Assessment***

Some or all of the bids passed to the Company's Transmission Function in Step 2.A above will also be evaluated to assess the general siting, permitting, and construction time requirements associated with the Company's system transmission network upgrades or third party transmission provider's system transmission network upgrades required as a result of a proposal needed to a) deliver the entire proposed capacity and energy from the proposed facility interconnection point with the Company's system to the Company's customers, or b) deliver the entire proposed capacity and energy from a third party transmission system to the Company's electric system. The impact of these analyses on a bidder's proposed schedule will be a factor in the evaluation of its proposal.

### ***C. Initial Economic Screening***

More specifically, the Bid Evaluation Team will screen all remaining proposals based on individual bid economics and individual bid transmission upgrade costs and time requirements. Using traditional spreadsheet analysis tools, the Company will evaluate the economics of individual bids. The levelized price (e.g., \$/MWh) of each proposal will be calculated, and this levelized price will be the primary determinant of the bids' economic value to the Company's customers. If this screening identifies bids that are clearly noncompetitive, the Company may eliminate such bids from further consideration and select a subset of original bids for further evaluation.

Initial economic evaluation analyses will be updated as additional information is received about proposals.

The primary purpose of the initial economic screening is to rank each bid by technology so that the most promising bids can be forwarded to the subject matter experts for their review as quickly as possible and to identify those bids likely to be moved forward for computer modeling of bid portfolios. The initial economic screening consists of calculating an "all-in" levelized cost of energy ("LEC"). In addition to the costs provided in the bid, the Company will estimate incremental costs or benefits, as necessary, such as:

- Projects that propose to interconnect to the Black Hills distribution system will be credited with avoided line losses in their LEC calculations;
- For bids proposing wind generation, the Company will estimate resource integration costs;
- For bids proposing solar generation (PV or solar thermal), the Company will estimate resource integration costs;
- For bids proposing non-dispatchable renewable generation or recycled energy generation resources that exhibit high levels of off-peak generation (e.g., geothermal, hydro, non-dispatchable biomass, etc.), the Company will estimate resource integration costs as determined by Black Hills;
- No renewable energy credit ("REC") value benefits will be credited to the



- LEC calculations for any renewable generation projects;
- No Clean Power Attributes will be credited to the LEC calculations for any renewable projects unless such attributes are based on enacted laws or regulations which have been affirmed through the entire administrative review process and entire appellate review process. The value of such Clean Power Attributes must, in the Company's sole discretion, be reasonably ascertainable and certain.

#### ***D. Initial Economic Screening of Storage***

Energy storage systems will be evaluated according to the initial economic screening process described above. However, to provide more clarity on the unique attributes of storage, this section clarifies issue-specific analysis to storage. The Company will evaluate bids that include energy storage proposals based on the capacity value an energy storage project may provide and the benefits of price-arbitraging (the energy storage system stores low-cost power and sells it at a later time for a higher price).

The specific ELCC values that the Company will assign to a storage project will be based on the project's duration. For storage combined with eligible energy resources, the ELCC attributed to the storage component will be added to the ELCC of the accompanying eligible energy resource for a combined project ELCC. The combined project ELCC will be limited to a maximum of 100 percent of the eligible energy resource nameplate capacity.

Energy-arbitrage benefits will be calculated through model logic that allows the storage device to charge during low-cost periods and discharge during high-cost periods. The Company will consider the level of restrictions on the Company's ability to dispatch the charging and discharging of the energy storage device in the determination of the energy-arbitrage benefits. Placing restrictions on the Company's ability to dispatch the energy storage devices will complicate the modeling and will likely result in less value being ascribed to the energy storage device. Bidders are encouraged to include all necessary restrictions, but to not overly restrict the Company's ability to dispatch the energy storage devices.

The Company will credit 30-minute start energy storage facilities a value \$0.20/kW-month and 15-minute start energy storage a value of \$0.22/kW-month.

The Company will not evaluate any potential benefits of energy storage on ancillary services.

#### ***Step 3 – Non-Economic Analysis***

This analysis may assess the non-price characteristics of the bids. Non-price factors that may be assessed include, as applicable and without limitation, the following:

- Development, construction and operation experience including ability to use tax advantages;
- Environmental compliance and status of permitting – environmental, land use permitting, zoning and other permits;
- Real property acquisition site control progress and plan; and

- Transmission access plan feasibility and arrangements.

If a non-economic analysis identifies bids that are clearly noncompetitive or otherwise unacceptable, the Company may eliminate such bids from further consideration and select a subset of original bids for further evaluation.

#### ***Step 4 – Portfolio Analysis of Bids***

Contingent upon the existence of sufficient bids passing through bid eligibility and due diligence screening, the Company shall pass forward to the computer modeling of bids.

Pursuant to ERP Rule 3613(a), 45 days after bids are received the Company will email each bidder and indicate whether its bid has been advanced to computer modeling of bids. For those bids not advanced to computer modeling, the Company will provide the reason(s) why the project will not be evaluated further. For those bids advanced to computer modeling, the Company will provide the modeling inputs and assumptions that reasonably relate to that potential resource or to the transmission of electricity from that facility to the Company. *See* Section 1.1 for more details on each Bidder's opportunity to address the Company's modeling assumptions as it pertains to their bid.

The general planning assumptions that will be used in the evaluation of proposals are included in Attachment C to this RFP.

The results from the modeling process, together with a consideration of due diligence findings (described in Step 3) will form the basis for the Company's analysis of bids.

#### ***Step 5 – Selection Process***

Within 120 days of the Company's receipt of bids in its competitive acquisition process, the Company will file a report with the Commission describing the Company's resource acquisition recommendation. The Company shall also provide the Commission with the best value employment metrics information provided by bidders under ERP Rule 3616 and by the Company pursuant to ERP Rule 3611.

The Company will work with the IE approved by the Commission to assist the Commission with the complex issues and analyses involved in utility resource modeling and selection. Within 30 days after the filing of the Company's 120-day report, the IE shall separately file a report that contains the IE's analysis of whether the utility conducted a fair bid solicitation and bid evaluation process, with any deficiencies specifically reported. The IE shall provide confidential versions of these reports to Staff of the Commission and the Office of Consumer Counsel ("OCC")

Within 45 days after the filing of the 120-day, the parties in the resource plan proceeding may file comments on the Company's report and the IE's report.

Within 60 days after the filing of the 120-day report, the Company may file comments responding to the IE's report and the parties' comments.

Within 90 days after the receipt of the 120-day report, the Commission shall issue a written decision approving, conditioning, modifying, or rejecting the Company's position and proposal regarding the acquisition of renewable energy resources. If a decision is made that the Company acquire specified renewable energy resources, the Company and the successful bidder(s) must negotiate signed agreements within 61 days.

*Attachment A*

**Forms**

- Form 1 Bid Certification
- Form 2 Bid Submittal
- Form 3 Project Information
- Form 4 Developments and Siting Status
- Form 5-1 Photovoltaic Project Data
- Form 5-2 Wind Project Data
- Form 5-3 Solar Thermal, Biomass, Storage, and Other Project Data
- Form 6 Pricing
- Form 7 Legal and Financial
- Form 8 Environmental
- Form 9 Energy and Fuel Delivery
- Form 10 Experience and Qualifications
- Form 11 Project Status and Schedule
- Form 12 Representation Authorization
- Form 13 Exceptions to Model PPA
- Form 14 Construction Milestones
- Form 15 Capacity and Energy Profile

**Form 1 - Bid Certification Form**

The bidder hereby certifies that all of the statements and representations made in this proposal are true to the best of the bidder's knowledge and belief, and agrees to be bound by the representations, terms, and conditions contained in the RFP. The bidder accepts the contract included in the RFP, except as specifically noted in writing. The bidder acknowledges that the officer whose signature appears below is able to contractually commit the bidder for its proposal.

Name of Bidding Company:

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Authorized Signature:

---

Print or Type Authorized Name:

---

Title of Authorized Individual:

---

Date Signed:

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Provide any and all information which would restrict the bidder from providing the Company with exclusive rights to negotiate a PPA or Equity Contract for the proposed project. Such restrictions could include, but are not limited to, prior active submission or participation in other RFPs, exclusivity rights granted to other parties, rights of first offer or refusal, purchase options, and active auctions for the project as applicable. Absent inclusion of restrictions in a response, all **proposals submitted shall be binding upon bidders, if accepted by the Company as the selected or back-up bidder(s), until twelve months from the proposal submission deadline. No proposals may be withdrawn during the twelve-month period. Negligence on the part of a bidder in preparing the proposal confers no right of withdrawal after the time fixed for the submission of proposals.**

**Form 2 – Bid Submittal Sheet**

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_  
(City, County, State)

**Bidder Contact Information:**

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Sale Type:

- Power Purchase Agreement
- Power Purchase Agreement with Build Transfer Options
- Build Transfer
- Utility Self-Build
  
- Other

Turbine Type (if applicable): \_\_\_\_\_

Fuel Type: \_\_\_\_\_  
(Describe primary and secondary fuel types if applicable)

Fuel Delivery Logistics: \_\_\_\_\_  
(Describe any fuel transportation or storage details)

Nameplate Capacity (MW) \_\_\_\_\_

Net Summer Capability (MW): \_\_\_\_\_

Estimated Annual Energy Production (MWh): \_\_\_\_\_

Projected Capacity Factor (%): \_\_\_\_\_

Development Resource Acquisition Status:

- Existing Facility
- Under Construction
- New Project

Proposed Project Closing Date: \_\_\_\_\_

Proposed Project Construction Date: \_\_\_\_\_

Proposed Commercial Operation Date: \_\_\_\_\_

**Form 3 – Project/Facility Information Form**

Location and Size

Project/Facility Location: \_\_\_\_\_  
 (Provide of a map that identifies the location of all key facilities and all transmission lines, roads, etc.)

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Project/Facility Capability, Availability

Unit/facility data (complete as applicable)

Nameplate Capacity (MW): \_\_\_\_\_

Expected Net Summer Capacity (MW): \_\_\_\_\_

Minimum Production Level Guarantee: \_\_\_\_\_

Storage- Nameplate Capacity \_\_\_\_\_

Storage- Duration of Nameplate Capacity (hours) \_\_\_\_\_

Ancillary Service Provider:

- Bidder
- The Company
- Other (Please specify): \_\_\_\_\_

Is metering, telemetering, and/or communications equipment necessary for the above services?

Yes  No

Explain: \_\_\_\_\_

Is the cost of the above metering, telemetering, and communications equipment included in capacity charge? \_\_\_\_\_

If it is not, please provide an estimated cost for this equipment: \_\_\_\_\_

Is the cost of ancillary services included in the capacity and/or energy pricing? \_\_\_\_\_

If not, please provide an estimated cost for the ancillary services: \_\_\_\_\_



If yes, please identify what is included:

- |   |  |
|---|--|
| <input type="checkbox"/> Scheduling                   | <input type="checkbox"/> Voltage Control                                       |
| <input type="checkbox"/> System Control               | <input type="checkbox"/> Regulation  |
| <input type="checkbox"/> Dispatch Services            | <input type="checkbox"/> Frequency Response                                    |
| <input type="checkbox"/> Reactive Supply              | <input type="checkbox"/> Operating Reserve                                     |
| <input type="checkbox"/> Spinning                     | <input type="checkbox"/> Supplemental Response<br>(10 Min Loading requirement) |
| <input type="checkbox"/> Other (Please Specify) _____ |  |

Provide additional comments concerning ancillary services, if necessary:

Under Separate Attachment Labeled "Form 3 - Ancillary Services"

Provide Load Level Heat Rates as applicable:

	Net Load Level (MW)	Net Heat Rate (BTU/kWh HHV)	
		At 32° F	At 95° F
Minimum Load			
Intermediate Load			
Full Load			
Emergency			

## Operating Limitations (complete as applicable)

Minimum Run Time per Dispatch	Hours
Minimum Down Time	Hours
Expected Forced Outage Rate or Availability	%
Ramp Rate	MW/minute
Start Up Time from Cold Start	Minutes
Start Up Time from Hot Start	Minutes
Automatic Generation Control (AGC) capable?	Yes or No
Minimum sustained operating level (MW) of the facility	MW

**Fuel (if applicable)**

(a) Please list primary and secondary fuel types of this resource.

Primary \_\_\_\_\_

Secondary \_\_\_\_\_

(b) Please describe fuel delivery logistics and storage.

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Provide an operations and maintenance plan including seasonal and yearly availability, planned outage schedules, plans to ensure availability of spare parts and equipment and responsible O&M personnel description.

Under Separate Attachment Labeled “Form 3 - Operations and Maintenance Plan”

Provide a description of the operating characteristics of the resource. Identify any engineering, mechanical or operational limitations with respect to yearly, monthly and daily, or hourly startups. Provide the details of any regulatory or permitting requirements that would impact the resource’s operations. Provide anticipated start-up/ramp-up requirements and times. Describe existing or proposed procedures, requirements with respect to real time, and prescheduled dispatching of the resource.

Under Separate Attachment Labeled “Form 3 - Operating Characteristics”

## Energy Delivery

The Company service area lies at the south end of the front range of Colorado.

The front range of Colorado is generally capacity deficient and relies on the interconnected transmission system of several entities to supply the capacity and energy requirements not met by generation resources located within the area.

There are four primary transmission paths which connect the front range of Colorado to the remainder of the Western Electricity Coordinating Council (“WECC”). Five constrained areas are identified on these paths and are commonly known as TOTs 1A, 2A, 3, 5 & 7.

Additional information on the five major transmission constraints affecting Colorado, including the appropriate contact person, is published by the WECC.

The major interconnections of the Company’s transmission system within the WECC are shown in Table 3:

Table 3 Black Hills’ Major Interconnections

<b>Interconnection Name</b>	<b>Interconnecting Utility</b>	<b>Back Hills Interconnection Voltage</b>
Midway	Public Service Company of Colorado, Western Area Power Administration, Colorado Springs, Tri-State G&T	115 kV
West Station	Tri-State G&T	115 kV
Boone	Public Service Company of Colorado, Tri-State G&T	115 kV
Reader	Public Service Company of Colorado	115 kV
Canon West	Public Service Company of Colorado, Western Area Power Administration	230, 115 kV

Price quoted in this bid reflects delivery to the following points of delivery:

- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> Midway       | <input type="checkbox"/> Boone                               |
| <input type="checkbox"/> Reader       | <input type="checkbox"/> Canon West                          |
| <input type="checkbox"/> West Station | <input type="checkbox"/> Internally connected to the Company |

As a reminder, include with your response a thorough written discussion of each of the applicable narrative topics described in Section 4.3.1 of the RFP. The written discussion of the narrative topics should be separately provided even if the topic is also covered by one of the Forms.

**Form 4 - Development and Siting Status (New Construction)**

Bidders shall provide a thorough description of the development status of its proposed project on a separate sheet labeled as Form 4. Information provided should include status of the following:

Site Acreage: \_\_\_\_\_

- Site, Zoning and Construction Permitting (Include the size of project (acres) and any zoning restrictions that would impact development or use of facility) Describe any rezoning plans and issues;
- Environmental Assessments and Studies;
- Emissions and Environmental Permitting;
- Regulatory and Governmental Approvals;
- Engineering and Design Activities;
- Resource Acquisitions (i.e., land, equipment such as turbines, fuel supply, waste disposal arrangements, etc.);
- Construction Status;
- Project Schedule and Milestones (Include construction start through commercial operation date);
- Describe existing and planned land uses in all directions surrounding the proposed site;
- Describe all city or county land use permits that are or will be required such as conditional use or special use approvals;
- For development projects, report on the status of land use permitting activities, including the status of any pending applications and any feedback from permitting agencies, community or neighborhood groups;
- Opportunities to expand the project and the requirements associated with any expansion;

Indicate whether bidder controls the site through

1. Ownership of a leasehold interest in, or a right to develop a site for the purpose of constructing the proposed generating facility;
2. An option to purchase or acquire a leasehold site for such purpose; or
3. An exclusivity or other business relationship between bidder and the entity having the right to sell, lease or grant bidder the right to possess or occupy a site for such purpose.

If site control described above has not yet been secured, describe plan and schedule for obtaining such site control; and

Provide a brief written description. Identify all known and/or potential structures, reserves, parks, animal life, flora and fauna whose proximity to the proposed project could jeopardize the schedule for commercial operation;

**Form 5 - Technical Description and Data Needed by Resource Type**

Bidders shall complete the following forms providing technical description of the selected technology.

Form 5-1 Photovoltaic

Form 5-2 Wind

Form 5-3 Solar Thermal, Biomass, Storage, and Other



**4. Collector System Equivalent Model.** IC may apply the equivalencing methodology described in Section 3.4 of the WECC WPP Power Flow Modeling Guide.

- Collector system voltage: \_\_\_\_ kV Equiv. Collector System Thermal Rating: \_\_\_\_ MVA
- R: \_\_\_\_ ohm or \_\_\_\_ pu on 100 MVA and collector kV base (positive sequence)
- X: \_\_\_\_ ohm or \_\_\_\_ pu on 100 MVA and collector kV base (positive sequence)
- B: \_\_\_\_  $\mu$ F or \_\_\_\_ pu on 100 MVA and collector kV base (positive sequence)

**5. Inverter Step-Up Transformer.** Note: These are typically two-winding air-cooled transformers. If the proposed project contains different types or sizes of step-up transformers, please provide data for each type.

- Rating: \_\_\_\_ MVA
- Nominal voltage for each winding (Low /High): \_\_\_\_ / \_\_\_\_ kV
- Available taps: \_\_\_\_ (indicate fixed or with LTC), Operating Tap: \_\_\_\_
- Positive sequence impedance (Z1) \_\_\_\_ %, \_\_\_\_ X/R on transformer self-cooled MVA

**6. Inverter and PV Module Data.**

- Number of Inverters: \_\_\_\_
- Nameplate Rating (each Inverter): \_\_\_\_ / \_\_\_\_ kW/kVA
- Describe reactive capability as a function of voltage: \_\_\_\_\_

**7. Plant Reactive Power Compensation.** Provide the following information for plant-level reactive compensation, if applicable:

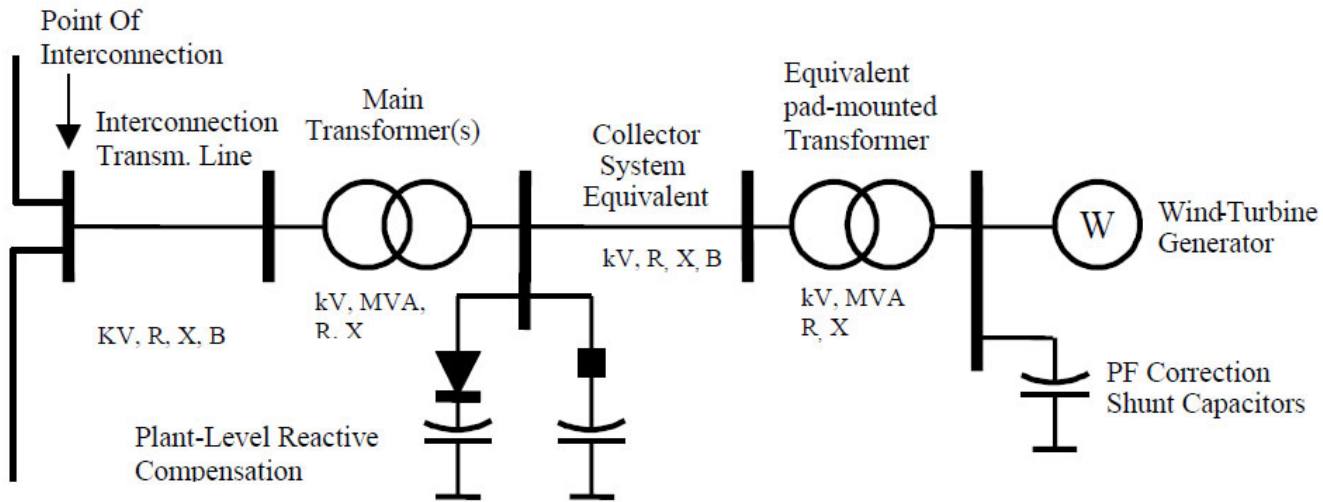
- Individual shunt capacitor and size of each: \_\_\_\_ X \_\_\_\_ MVA
- Dynamic reactive control device, (SVC, STATCOM): \_\_\_\_\_
- Control range \_\_\_\_\_ MVar (lead and lag)
- Control mode (e.g., voltage, power factor, reactive power): \_\_\_\_\_
- Regulation point \_\_\_\_\_
- Describe the overall reactive power control strategy: \_\_\_\_\_



**Form 5-2 – Wind Data Form**

**WIND POWER PLANT DATA REQUEST**

**1. One-Line Diagram.** Provide a one-line diagram similar to Figure A-1 below.



*Figure A-1. Single-machine representation one-line diagram*

**2. Interconnection Transmission Line.**

- Point of Interconnection (substation or transmission line name): \_\_\_\_\_
- Line voltage: \_\_\_\_\_ kV    Line Length: \_\_\_\_\_ Miles
- Line Conductor Size: \_\_\_\_\_ kcmil: \_\_\_\_\_ (Type ACSR, etc.): \_\_\_\_\_
- Line Thermal Rating: \_\_\_\_\_ MVA \_\_\_\_\_ Amps
- R = \_\_\_\_\_ ohm or \_\_\_\_\_ pu on 100 MVA and line kV base (positive sequence)
- X = \_\_\_\_\_ ohm or \_\_\_\_\_ pu on 100 MVA and line kV base (positive sequence)
- B = \_\_\_\_\_  $\mu$ F or \_\_\_\_\_ pu on 100 MVA and line kV base (positive sequence)

**3. Station Transformer.** (Note: If there are multiple transformers, data for each transformer should be provided)

- Rating (ONAN/ONAF/ONAF): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ MVA
- Nominal Voltage for each winding (Low /High /Tertiary): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ kV
- Winding Connections (Low/High/Tertiary): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ (e.g. Delta, Wye-gnd)
- HV DETC (NLTC), LTC or None: \_\_\_\_\_ Available taps: \_\_\_\_\_ Operating Tap: \_\_\_\_\_ kV
- Impedances: HV-LV, HV-TV, LV-TV, assuming 3-winding design, in per-unit on transformer self-cooled (ONAN) MVA Base Rating:

○ Positive Sequence Z1: HV-LV: R1: \_\_\_\_\_ pu    X1: \_\_\_\_\_ pu  
 HV-TV: R1: \_\_\_\_\_ pu    X1: \_\_\_\_\_ pu

LV-TV: R1: \_\_\_\_\_ pu    X1: \_\_\_\_\_ pu

**4. Collector System Equivalent Model.** This can be found by applying the equivalencing methodology described in Appendix A; otherwise, typical values can be used.

- Collector system voltage: \_\_\_\_\_ kV
- Equiv. Collector System Thermal Rating: \_\_\_\_\_ MVA
- R: \_\_\_\_\_ ohm or \_\_\_\_\_ pu on 100 MVA and collector kV base (positive sequence)
- X: \_\_\_\_\_ ohm or \_\_\_\_\_ pu on 100 MVA and collector kV base (positive sequence)
- B: \_\_\_\_\_  $\mu$  F or \_\_\_\_\_ pu on 100 MVA and collector kV base (positive sequence)

**5. Wind-turbine Generator (WTG) Pad-Mounted Transformer.** Note: These are typically two-winding air-cooled transformers. If the proposed project contains different types or sizes of pad-mounted transformers, please provide data for each type.

- Rating: \_\_\_\_\_ MVA
- Nominal voltage for each winding (Low /High): \_\_\_\_\_ / \_\_\_\_\_ kV
- Winding Connections: \_\_\_\_\_ / \_\_\_\_\_ (Delta, Wye, Wye grounded)
- Available taps: \_\_\_\_\_ (please indicated fixed or ULTC)
- Operating Tap: \_\_\_\_\_
- Positive sequence impedance (Z1): \_\_\_\_\_ %, \_\_\_\_\_ X/R on transformer self-cooled MVA

**6. WTG Powerflow Data.** Proposed projects may include one or more WTG Types (See NOTE 1 below). Please provide the following information for each:

- Number of WTGs: \_\_\_\_\_
- Nameplate rating (each WTG): \_\_\_\_\_ MW
- WTG Manufacturer and Model: \_\_\_\_\_
- WTG Type: \_\_\_\_\_ (Type 1, 2, 3, or 4; see Note 6.1 below)

**For Type 1 or Type 2 WTGs:**

- Uncompensated power factor at full load: \_\_\_\_\_
- Power factor correction capacitors at full load (total MVAR): \_\_\_\_\_ MVAR or “None”
- Number of shunt stages and size: \_\_\_\_\_
- MVAR Rating of each stage: \_\_\_\_\_

**For Type 3 and Type 3 WTGs:**

- Maximum (uncompensated) over-excited power factor (producing MVAR) at full load: \_\_\_\_\_
- Maximum (uncompensated) under-excited power factor (absorbing MVAR) at full load: \_\_\_\_\_
- Control mode: \_\_\_\_\_ (voltage control, fixed power factor)

**NOTE 6.1:** WTG Type can be one of the following:

- Type 1 – Squirrel-cage induction generator
- Type 2 – Wound rotor induction machine with variable rotor resistance
- Type 3 – Doubly-fed asynchronous generator
- Type 4 – Full converter interface

**7. Wind Farm Reactive Power Compensation.** Provide the following wind farm reactive compensation, if applicable, to supplement generator(s) reactive capability in order to meet Transmission Provider's (TP) reactive capability criteria:

- Individual shunt capacitor and size of each: \_\_\_\_\_ X \_\_\_\_\_ MVAR
  - Dynamic reactive control device, (SVC, STATCOM): \_\_\_\_\_
  - Control Range: \_\_\_\_\_ MVAR (lead and lag)
  - Control mode (line drop, voltage droop, voltage control): \_\_\_\_\_
  - Regulation point \_\_\_\_\_
  - Describe the overall reactive power control strategy: \_\_\_\_\_
-



- Storage Technology:
  - Battery
  - Fly Wheel
  - Compressed Air
  - Other
  
- Battery Storage Chemistry: \_\_\_\_\_
- Duration (hours): \_\_\_\_\_
- Does Black Hills have charge/discharge dispatch rights in years 1-5?
  - Yes
  - No
  
- Does Black Hills have charge/discharge dispatch rights beyond year 5?
  - Yes
  - No
  
- If Black Hills has charge/discharge dispatch rights during any years: \_\_\_\_\_
- Round Trip Efficiency by Year: \_\_\_\_\_

<u>Service Year</u>	<u>Round Trip Efficiency (%)</u>
<u>Year 1</u>	
<u>Year 2</u>	
<u>Year 3</u>	

- Availability by Year: \_\_\_\_\_

<u>Service Year</u>	<u>Availability (%)</u>
<u>Year 1</u>	
<u>Year 2</u>	
<u>Year 3</u>	

- Self-Discharge Rate (MWh/month): \_\_\_\_\_
- Guaranteed Minimum Charging Time for Full Charge (minutes): \_\_\_\_\_
- Guaranteed Maximum Charge Rate (MW): \_\_\_\_\_
- Guaranteed Minimum Discharging Time for Full Discharge (minutes): \_\_\_\_\_
- Guaranteed Maximum Discharge Rate (MW): \_\_\_\_\_
- Maximum Charge Ramp Rate (MW/minute): \_\_\_\_\_
- Guaranteed Minimum Response Time (seconds): \_\_\_\_\_
- Maximum Annual Cycles: \_\_\_\_\_ (Must be  $\geq 400$ )
- Identify Charge/Discharge Restrictions: \_\_\_\_\_
- Degradation Rate (%): \_\_\_\_\_
- Battery Idle Time Following Discharge Event (Minutes): \_\_\_\_\_

**6. Facility Specifications (Contract Capacity of the Facility)**

- Installed DC Rating (kWpD): \_\_\_\_\_
- Contract Capacity (kW AC): \_\_\_\_\_
- Total Inverter AC Rating: \_\_\_\_\_

Power Ratings of the Facility:

- Installed DC Rating (kWpDC): \_\_\_\_\_
- Equipment Degradation Factor:

**7. Autonomous Functions**

- The Energy Storage System (“ESS”) will have the capability to monitor grid frequency on the ESS side of the POI, and continuously compute the rate of frequency change:
  - I agree
- If frequency drops below a specified trigger point or if frequency falls at a faster than specified rate, then ESS will respond with a full frequency power for 60 seconds:
  - I agree
- After the conclusion of the 60 second response, the ESS will power ramp in 15 seconds:
  - I agree
- Monitor voltage at POI:
  - I agree
- If POI voltage drops below trigger voltage, respond with proportional reactive power, calculated from specified target voltage and bias, for a minimum of five seconds. Contingent on not currently providing frequency response power:
  - I agree
- While voltage remains between 1.1 and 0.8 pu, ESS will respond to deviations in voltage outside a defined deadband with proportional reactive power:
  - I agree
- Monitor system state of change and provide a mechanism to regulate SOC, principally to recover SOC after discharge events (both manual and automatic):
  - I agree
- Time between a frequency event appropriate to trigger a response and a full power response from the ESS: \_\_\_\_\_
- Response time (in cycles) for detecting and providing Reactive power in response to POI voltage falling below 0.8 pu: \_\_\_\_\_
- Ramp rate (MVAR/sec) for adjustment of reactive power: \_\_\_\_\_

**8. Performance Validation**

- Audit data must be accessible via an onsite HMI. Vendor may select appropriate methods to supply this function:  
 I agree
- Audit data must be accessible to the Black Hills EMS system. Vendor may recommend appropriate methods to supply this function:  
 I agree
- Describe how system will be maintained to continuously perform at initial nameplate:

**9. Connection and Disconnection from the Black Hills System**

- While voltage and frequency remain within the specified voltage and frequency windows, the ESS shall remain connected to the Black Hills grid and operational at all times unless instructed otherwise by disconnection signal:  
 I agree
- Provide function for commanded disconnection from the Black Hills grid both remotely and local. This is to be used for routine disconnection when sufficient warning is available to permit a graceful disconnection by the ESS:  
 I agree
- Provide functionality to accept an emergency disconnect input:  
 I agree
- Startup time from a full off condition:

Maximum time for ESS POI disconnection after receiving emergency stop signal (seconds): \_\_\_\_\_

**10. Performance Validation Summary of Bidder Responsibilities**

- Please describe the equipment required to meet these requirements with your solution:

- Describe additional equipment required to power for all auxiliary loads for the ESS:

- Describe the process for ensuring proper operation testing or checkout:

- Describe the testing and control simulation to be available to Black Hills including all software to be employed:

## 11. Services

- Design shall be in accordance with applicable specifications:
  - I agree
- Design and installation of a proper ground mat at the site. The grounding mat is to be connected to the existing grounding system in the substation:
  - I agree
- Commissioning of the complete ESS and installations:
  - I agree
- Operational testing of all ESS systems, individual components as well as the whole ESS, and their interface to Black Hills via SCADA communications:
  - I agree
- Control system simulation to include evaluation of the interaction of the ESS with Black Hills' local generation:
  - I agree
- Provide input to Black Hills during the development of the operating procedures for the ESS:
  - I agree
- Geological and soil resistivity testing as required
  - I agree



**Form 6 – Pricing**

Please describe the pricing mechanism for your proposal. List prices in the table below. The company -is interested in the methodology used by bidders to ensure pricing includes all applicable charges. Examples of items to discuss are: demand charges versus energy charges. Are there start up charges, or start-up fuel costs? If there is a separate demand component, describe the methodology for calculating the kW billing demand determinant. Is pricing dependent upon certain subsidies or credits? If so, please provide a detailed explanation. Is pricing fixed or subject to change? How is the transmission charge component calculated?

Please provide responses on a separate page and label as “Form 6 – Pricing”

--

All pricing must be provided in terms of current year dollars, also referred to as nominal or escalated dollars. Bidders may propose prices that are either fixed for the term, escalate at a known, non-indexed rate or are subject to index escalation conforming to the guidelines set forth in section 2.3 of this RFP. If a bidder provides alternative pricing tied to an index, a second Form 6 with this alternate pricing must also be submitted. Forms with such alternative pricing must described the index used and how it serves to reduce the overall bid price.

If bidders offer energy storage with a renewable generating facility, the bidder must break out the pricing components for both the energy storage and renewable generation.

If applicable, please complete the table below and identify all pricing information related to this bid. Attach additional pages as needed. Transmission charges must include all charges from the Facility to the Point of Delivery on the Company’s system, including but not limited to, any required upgrades. Further, any bid for utility-ownership proposals (*i.e.* utility self-build or build-transfer) should include estimated fixed and variable O&M costs if possible. See the RFP for details.

<u>Calendar Year</u>	<u>Price (\$/MWh) with PTC</u>	<u>Price (\$/MWh) without PTC</u>

Etc.

If storage and Black Hills has charge/discharge dispatch rights:

<u>Calendar Year</u>	<u>Price (\$/kW-month)</u>	

Energy Quantity

<u>Service Year</u>	<u>Quantity (MWh)</u>
<u>Year 1</u>	
<u>Year 2</u>	
<u>Year 3</u>	

Capacity Quantity

<u>Service Year</u>	<u>Quantity (MW)</u>
<u>Year 1</u>	
<u>Year 2</u>	
<u>Year 3</u>	

Etc.

Additional Notes

Specify any other charges: \_\_\_\_\_

For ownership arrangements, alternative purchase terms may include:

- Outright purchase and operation of the project by the company at the date of commercial operation. This offer can include pricing that assumes the Company would make periodic progress payments during the construction phase or pricing that assumes the bidder will finance construction. (Bidder to provide training to Company operating personnel);
- Joint development and ownership by the Company and the Bidder;
- Purchase of the project by the Company with Bidder having principal responsibility for continued development and operation. This offer can include pricing that assumes the Company would make periodic progress payments during the construction phase or pricing that assumes the bidder will finance construction;
- Purchase of the project by the Company at commercial operation with operation by the Bidder for a specified time period during which time bidder would provide training to the Company's operating personnel. This offer can include pricing that assumes the Company would make periodic progress payments during the construction phase or pricing that assumes the bidder will finance construction.

Price proposal must specify fixed and variable payments, escalation rates to be applied, if any, and all other pricing information necessary for the Company to fully evaluate the proposal. In addition, provide a summary of the major capital and operating expenses along

with a budget for projected capital costs, site acquisition, improvements, permitting, construction, testing and commissioning, along with other appropriate inclusions.

Start-up Costs (\$/Start): \_\_\_\_\_

Variable O&M Costs (\$/MWh): \_\_\_\_\_

Fixed O&M Costs (\$/Annum): \_\_\_\_\_

Specify the Year the Costs are associated with: \_\_\_\_\_

Briefly describe what is included in the fixed O&M costs: \_\_\_\_\_

Briefly describe what is included in the variable O&M costs: \_\_\_\_\_

Interconnection Costs (total): \_\_\_\_\_

New Interconnection/Interconnection Upgrade costs:

\_\_\_\_\_

Transmission Charges: \_\_\_\_\_

Ongoing Service & Facilities Charges: \_\_\_\_\_

**Form 7 - Legal and Financial**

**\*\*Please provide responses on a separate page and label as Form 7:**

**The proposal should contain at a minimum the following information:**

Describe the current or proposed legal status of the Bidder and the state of organization.

Identify any Co-Owners/Sponsor Including Ownership Percentage for Each:

Disclose any known commercial affiliations, partnerships, or alliances with the Company or Black Hills Corporation or its affiliates including Black Hills Power Inc. or Cheyenne Light, Fuel & Power Company.

Describe the structure and the status of the project financing. Include major provisions of the plan along with the milestones that the project must meet for ongoing financing. Specific information regarding any necessary financing or refinancing is required including information regarding expected financing sources, whether the project will be financed as a recourse or non-recourse project, the percentages of debt and equity financing, the expected cost of debt and the financing commitments that the bidder has obtained. Proven access to financing must be established for bids to be seriously considered in response to the RFP.

Describe all anticipated credit support arrangements and parental, subsidiary, and venture relationships that are pertinent to the proposal.

Provide, under separate cover, audited financial statements for two years of operation, if available.

A credit worthiness evaluation will be conducted on each Bidder.

**Form 8 - Environmental**

Using the table below and any written documentation necessary to show that consultation has occurred with appropriate governmental agencies (for example, the Colorado Division of Wildlife or the U.S. Fish and Wildlife Service) responsible for reviewing the potential project.

Agency	Land-use or Environmental Regulated Activity	Requirement	Will your proposal trigger or cause the requirement to be applicable?	If triggered, how will you address in your proposal? If you consider this to be the responsibility of the owner/operator (for build/transfer bids only), please note.	Estimated timeframe to obtain permit or comply with requirement (such as developing a plan and obtaining approval).
<b>U.S. Fish and Wildlife Service</b>					
	Endangered Species Act, Section 9	Section 9 deals with the "take" of a species listed on the Threatened & Endangered (T&E) Species list. Impacts could include significantly modifying its habitat with this project.			
	Endangered Species Act, Section 7	Section 7 deals with the development of a Habitat Conservation Plan in the event T&E species are adversely impacted.			
	Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act	Both Acts address the instance of "take" of a Migratory Bird or Eagle. The USFWS has also develop an Eagle Take Permit designed to offset takes, not to allow takes.			
	Avian Protection Plan	The USFWS recommends the development of an Avian Protection Plan for an adverse impacts to migratory birds.			
<b>U.S. Army Corps of Engineers</b>					
	Section 404 compliance; Individual Permit	Section 404 requires a permit for the discharge of dredged or fill material into navigable waters.			
	Section 404 compliance: NWP 14 (Linear Transportation Facilities) (i.e., access roads)	The NWP 14 permit is for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States.			
	Section 404 compliance: NWP 12 (Utilities) (i.e., power lines and	The NWP 12 permit is for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of water of the United States. -			

Agency	Land-use or Environmental Regulated Activity	Requirement	Will your proposal trigger or cause the requirement to be applicable?	If triggered, how will you address in your proposal? If you consider this to be the responsibility of the owner/operator (for build/transfer bids only), please note.	Estimated timeframe to obtain permit or comply with requirement (such as developing a plan and obtaining approval).
	collection systems)				
	Section 404 Compliance: NWP 51 (Land-based Renewable Energy Generation Facilities)	The NWP 51 permit is for discharges of dredged or fill material into non-tidal water of the United States for the construction, expansion, or modification of land-based renewable energy production facilities, including attend features. Such facilities include infrastructure to collect solar, wind, biomass, or geothermal energy.			
	Section 404 compliance: NWP 33 (Temporary Construction, Access, and Dewatering)	The NWP 33 permit is for temporary structure, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard permit requirements.			
	Section 401 - certification for surface water quality	Colorado Water Quality Control Division (WQCD) has jurisdiction for Section 401 compliance.			
<b>U.S. Environmental Protection Agency</b>					
	Spill Prevention, Containment, and Countermeasures (SPCC) plan	Plans are required for facilities that exceed 1320 gallons of storage and regulation are located at 40 Code of Federal Regulations [C.F.R.] 112.7.			

Agency	Land-use or Environmental Regulated Activity	Requirement	Will your proposal trigger or cause the requirement to be applicable?	If triggered, how will you address in your proposal? If you consider this to be the responsibility of the owner/operator (for build/transfer bids only), please note.	Estimated timeframe to obtain permit or comply with requirement (such as developing a plan and obtaining approval).
	National Environmental Policy Act (NEPA)	The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. The project needs to have a federal nexus to federal land or federal permits.			
<b>Federal Aviation Administration</b>					
	FAA Obstruction Evaluation/Airport Airspace Analysis	Renewal Energy projects involving wind turbines and MET tower installations need to conduct an obstruction evaluation with the FFA.			
<b>Colorado Department of Public Health and Environment (CDPHE)</b>					
	Clean Water Act Section 401 - Water Quality Certification (WQC)	The State of Colorado (CDPS) has primacy to issued General Permit Storm water Discharges Associated with Construction Activity.			
	Water	The Department also issues General Permits for Storm water Discharges Associated with Light Industry Activity.			
	Water	The Department issues a Construction Dewatering Permit.			
	Air Quality	The department issues permits for PSD, Major and Minor sources of air pollution. This would apply to Co-generation facilities or energy generation sources combusting some type of fuel.			
	Air Quality - Land Development Permit	The Department issues fugitive dust control permits for projects >25 acres contiguous development and >6 months in duration.			



Agency	Land-use or Environmental Regulated Activity	Requirement	Will your proposal trigger or cause the requirement to be applicable?	If triggered, how will you address in your proposal? If you consider this to be the responsibility of the owner/operator (for build/transfer bids only), please note.	Estimated timeframe to obtain permit or comply with requirement (such as developing a plan and obtaining approval).
	SARA	Community Right to Know - SARA Tier II Chemical Inventory reporting. The State of Colorado requires annual reporting for facilities that exceed quantity thresholds for stored chemicals at the site.			
	Solid Waste	The Department regulates activities associated with the disposal of solid and hazardous waste. This may involve obtaining permits or registrations.			
<b>Colorado Parks and Wildlife</b>					
	Nongame and Endangered Species Approval	If habitat or concern species exist, biological surveys may be required, and mitigation measures implemented.			
<b>Colorado Public Utilities Commission (CPUC)</b>					
	State HAZMAT Permit	No person may offer or accept hazardous material for transportation in commerce unless that person is registered in conformance with the United States DOT. Vehicles requiring a placard must obtain authorization and a State HAZMAT Permit from the CPUC.			
	Rules for Electric Utilities CCR 723-3	This regulation covers a wide range of activities concerning electric utilities. There are provisions throughout the section that address environmental and land issues.			
<b>State of Colorado, Department of Agriculture</b>					
	Pesticide Business License	To legally apply any pesticide or herbicide for compensation, an entity must have a Commercial Pesticide Applicator License.			
<b>State of Colorado, Office of Archaeology and Historic Preservation</b>					

Agency	Land-use or Environmental Regulated Activity	Requirement	Will your proposal trigger or cause the requirement to be applicable?	If triggered, how will you address in your proposal? If you consider this to be the responsibility of the owner/operator (for build/transfer bids only), please note.	Estimated timeframe to obtain permit or comply with requirement (such as developing a plan and obtaining approval).
	Review impacts to National Register of Historic Places-eligible sites	This regulatory activity is required for any federally funded or permitted project with the potential to impact cultural resources required to comply. Excavation on State lands during property evaluation for archaeological/paleontological significance requires a survey and Test Excavation Permit.			
<b>Colorado General Assembly</b>					
	1041 Process in Section 24-65.1-101.	The Colorado General Assembly enacted measures to further define the authority of state and local governments in making planning decisions for matters of statewide interest. These powers are commonly referred to as "1041 powers", based on the number of the bill of the proposed legislation (HB 74-1041). These 1041 powers allow local governments to identify, designate, and regulate areas and activities of state interest through a local permitting process. The general intention of these powers is to allow for local governments to maintain their control over particular development projects even where the development project has statewide impacts. The statute concerning areas and activities of state interest can be found in Section 24-65.1-101.			
<b>County</b>					
	Development Services Division	Most counties require a Conditional Use Permit, or similar use permit for land development projects.			

Agency	Land-use or Environmental Regulated Activity	Requirement	Will your proposal trigger or cause the requirement to be applicable?	If triggered, how will you address in your proposal? If you consider this to be the responsibility of the owner/operator (for build/transfer bids only), please note.	Estimated timeframe to obtain permit or comply with requirement (such as developing a plan and obtaining approval).
	Site Development Plan	A Site Plan is an accurately scaled drawing of a lot or parcel showing, at a minimum, the property address, the schedule/tax number, all existing structures, easements, rights-of-way, and setbacks from the property lines to the existing structures (if any), the location of the lot in relation to abutting streets, driveway/access location(s), dimensions of the proposed structure and of existing structures, including height.			
	Other	Specific county requirements that may not be on this list.			

**Form 8 - Continued**

Emission Rates on Primary Fuel (if Applicable)

If proposing multiple units duplicate the request and label as appropriate:

	Minimum Load (Lb/MMBtu)	Intermediate Load (Lb/MMBtu)	Full Load (Lb/MMBtu)
Capacity in MW			
Particulate Matter - PM10			
Particulate Matter - PM2.5			
Lead			
Mercury			
Oxides of Sulfur			
Oxides of Nitrogen			
Carbon Dioxide			
Carbon Monoxide			
Volatile Organic Compounds			

Maximum NO<sub>x</sub> emission rate (in parts per million): \_\_\_\_\_

Maximum CO emission rate (in parts per million): \_\_\_\_\_

Maximum permitted/permittable annual capacity factor (%): \_\_\_\_\_

Emission Rates on Secondary Fuel (if applicable): Repeat table above for emission rates on secondary fuel.

Additional Notes:

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**Form 9 – Energy and Fuel Delivery**

**\*\*Please provide responses on a separate page and label as Form 9:**

Provide a detailed description of the point of delivery at which bidder is proposing to deliver the capacity and energy to the Company system; including: (1) the location and voltage level of such point, (2) the path from the proposed facility to the point of delivery, and (3) the ownership of each parcel of land crossed from the proposed facility to the point of delivery. If the proposed point of delivery is also the point of interconnection described on a separate form, the bidder may simply indicate below that the points are the same and refer back to the other form.

For proposals that will require third-party transmission service(s) to deliver, on a firm transmission service basis, the capacity and energy to the point of delivery specified above, provide a detailed description of the interconnection, electric losses, transmission and ancillary service arrangements, by provider, that will be required, including the identity of all third party providers, the location and voltage level of the interconnection point to the interconnection service provider's facilities, any interconnection facilities that Bidder owns or intends to construct and own, the specific services provided by each provider, and the line losses, point(s) of receipt and point(s) of delivery associated with each third party transmission service. Attach a USGS-based map that shows the location of the interconnection point and the generation facility.

Provide documentation that the third-party services discussed above will be available to bidder during the proposed contract term. This should include: (a) any associated transmission studies that directly examined delivery of the proposed energy to the point of delivery, (b) detailed information on any or all new transmission facilities and/or upgrades to existing facilities that will be required to deliver the proposed energy to the point of delivery, and (c) a detailed discussion of the schedule for siting, permitting, and construction of such new facilities and/or upgrades. Attach documentation to this form as needed.

If applicable, provide a detailed description of the fuel supply arrangements bidder is proposing including a) purchase plan or arrangements for fuel, b) transportation arrangements for delivery of the fuel to the Facility, c) a detailed discussion of the

schedule for siting, permitting and construction of any fuel-related facilities including any new transportation facilities or any upgrades to existing transportation facilities required for the proposed or existing project, d) any dual fuel capability bidder is proposing including the type of fuel, the purchase plan or arrangements for acquiring such fuel, the amount of on-site storage for such fuel or transportation arrangements for such fuel and the schedule for siting, permitting and construction of any fuel-related facilities for such fuel including any new transportation facilities or any upgrades to existing transportation facilities required for such fuel.

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**Form 10 - Experience and Qualifications**

**\*\*Please provide responses on a separate page and label as Form 10.**

Each Respondent shall:

Provide a general description of the Bidder's background and experience in projects similar to this proposal.

Provide its form of business classification (i.e., sole proprietorship, partnership, or corporation)

List all affiliated companies, including holding companies, subsidiaries, and predecessor companies presently or in the past engaged in developing and/or implementing similar projects.

List all material lawsuits or contested proceedings relevant to the development of any electricity generation resource in which there were adverse results to the Bidder or where adjudication is pending.

Provide a statement of Respondent's financial status and ability to obtain financing for the proposed site(s).

Provide a list of any current credit issues raised by rating agencies, banks, or accounting firms.

Provide a list of all credit ratings from the major rating agencies, if possible.



**Form 11 - Project Status and Schedule**

**\*\*Please provide responses on a separate page and label as Form 11:**

Identify all permits necessary or anticipated with regard to siting and commercial operation of the resource. These would include, but are not limited to, construction activities, environmental, wastewater, solid waste, air quality, water rights, etc. Identify the progress associated with the acquisition of the permits.

Provide schedule for the following: site acquisition, permitting, construction, and commercial operation. Include a separate schedule for each major project activity.

Describe the arrangements and commitments (contracts, letters of intent, memoranda of understanding) that have been made, if any, for the construction of the project. Include measures that have been taken to assure that the schedule will be met (purchase of equipment with long lead times, incentives, etc.)

Identify the term associated with the proposed resource falling within the range of 5-20 years for existing resources and 5 - 20 years for new resources.

**Form 12 – Representation Authorization**

Black Hills Colorado Electric, LLC

Notice of Customer Voluntary Written Consent

The FERC Standards of Conduct Regulations state that a non-affiliated transmission customer may voluntarily consent, in writing, to allow the Transmission Provider to share the non-affiliated customer’s information with a Marketing or Energy Affiliate. The Transmission Provider must post notice on the OASIS or Internet website of that consent along with a statement that it did not provide any preferences, either operational or rate-related, in exchange for that voluntary consent.

Signature of this form by the Customer serves as notice of voluntary written consent allowing the Merchant Function of Black Hills Colorado Electric, LLC to engage in non-public transmission/interconnection-related discussions associated with the possible [\_\_\_\_\_] between Black Hills Colorado Electric, LLC in connection with the 2019 Request for Proposals. Black Hills Colorado Electric, LLC will maintain and protect the confidentiality of all information received from the Transmission Function of Black Hills Colorado Electric, LLC pertaining to the Customer’s transmission/interconnection facilities.

Customer: \_\_\_\_\_

Signed: \_\_\_\_\_

Print Name: \_\_\_\_\_

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

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

Contract or Project Name: \_\_\_\_\_

Please submit a signed written consent letter to the Bid Submittal site Transmission Provider and a copy to the Merchant Function below:

Transmission Provider

Black Hills Colorado Transmission (BHCT)

Merchant Function

Black Hills Power as agent for Black Hills Colorado Electric

**Form 13-Exceptions to Model PPA**

Set forth any exceptions or changes required to the Model PPA either in the bid form or in a redlined version of the Model PPA. If any such exceptions affect the bid pricing, please explain and indicate the effect on price with and without the requested change.

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**Form 14 – Construction Milestones**

A detailed development and construction milestone table will be developed to support the Model PPA. Bidders should insert the proposed date for each milestone shown here as would be found on the detailed Development Schedule provided with the proposal. The milestones should be based on the requirements to achieve the commercial operation date. See the Model PPA for defined terms. Complete as applicable or indicate n/a.

- \_\_\_\_\_ Seller shall establish the Security Fund in accordance with Section 11.1 of the Model PPA.
- \_\_\_\_\_ Seller shall have provided Company with a letter of intent, terms sheet or other written evidence from a lender of its intent to finance construction of the Facility.
- \_\_\_\_\_ Seller shall provide Black Hills with a copy of the executed Facility EPC, or other general contractor, agreements.
- \_\_\_\_\_ Seller shall provide Black Hills with copies of executed purchase orders/contracts for the delivery and installation of Facility turbine(s)/generator(s) and the step-up transformer(s).
- \_\_\_\_\_ Seller shall provide Black Hills with copies, as applicable, of executed Facility operating agreements, electric transmission or interconnection agreements, and natural gas transportation or interconnection agreements.
- \_\_\_\_\_ Seller shall provide Black Hills with documentation that all governmental permits have been obtained or will be obtained by the time needed to meet all Construction Milestones.
- \_\_\_\_\_ Seller shall have achieved closing on financing for the Facility or provided Black Hills with proof of financial capability to construct the Facility.
- \_\_\_\_\_ Seller shall provide Black Hills with evidence of complying with that insurance coverage required prior to the Commercial Operation Date.
- \_\_\_\_\_ Seller shall have laid the foundation for all Facility buildings, generating facilities and step-up transformation facilities.
- \_\_\_\_\_ The turbine(s)/generator(s) shall have been delivered to, and installed at, the Site.
- \_\_\_\_\_ The step-up transformer shall have been delivered to, and installed at, the Site.
- \_\_\_\_\_ Seller shall have the natural gas line and all other necessary fuel supply interconnection facilities in place, and capable of delivering

fuel to the CTs for operation.

\_\_\_\_\_ Seller shall demonstrate that the Facility has the required Network Resource designation.

\_\_\_\_\_ Seller shall have constructed Seller's Interconnection Facilities and such facilities are capable of being energized and delivering energy.

\_\_\_\_\_ Commercial Operation Date is achieved. (Commercial Operation Milestone)



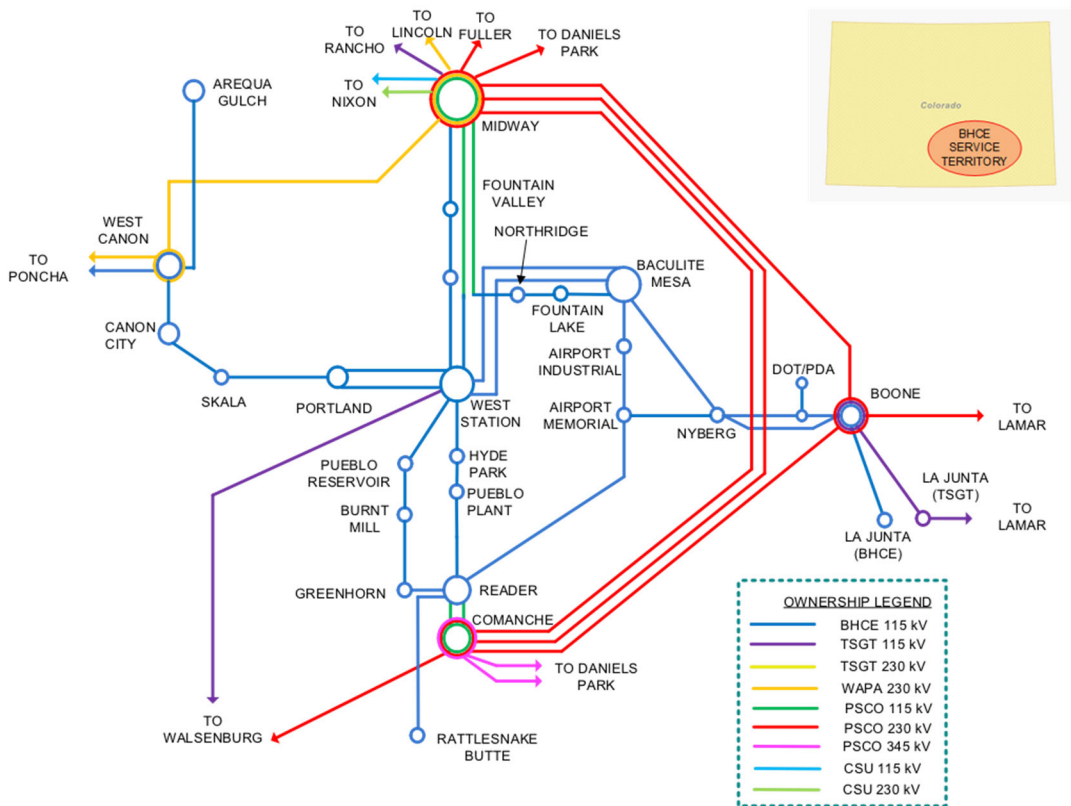
### ENERGY PROFILE BY HOUR (MWh)

Month	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
	Jan																							
Feb																								
Mar																								
Apr																								
May																								
Jun																								
July																								
Aug																								
Sept																								
Oct																								
Nov																								
Dec																								

**HE = Hour Ending**

*Attachment B*

**Transmission System Map**





*Attachment C*

**General Planning**  
**Assumptions**

The planning assumptions shown on the Table below will underlie the evaluation of proposals received in response to the 2019 Renewable Advantage. Note that the following is not a complete listing of all assumptions that will be applied in the evaluation process. In addition, the assumptions noted below represent “base case” assumptions. Sensitivity analysis will be performed in which certain of these assumptions are altered.

**General Planning Assumptions**

<b>Item</b>	<b>Assumptions</b>
Capacity credit for solar at 200 MW	23%; See Section 8 of ERP Amendment
Capacity credit for wind at 200 MW	19%; See Section 8 of ERP Amendment
CO <sub>2</sub> price forecast	See Section 14 of ERP Amendment
Cost of integrating renewable resources	See Section 8 of ERP Amendment
DSM forecast	See Section 7 of ERP Amendment
Financial parameters	Appendix F of 120-Day Report filed in Proceeding No. 16A-0426E
General inflation rate	Appendix F of 120-Day Report filed in Proceeding No. 16A-0426E
Interconnection costs applied to bids	Estimated during Evaluation Process
Load forecast	See Section 7 of ERP Amendment
Market prices	Confidential ABB 2019 WECC Fall Reference Case
Natural gas prices	Confidential ABB 2019 WECC Fall Reference Case
Owned unit operating characteristics and costs	See Table 5-1 of 2016 ERP Report; and Section 7 of ERP Amendment
Owned unit retirement dates	See Table 5.1 of 2016 ERP Report

Planning period	24 years
Planning reserve margin	15% minimum
Power purchase contracts	Varies by resource
Renewable resource options considered	See Section 8 of ERP Amendment
Resource Acquisition Period	4 years
Seasonal firm market purchases	Confidential ABB 2019 WECC Fall Reference Case and Section 12 of ERP Amendment
Spinning reserve requirement	WECC Requirements

*Attachment D*

**Form of Non-Disclosure Agreement**

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE COLORADO  
PROCEEDING NO. 19A-0660E**

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**IN THE MATTER OF THE APPLICATION OF BLACK HILLS COLORADO ELECTRIC, LLC CONCERNING: (1) A COMPETITIVE SOLICITATION FOR UP TO 200 MW OF RENEWABLE ENERGY OUTSIDE OF AN ELECTRIC RESOURCE PLAN; AND (2) A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE RENEWABLE GENERATION FACILITY OR FACILITIES ACQUIRED AS A RESULT OF THE COMPETITIVE SOLICITATION.**

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**BIDDER HIGHLY CONFIDENTIAL NONDISCLOSURE AGREEMENT**

I, \_\_\_\_\_, state that I am employed by a bidder in Black Hills Colorado Electric, LLC's 2019 RFP process.

For purposes of this highly confidential nondisclosure agreement, "Potential Resource" means the new or existing resource of the bidder by whom I am employed.

For purposes of this highly confidential nondisclosure agreement, "Highly Confidential Information means highly confidential modeling inputs and assumptions that reasonably relate to the Potential Resource or to the transmission of electricity from that Potential Resource to Black Hills.

I understand that I may obtain Highly Confidential Information for the sole purpose of assisting the bidder to identify modeling errors or omissions concerning its Potential Resource so that the modeling errors or omissions may be corrected before the competitive acquisition process is completed.

I have read the protective provisions relating to confidential information contained in 4 Code of Colorado Regulations 723-1-1100 through 1104. With respect to all Highly Confidential Information that may be produced to me, I agree to be bound by the terms of the protective provisions contained in 4 Code of Colorado Regulations 723-1-1100.

I will properly implement and maintain extraordinary confidentiality provisions for the Highly Confidential Information I receive.

The Highly Confidential Information I receive may only be used or disclosed to assist the bidder to identify modeling errors or omissions concerning its Potential Resource so that the modeling errors or omissions may be corrected before the 2019 RFP competitive acquisition process is completed.

I will not disclose or disseminate any Highly Confidential Information I receive to any third party other than to those who are specifically authorized to review such Highly

Confidential Information and who have signed this highly confidential nondisclosure agreement. At the conclusion of the 2019 RFP competitive acquisition process, I agree to return all Highly Confidential Information to Black Hills Colorado Electric, LLC.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Employer or Firm

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
Bidder Represented

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

*Attachment E***Large Generator Interconnection Request Form**

(This Large Generator Interconnection Request Form is not a required bid submittal form. This form is included in the RFP for informational purposes only.)

**APPENDIX 1 to LGIP  
INTERCONNECTION REQUEST FOR A  
LARGE GENERATING FACILITY**

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with Transmission Provider's Transmission System pursuant to a Tariff.
2. This Interconnection Request is for (check one):
  - A proposed new Large Generating Facility.
  - An increase in the generating capacity or a Material Modification of an existing Generating Facility.
3. The type of interconnection service requested (check one):
  - Energy Resource Interconnection Service
  - Network Resource Interconnection Service
4.  Check here only if Interconnection Customer requesting Network Resource Interconnection Service also seeks to have its Generating Facility studied for Energy Resource Interconnection Service.
5. Interconnection Customer provides the following information:
  - a. Address or location of the proposed new Large Generating Facility site (to the extent known) 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 Large 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. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;
  - f. Approximate location of the proposed Point of Interconnection (optional); and

g. Interconnection Customer Data

- 6. Applicable deposit amount as specified in the LGIP.
- 7. Evidence of Site Control as specified in the LGIP (check one)
  - Is attached to this Interconnection Request
  - Will be provided at a later date in accordance with this LGIP
- 8. This Interconnection Request shall be submitted to the representative indicated below:

FERC Tariff and Admin Department  
Black Hills Corp.  
PO BOX 1400  
Rapid City, SD 57709-1400

- 9. Representative of Interconnection Customer to contact:

[To be completed by Interconnection Customer]

- 10. This Interconnection Request is submitted by:

Name of Interconnection Customer: \_\_\_\_\_

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

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

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

**Attachment A to Appendix 1 to LGIA  
Interconnection Request**

**LARGE GENERATING FACILITY DATA**

**UNIT RATINGS**

kVA \_\_\_\_\_ °F \_\_\_\_\_ Voltage \_\_\_\_\_  
 Power Factor \_\_\_\_\_  
 Speed (RPM) \_\_\_\_\_ Connection (e.g. Wye) \_\_\_\_\_  
 Short Circuit Ratio \_\_\_\_\_ Frequency, Hertz \_\_\_\_\_  
 Stator Amperes at Rated kVA \_\_\_\_\_ Field Volts \_\_\_\_\_  
 Max Turbine MW \_\_\_\_\_ °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)**

	<b>DIRECT AXIS</b>	<b>QUADRATURE AXIS</b>
Synchronous – saturated	$X_{dv}$ _____	$X_{qv}$ _____
Synchronous – unsaturated	$X_{di}$ _____	$X_{qi}$ _____
Transient – saturated	$X'_{dv}$ _____	$X'_{qv}$ _____
Transient – unsaturated	$X'_{di}$ _____	$X'_{qi}$ _____
Subtransient – saturated	$X''_{dv}$ _____	$X''_{qv}$ _____
Subtransient – unsaturated	$X''_{di}$ _____	$X''_{qi}$ _____
Negative Sequence – saturated	$X_{2v}$ _____	
Negative Sequence – unsaturated	$X_{2i}$ _____	
Zero Sequence – saturated	$X_{0v}$ _____	
Zero Sequence – unsaturated	$X_{0i}$ _____	
Leakage Reactance	$X_{lm}$ _____	

**FIELD TIME CONSTANT DATA (SEC)**

Open Circuit	$T'_{do}$ _____	$T'_q$ _____
Three-Phase Short Circuit Transient	$T'_{d3}$ _____	$T'_q$ _____
Line to Line Short Circuit Transient	$T'_{d2}$ _____	
Line to Neutral Short Circuit Transient	$T'_{d1}$ _____	
Short Circuit Subtransient	$T''_d$ _____	$T''_q$ _____
Open Circuit Subtransient	$T''_{do}$ _____	$T''_{qo}$ _____

**ARMATURE TIME CONSTANT DATA (SEC)**

Three Phase Short Circuit	$T_{a3}$	_____
Line to Line Short Circuit	$T_{a2}$	_____
Line to Neutral Short Circuit	$T_{a1}$	_____

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



**MW CAPABILITY AND PLANT CONFIGURATION  
LARGE 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

**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(Generator Side/System side/Tertiary)  
\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_kV

Winding Connections (Low V/High V/Tertiary V (Delta or Wye))  
\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Fixed Taps Available \_\_\_\_\_

Present Tap Setting \_\_\_\_\_

**IMPEDANCE**

Positive             $Z_1$  (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: \_\_\_\_\_

Elevation: \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase

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): \_\_\_\_\_
- (\*)  $I_2^2t$  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 Transmission Provider prior to submitting the Interconnection Request to determine if the information designated by (\*) is required.

*Attachment F*  
**Model Purchase Agreement**

*Attachment G*

**FORM SITE CONTROL AFFIDAVIT**

*[Insert Date]*

Black Hills Energy  
c/o Accion Group LLC, Independent Administrator  
244 North Main Street  
Concord, NH 03301

Subject: 2019 RFP – Site Control

Ladies and Gentlemen:

On or before *[date]*, and in accordance with the provisions of Black Hills Colorado Electric, LLC's d/b/a Black Hills Energy ("Black Hills Energy") 2019 Renewable Energy and Storage Request for Proposals ("RFP"), *[Insert full legal name]* ("Seller"), a *[Insert form of entity and state of organization]*, is submitting one or more proposals for consideration to fulfill a portion of Black Hills Energy's solicitation. In order for such Seller to be eligible for participation, Seller must, among other things, possess Site Control, as such term is defined below. Capitalized words used without definition here have the meaning shown in the RFP.

Seller hereby represents, warrants, and covenants that:

1. Seller has Site Control of the Site, located at *[Insert parcel number and GPS coordinates of the Site]*, which is the Site where the Facility is, or will be, located if Seller and Black Hills Energy execute an agreement;
2. The Site is adequate for the Facility and lawfully zoned for the Facility, or if not already appropriately zoned, Seller agrees to and shall obtain appropriate zoning variances and/or approvals prior to agreement execution;
3. Seller is the authorized or legal entity that will execute the agreement with Black Hills Energy if Seller's proposal is selected;
4. Seller will retain Site Control of the Site for the duration of the agreement term, subject to the Assignment provisions of the agreement;
5. Seller will promptly notify Black Hills Energy in writing of any change in the status of Seller's Site Control; and
6. Upon request, Seller will provide to Black Hills Energy a copy of the lease, deed, and other satisfactory legal evidence of Site Control.

For purposes of this Affidavit:

**"Site Control"** means that, with respect to the Site, as further described above, and for the duration of the agreement term, Seller (i) owns the Site, or prior to execution of any agreement with Black

Hills Energy, will own the Site pursuant to (A) a current binding written agreement between Seller and the landowner, or (B) its exercise of an option to purchase the Site pursuant to a current binding written option agreement with the landowner; or (ii) is the lessee of the Site under a binding written lease agreement with the landowner, or will, prior to execution of any agreement with Black Hills Energy, lease the Site by exercise of an option pursuant to a current binding written option agreement with the landowner that shall result in a binding written lease agreement with the landowner; and (iii) is the holder of each and every right-of-way grant, easement, or similar instrument(s), or will, prior to execution of any agreement with Black Hills Energy, be the holder of such grants, easements, or instrument(s) necessary for Seller's intended use of the Site. The undersigned is the managing partner or other person, or entity duly authorized to act for Seller in all matters relating to the control and operation of the Site. With respect to items (i) through (iii) immediately above, Seller's rights to, and control of, the Site referenced therein are and will be free and clear of any lien, right, contract, or other encumbrance that could adversely affect Seller's performance of its obligations under any agreement with Black Hills Energy that Seller may enter into with Black Hills Energy, and its rights will be for such duration and upon such terms as are necessary to satisfy its obligations under the agreement with Black Hills Energy.

Seller, through its duly authorized representative, does solemnly swear or affirm under penalty of perjury, that the information Seller has provided in this Affidavit is based on Seller's own personal knowledge and is true, complete and correct.

*[Insert Seller's full legal name]*

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

Name: \_\_\_\_\_

Title (if applicable): \_\_\_\_\_

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

On this \_\_\_\_\_ day of \_\_\_\_\_, 2018, before me appeared *[Insert Seller's full legal name]*, the person who signed the Site Control Affidavit in my presence and who swore or affirmed that he/she understood the document and freely declared it to be truthful.

\_\_\_\_\_

*Official Signature of the Notary*

**State of \_\_\_\_\_ County of \_\_\_\_\_**

*Official Seal of the Notary*