**REQUEST FOR PROPOSALS**

**Issued by:**

Wyoming Infrastructure Authority (WIA)

PHONE: 307-635-3573

**Issue Date: October XX, 2016**

**Proposal Due Date: November XX, 2016**

Additional copies of this solicitation are available from the Wyoming Infrastructure Authority WIA

www.wyomingitc.org

***REQUEST FOR PROPSALS:***

**Advanced Post-Combustion Carbon Dioxide Capture Test Facility Opportunity**

**Wyoming Infrastructure Authority**

**Introduction:**

The State of Wyoming will have available in late 2017, its carbon dioxide (CO2) Integrated Test Center (ITC) for the testing of pilot scale (≥5 MWe to ≤18 MWe) post-combustion CO2 separation technologies at a coal-fired electric generation power plant located at the Basin Electric Power Cooperative, Dry Fork Station (DFS) located seven miles north of Gillette, Wyoming.

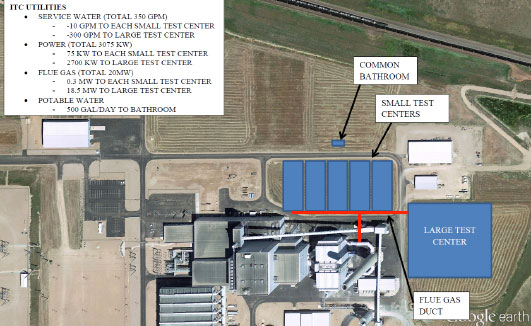
In 2014, with the support and encouragement of Governor Matthew H. Mead, the Wyoming State Legislature allocated $15 million in funding for the design, construction and operation of an integrated test center to study the capture, utilization and storage of CO2 emissions from a Wyoming coal fired power plant. An additional $5 million commitment from private industry was required under the appropriation, which has since been secured from [Tri-State Generation and Transmission Association](http://tristate.coop/" \t "_blank) in addition to $1 million pledged from the [National Rural Electric Cooperative Association](http://nreca.coop/" \t "_blank). Basin Electric is providing the host site and additional in-kind contributions.

The ITC will provide space for researchers to test CO2 capture, utilization and storage (CCUS) technologies using a combined 20 MW of actual coal based flue gas. The 20 MWe equivalent of flue gas will be split among one large test bay and five smaller test bays. The large test bay will provide flue gas equivalent from 5 MWe to 18 MWe, and is the focus of this Request For Proposals (RFP).

The large test bay test site will have the following amenities:

* Footprint of 360 ft. x 363 ft.
* 81,000 acfm flue gas (at a pressure of approximately 15 inches H2O)
* 300 gpm service water
* 2700 kW electricity (to be purchased by tenant)
* Access to restroom and potable water

The image below provides a relative position of the large test bay at DFS.



**Purpose:**

The purpose of this RFP is to provide interested parties the opportunity to propose to “lease”, at no cost, access to a test bay for >5 MWe to <18 MWe flue gas slip stream from a coal-fired power plant. This opportunity aims to provide developers of advanced post-combustion CO2 capture technologies the opportunity to test their equipment and processes at larger scale at a commercial (i.e., non-laboratory) facility.

The responses to this RFP will be used to identify the first potential user(s) of the ITC.

**Eligibility:**

This RFP is open to those in private industry, government agencies, government laboratories, university faculty and staff, and individuals who have the capability to address the needs of this request as outlined below. The development of the test article, permitting, construction, installation, operation and testing, and restoration of the test bay to “as received” conditions will be self-funded by the winner or winners (in the event the site is modified to accommodate more than one test bay). Test bay users will be required to comply with all safety and environmental requirements of the Dry Fork Station (DFS) and any applicable environmental regulations.

**Background:**

Federal regulations have been proposed that will require stationary electric generating units (EGUs), primarily coal-fired EGUs, to significantly reduce CO2 emissions. Although the outcome of these proposed regulations is unclear, it is likely that reduction of CO2 emissions from fossil-fueled plants will be mandated. The energy penalties and capital costs associated with the commercially available and current state-of-the-art CO2 capture technologies is a deterrent to widespread deployment of CCUS. The costs associated with current CO2 capture technologies can amount to more than 75% of the total cost of CCUS. While continued research and development on CO2 capture technology are essential to reduce both technical and economic risks, new and emerging capture technologies are reaching the point where larger pilot scale demonstrations are necessary in order to address the prohibitive costs.

Wyoming’s ITC will serve as a catalyst for aligning Wyoming’s efforts for research, testing, pre-commercialization, and commercialization of CCUS technologies. It can further position Wyoming to be part of the international collaboration on the commercialization of CO2 utilization technologies using CO2 from both coal and natural gas sources. There is also substantial opportunity for significant enhanced oil recovery (EOR) within Wyoming. Recent studies indicate that at present values of CO2 there is more than $6 billion dollars of CO2 needed for EOR in the state.

Wyoming’s short to mid-term interests are to encourage commercialization of technology for the capture of CO2 from existing coal-fired power plants and to provide CO2 for EOR. The longer-term solution for Wyoming and the coal industry is to find additional uses for CO2 from coal generation flue gas and other large stationary point sources. This would expand the use of CO2, increasing its market potential and in turn creating an economically sustainable CO2 utilization industry on a global scale.

**Technical Focus:**

The focus of this RFP is demonstration at ≥5 MWe to ≤18 MWe scale of one or more post-combustion CO2 separation technologies. Performance and economics are expected to be shared with the State of Wyoming. The lessee’s intellectual property is not to be disclosed.

Ongoing research will continue to advance the development of post-combustion CO2 capture technologies. The ability to conduct larger pilot scale testing under realistic conditions and continuous long-term operation will stimulate more rapid scale up of commercially viable technology solutions.

One of the key objectives of the ITC initiative is to advance the development of potential commercially viable CO2 capture technologies for retrofit applications at existing coal-fired generating plants. Thus, technologies with minimal impacts on existing coal-fired generating plant cycles (i.e. steam requirements) are preferred. Pilot-scale testing is a critical milestone to keep the CCUS on track to have advanced technologies sufficiently developed and scaled-up by 2020 to enable inclusion in the design of a first-of-kind demonstration plant.

ITC lease applicants should be able to demonstrate a technology capable of producing a high purity stream of captured CO2 that would be suitable for utilization and/or storage.[[1]](#footnote-1)

**Timeline:**

September XX, 2016: Pending RFP release posted on ITC website

September 30, 2016: RFP issued

October XX, 2016: Site walk-through at Dry Fork Station, host site of the ITC

November 1, 2016: Written questions on RFP due to WIA

November15, 2016: RFP questions answers posted to ITC website

December 23 or 30, 2016: Proposals due to WIA

January 2017: Proposal review period

January XX: Finalists identified & notified

Late January: Finalists Oral Presentations

February 1, 2017: Recommendations submitted to the state of Wyoming

February 17, 2017: Final selections made

February 24, 2017: Selected parties notified

XX: Group 1 lessee(s) granted site access at ITC

XX: Group 1 testing begins

XX: Group 1 testing concludes

**Proposal Format:**

Proposals are limited in length to 30 pages allocated below among four (4) areas, and must be submitted in 11 point Calibri font with one-inch margins. Please be concise and succinct as possible. While the proposal should provide enough information to judge its merit, please do not include any proprietary or confidential information.

Responses to this RFP are due no later than 8:00 pm Mountain Time (10 pm Eastern, 9:00 pm Central, 7:00 pm Pacific) on October XX, 2016. Responses are to be submitted electronically as a single pdf document via [***here***](https://survey.uwyo.edu/TakeSurvey.aspx?SurveyID=82K1l682H).

To be considered for selection as the ITC test bay lessee, all proposals must contain the following elements, preferably in the following order (the first two items do not count toward the 30 page limit):

1. Signed proposal application form (Attachment 1)

2. Project Summary Form (Attachment 2)

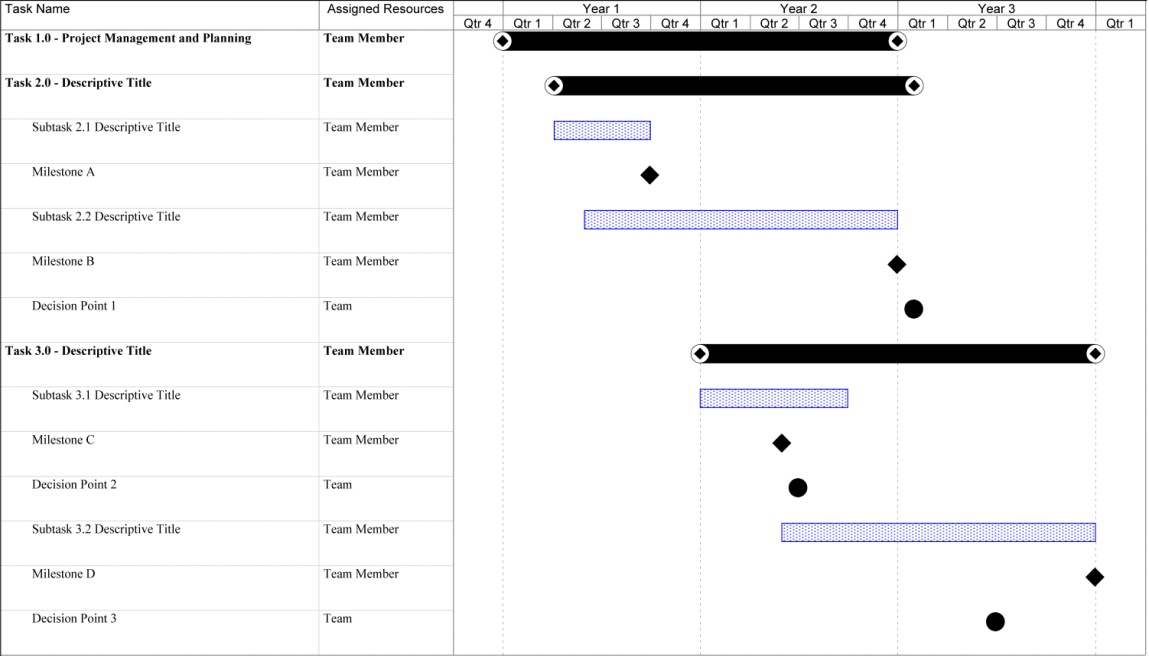
3. Table of Contents

4. Body of Proposal (four topical areas described subsequently)

The decision of which entity(s) will have first access to the ITC will be determined by evaluation of proposals in the following **four areas and oral presentations by the finalists.** Please include a detailed section on each of the four areas.

1. **Discussion of Proposed Technology and Feasibility (10 pages or less)**
   1. **Project Schedule/Timeline and Milestones**

Provide a schedule of the proposed ITC testing project (similar to the example Gantt chart shown below), broken down by project phase and by task/subtask. Each task/subtask should be identified with a start date, and an end date. The schedule should show interdependencies between tasks and include the milestones that are identified below.



**Example of a Testing Project Schedule Format**

Provide milestones for each phase of the project, and describe the relationship to specific tasks/subtasks. Each milestone should include a title, planned completion date, and the method/measure used to verify completion of the milestone. Milestones should be quantitative, technically-based, and show progress toward intermediate project phase or overall project goals. The applicant shall identify those milestones that represent critical path milestones (no less than four per calendar year) which must be met prior to the project proceeding to subsequent activities.

Format for the milestone log should be as follows:

Title: {Milestone Title}

Planned Date: {Planned Completion Date}

Verification Method: {Milestone Verification Method}

* 1. **Provide a schedule for scale up to first commercially viable unit of at least 100 MWe**.
  2. **Suggested technical parameters to be addressed in the proposal include:**

i. Technology classification (e.g., solvent, adsorbent, membrane, cryogenic, hybrid, other)

ii. Description of the process (include whether the driving force is temperature swing, pressure swing, etc.)

iii. Distinction and/or features specific to the technology that are different from others in this technology classification

iv. An overview process schematic. Do not include proprietary information.

v. An overall description of the technology development progress made to date, including various steps for scaling up

vi. Largest scale at which the technology has been tested to date (equivalent flue gas and duration). Identify the source of the flue gas.

vii. Longest duration of testing on actual flue gas and at what scale (if different from above)

viii. Previous experience and pertinent results, from previous lab, bench, and pilot-scale testing

ix. List of any hazardous materials and/or pressurized or other safety concerns associated with the process.

x. A description of how the technology would be integrated with an existing coal-fired power plant. Discuss how this integration can be minimized and the related expense or increase in energy penalty, or lack thereof, of minimal integration.

xi. Please describe the impact of NOX, SO2, particulate matter, or any other flue gas constituents on the process.

xii. Limitations and/or approach to load following (i.e., changing the flue gas flow rate) with this technology

xiii. Expected water usage/consumption for the process and any steps toward minimizing water consumption

xiv. The land-space requirements for the technology if applied at the 550 MWe scale

xv. Describe external and independent reviews of the technology.

1. **Proposed Scale of Test Article (two (2) pages or less)**

The size desired is a minimum of 5 MWe and maximum of 18 MWe of flue gas that is capable of capturing at least 60% of the CO2 in the flue gas, recognizing that 60% capture may not offer the most economically advantageous capture rate.

Please describe whether the equipment and materials proposed to be tested at the ITC are existing, or would need to be manufactured. If manufacturing is required for the major components, describe the funding that will support that effort, timeline for production, and sub-contractors that will be involved.

**C. Corporate Description, Management Approach and Capabilities (10 pages or less)**

Provide detailed information that will allow the reviewers to understand the corporation and partners’ capabilities and approach to managing the proposed research/demonstration, structure of the project organization, and qualifications of applicants and proposed key personnel.

1. **Organizations’ Corporate Experience in Managing Similar Projects**

Provide information relevant to the organization’s capabilities and experience in managing technical projects of similar nature and complexity, including specific examples that demonstrate the ability to successfully meet research objectives within scope, budget, and schedule. Depending on their role, relevant information for sub-recipients and consultants should also be provided.

1. **Project Organizational Structure: Roles and Responsibilities**

Describe the overall structure planned for the site project team, including relationships among participating organizations.

**Roles and Responsibilities of Organizations**: For multi-organizational project structures, describe the roles and the functions to be performed by each organization, the degree to which each organization provides value added toward achieving the overall objective(s), the business agreements between the applicant and participants, and how the various efforts will be integrated and managed.

**Roles and Responsibilities of Key Personnel:** Describe and clearly delineate the roles and responsibilities of key personnel assigned to the project team.

1. **Knowledge, Capabilities, Experience, and Availability of Key Personnel**

Describe the knowledge, capabilities, experience (technical and managerial), and availability of the key personnel to be assigned to the project as well as the percentage of time each would devote to the project. Abbreviated resumes of key project personnel may be included within the section page limit.

Include related supporting information demonstrating the wherewithal to both build and properly conduct the testing and commercialization of the subject technology. Is the intellectual property (IP) for the process to be tested at the ITC, owned by the proposed lessee? Please describe the IP ownership and rights.

1. **Corporate Financial Plan (seven (7) pages or less)**

Although the ITC will host pilot-scale demonstrations, the ITC will not provide financial support for the lessee(s). Thus, it is incumbent on the lessee to secure funding from other sources. Please describe the sources of funding that will be used to complete testing at the ITC.

Include a demonstration of the financial ability to fund the test article development and construction, testing, pilot decommissioning, and path toward commercialization. Please provide a description of a business plan for commercialization based on successful outcomes from ITC testing. Explain how testing at the ITC will facilitate commercialization of the lessee(s) proposed CO2 capture technology.

1. **Prior or Current Involvement or Ties with the State of Wyoming**

Please describe any prior collaboration, funding received from, or technology development efforts associated with the state of Wyoming.

Please review attachment (3) Project Management Document for ITC site specifications.

**Lease Requirements:**

A lease agreement shall specify the terms and conditions of occupancy of the ITC. A sample lease agreement is included as Attachment 4. Terms and conditions may include but not be limited to:

* The date of first occupancy and date of final decommissioning.
* A methodology, including the ability, for the State of Wyoming to audit records as necessary
* For entities that may sub-lease portions of the ITC, the State of Wyoming will require a sub-lease document be in place prior to the date of occupancy.

Any lessee(s) selected through this proposal process will need to meet several important requirements:

* Complying with all safety rules and procedures at the Basic Electric Dry Forks Station, host of the ITC.
* Obtaining the required permits for the full duration of testing
* Carrying proper insurance

**Reporting Requirements:**

**Quarterly Progress Reports:** Quarterly progress reports shall be submitted to the Wyoming Infrastructure Authority. Progress reports should not exceed three pages, and should report status of work, successes and failures, progress toward demonstration-scale technology and/or technology commercialization, and updates on the project schedule. Do not include proprietary or confidential information, trade secrets, or intellectual property in the Quarterly Progress Reports.

**Final Executive Summary Report:** This report should be a concise summary of project results. These reports will be made available to the public. Therefore, do not include proprietary or confidential information, trade secrets, or intellectual property in the Final Executive Summary Report. The Final Executive Summary Report should be in pdf format and be less than 15 pages, inclusive of references, figures and other supporting materials. The Final Executive Summary Report is due within 90 days of the end date stated on the lease agreement.

All publications including data collected from the ITC, shall credit the ITC by use of the following language:

“The Wyoming Infrastructure Authority’s Integrated Test Center (www.wyomingitc.org) hosted experiments resulting in the collection of data described in this work.”

**Proposal Submission**

Proposals must be submitted in a single pdf to [include email address] with “Integrated Test Center Proposal” in the subject line no later than X:00 pm Mountain Time (X:00 pm Eastern Time, X:00 pm Central, X:00 pm Pacific) on [Day of week-Month-Date-Year]. **No exceptions will be made for late arrival of proposals, for any reason.**

For technical questions, please contact [Insert contact name, affiliation, email, and phone].

For programmatic questions, please contact [Insert contact name, affiliation, email, and phone]

**DISCLAIMER AND IMPORTANT NOTES**

**Attachment 1: Project Summary Form**

**1. *Please list the type of technology or technology classification of CO2 capture technology this proposal addresses (100 words or less):***

**2. *Please provide the following parameters of the proposed project:***

1. Flue gas flow rate requested (must be a minimum of 5 MWe and a maximum of 18 MWe)

2. Anticipated footprint and height of the equipment to be tested (length x width x height in feet)

3. Largest scale at which this technology has been tested to date (MWe)

**3. *Briefly describe the benefit(s) of this project to the State of Wyoming and the Wyoming coal industry:***

**4. *Anticipated duration of occupancy in months:* ­­\_\_\_\_\_\_\_\_**

**5. *Project Abstract (300 words or less):***

**6. *Expected project testing schedule***

***Design and Fabrication***

***Mobilization***

***Erection***

***Checkout***

***Testing and Monitoring***

***Isolation and Removal***

***Final Report***

***Expected Site requirements***

***Expected staff at site during each project testing phase***

**Attachment 2: Sample Lease Agreement**

**SUBLEASE BETWEEN**

**THE STATE OF WYOMING, WYOMING INFRASTRUCTURE AUTHORITY**

**AND RFP FINALIST**

**1. Parties.** This Sublease is made between RFP Finalist (Sublessee), having its principal office at\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and the Wyoming Infrastructure Authority, in its capacity as an agent and instrumentality of the State of Wyoming (WIA). In consideration of the mutual covenants contained herein, the parties agree as follows:

**A.** Sublessee's business address for the purpose of notification under the terms of this Sublease is:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**B.** The WIA's business address for the purpose of notification under the terms of this Sublease is:

Wyoming Infrastructure Authority

325 W. 18th Street

Cheyenne, WY 82001

**C.** In the event that the addresses listed above change, the party whose address has changed will immediately notify the other party to the Sublease in writing.

**2. Purpose of Sublease.**

**A.** The WIA sublets the premises located in the County of Campbell, State of Wyoming and more specifically described below (Site) from Basin Electric Power Cooperative and the Wyoming Municipal Power Agency (Basin Electric) until March 31, 2027, and desires to sub-let a portion of the premises to Sublessee.

* + - 1. Physical address: Dry Fork Station (DFS), 12460 North Highway 59, Gillette, WY 82716.
      2. Description of Site to be Sublet within Basin Electric property for the Integrated Test Center (ITC): Basin Electric sublets to the WIA approximately 9.2 acres of land wholly within the existing DFS property plus an independent access road to the Site, *see* attached drawing DFS-GA-000-0018, Rev A, Integrated Test Center Addition Layout for Unit 1, incorporated herein.

**B.** Sublessee desires to sublet a portion of the premises for the purposes of utilizing a test bay to study the capture, sequestration, and management of carbon, as described generally in Budget Footnote 334 to the 2014 State Budget, Enrolled Act 41, more specifically found in the 2014 Wyoming Session Laws at Chapter 26, § 334, as amended by Budget Footnote 334 to the 2015 State Budget, Enrolled Act No. 56, more specifically found in the 2015 Wyoming Session Laws at Chapter 142, § 334.

**C.** For purposes of regulation under the Clean Air Act, any federal regulations promulgated pursuant to the Clean Air Act, the Wyoming Environmental Quality Act, or the Wyoming Air Quality Standards and Regulations, the ITC and DFS are functionally distinct facilities. No work related to the ITC shall qualify as “construction” or “modification” of DFS. The ITC and DFS will operate as separate sources and are not under common control. The boundary between the ITC and DFS is delineated with a secured fence as shown in Drawing 18, attached and incorporated hereto.

**D.** The parties desire to enter into an agreement (Sublease) defining their rights, duties, and liabilities relating to the sublet of the premises.

**3. Term of Sublease.** The WIA sublets the above premises to Sublessee for a term of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ commencing on \_\_\_\_\_\_\_\_, and terminating on \_\_\_\_\_\_\_\_\_\_, or sooner as provided herein. This Sublease is not valid and shall not become effective until it is signed by an authorized representative of the WIA and an authorized representative of the Sublessee, and has been approved as to form by the Office of the Wyoming Attorney General and, if required by Wyo. Stat. Ann. § 9-2-1016(b)(iv)(D), approved by the Governor or his designee. The effective date of this Sublease shall be the date of the last such signature, and this Sublease shall commence on the date of the last signature or on the date specified in the Term of Sublease provision, whichever is later. This Sublease may be extended under the same terms and conditions by mutual written agreement of the parties to this Sublease.

**4. Rent Payment.** The Parties agree that no rent shall be due during the term of this Sublease. The WIA is subletting the Site to Sublessee in consideration of the publicity associated with the research that will benefit the State of Wyoming and Wyoming’s mineral extraction and power generation industries. The Parties acknowledge and agree that such publicity constitutes good and valuable consideration supporting this Sublease.

**5. Responsibilities of the WIA.**

**A. Environmental Regulatory Education.** In partnership with the Wyoming Department of Environmental Quality, the WIA will provide certain preliminary trainings to Sublessee on applicable state environmental regulations, including air quality permitting.

**B. Parking.** The WIA shall provide access to a **Parking Area** for Sublessee to use for the duration of this Sublease, in the approximate location and size depicted onDrawing 18. Sublessee may park only in the Parking Area for a reasonable length of time and nowhere else on the property. DFS personnel have the sole discretion to make decisions regarding the Parking Area.

**C. Quiet Enjoyment.** The WIA warrants that Sublessee shall be granted peaceable and quiet enjoyment of the premises free from any eviction or interference by the WIA at all times of the day and on all days of the year during the term of the Sublease, so long as the Sublessee performs in accordance with this Sublease.

**D.** **Repairs.** Does the WIA promise to do anything?

**E**. **Security**. The Site to be used by Sublessee for the ITC is located inside of a fence. All persons must be pre-approved by Basin Electric before entering the Site and DFS. Basin Electric reserves the right to refuse any person entry to the Site for any reason. Basin Electric has authorized the WIA to invite persons onto the Site only for the following purposes:

i. To conduct research to validate the commercial readiness of their processes relative to carbon capture and utilization of CO2 at the ITC; and

ii. To observe research activities at the ITC.

**6. Responsibilities of Sublessee.**

**A. Access to Premises.** Sublessee shall permit the WIA or its agents or designees, with or without prior written permission, to enter the premises occupied by Sublessee at all reasonable hours to inspect the Site. Sublessee shall also allow Basin Electric personnel access to the Site at all hours, for any or no reason, and with or without notice. The WIA shall notify Sublessee in advance of Basin Electric’s need to access the Site unless it is impracticable to do so.

**B**. **Compliance with DFS Rules & Practices**. Sublessee shall review, understand and agree to fully comply with the DFS safety and environmental rules and safe work practices manual.

**C. Condition Upon Surrender.** Sublessee shall be responsible for leaving the Site in a clean and orderly condition upon termination of this Sublease. Garbage and miscellaneous items shall be removed from the Site at the expense of Sublessee.

**D. Duty of Care.** The Sublessee and its agents and designees shall adhere to a standard of reasonable care while conducting all activity on the premises.

**E.** **Invitees**. Sublessee shall only invite Observers on to the Site upon prior written approval from Basin Electric, obtained through the WIA.

**F. Non-assignment.**  Neither Sublessee nor its successors or assigns shall assign, mortgage, pledge, or encumber this Sublease or sublet the premises in whole or in part, or permit the premises to be used or occupied by others.

**G.** **Permits**. Sublessee must comply with all applicable state and federal environmental laws and regulations, including receiving and complying with all necessary permits. Sublessee is solely responsible for any violation of any environmental permit or environmental law.

**H. Surrender of Possession.** Sublessee shall, on the last day of the term, or on earlier termination and forfeiture of this Sublease, peaceably and quietly surrender and deliver the premises to the WIA free of subtenants. This subsection applies to and includes all buildings, additions, and improvements constructed or placed thereon by Sublessee, except moveable trade fixtures, all in good condition and repair.

**I. Utilities.** Sublessee is solely responsible for LIST.

**7. Special Provisions.**

**A. Easements, Contracts, or Encumbrances.** The parties shall be bound by all existing easements, contracts, and encumbrances of record relating to the premises.

**B. Insurance.** During the term of this Sublease, The WIA shall obtain and maintain, at its own expense, insurance on the building and improvements. Sublessee shall obtain and maintain, at its own expense, insurance on its personal property and all its contents owned by it and located at the premises, with the WIA listed as a “co-insured” under such policies.

**C**. **Intellectual Property Rights**. Sublessee understands and acknowledges that all Research Tenants at the ITC are required by the ITC Legislation to enter into certain agreements regarding intellectual property rights with the State of Wyoming. Sublessee further acknowledges and agrees that it is subject to the intellectual property rights restrictions described in Section (n)(vi) of the ITC Legislation.

**D.** **Publicity**

i. Any publicity given by Sublessee to the ITC shall refer to the State of Wyoming, Wyoming Infrastructure Authority, and both owners of DFS: the Basin Electric Power Cooperative and the Wyoming Municipal Power Agency (Owners).

ii. Before publishing publicity including general references to the State of Wyoming, Sublessee shall provide a copy to the Governor’s Communication Director, via email, to obtain prior approval before release. Before releasing such publicity that includes any specific references to a Wyoming state official or state agency, Basin shall contact the Governor’s Communication Director, via telephone at (307) 777-7437, to obtain prior approval.

iii. Sublessee shall not use the Owners’ names, logos, or marks in advertising, signage, promotion, publicity, or fund-raising without the prior written approval of the Owners.

iv. Sublessee shall have the right to publish at any time and in any publication that they shall choose in their sole discretion any results or findings from the ITC that have been previously released to the public, and may publish any other results and findings with the prior written approval of the WIA, which approval shall not be unreasonably withheld, conditioned or delayed.

**E.** **Startup, Shutdown, Malfunction, Forced Outages, Upsets or Other Similar Events**. The obligations under this Sublease shall not interfere with the operation of DFS, at the sole discretion of Basin Electric via DFS personnel. Basin Electric may immediately discontinue, without notice and without liability, any service or obligation under this Sublease that interferes with or threatens to interfere with the operation of DFS. Basin Electric shall notify Sublessee in advance of a discontinuation of service unless it is impracticable to do so.

i. Basin Electric, without notice and without liability, may interrupt the flue gas stream or take any other action required to maintain operations at DFS, without liability to any Sublessee or other party to this Sublease.

ii. Basin Electric shall provide and deliver the slip stream of flue gas from DFS to the WIA and its Research Tenants “as is” with no warranty of fitness or other guarantee during startup, shutdown, malfunction, forced outages, upsets, or other similar events. Basin Electric is not liable for any interruptions in service or for changes in the quality or constituents of the flue gas stream under this Sublease, including any damage or harm to any equipment or for the interruption of any test that may occur during startup, shutdown, malfunction, forced outages, upsets, or other similar events.

**8. General Provisions.**

**A.** **Amendments.** Any changes, modifications, revisions, or amendments to this Sublease that are mutually agreed upon by the Parties to this Sublease shall be incorporated by written instrument, executed and signed by all parties to this Sublease and approved as to form by the Wyoming Office of the Attorney General.

**B. Americans with Disabilities Act and Nondiscrimination.** The Parties shall comply with the Civil Rights Act of 1964, the Wyoming Fair Employment Practices Act (Wyo. Stat. Ann. §§ 27-9-101 -106), the Americans with Disabilities Act, 42 U.S.C. § 12101 - 12213, and the Age Discrimination Act of 1975, 42 U.S.C. § 6101 - 6107, and any rules or regulations promulgated under these and any other state and federal anti-discrimination statutes. The Parties shall not discriminate against any individual on the grounds of age, sex, sexual orientation, creed, color, race, religion, national origin, ancestry, pregnancy, or disability in connection with the performance under this Sublease.

**C. Applicable Law/Venue.** The construction, interpretation and enforcement of this Sublease shall be governed by the laws of the State of Wyoming. The Courts of the State of Wyoming shall have jurisdiction over this Lease and the Parties. The proper venue shall be the First Judicial District, Laramie County, Wyoming.

**D. E.** **Entirety of Sublease.** This Sublease, consisting of six (6) pages, and Attachment A, consisting of one (1) page, constitute the entire agreement between the Parties and supersede all prior negotiations, representations or contracts, either written or oral.

**F. Indemnification.** The Sublessee shall release, indemnify, and hold harmless the State, the WIA, and their officers, agents, employees, successors and assignees from any cause of action, or claims or demands arising out of this Lease.

**G. Notice.** All notices to be given with respect to this Sublease shall be in writing. Each notice shall be sent by registered or certified mail, postage prepaid and return receipt requested, to the Party to be notified at the address set forth above or as it may be amended as provided for herein. Every notice shall be deemed to have been given at the time it shall be deposited in the United States mail in the manner prescribed herein. Nothing contained herein shall be construed to preclude personal service of any notice in the manner prescribed for personal service of a summons or other legal process, in which case notice shall be deemed to have been given at the time of such personal service.

**H. Prior Approval**. This Sublease shall not be binding upon any Party until this Sublease has been reduced to writing, approved as to form by the Wyoming Office of the Attorney General, and executed by all Parties.

**I.** **Public Records and Meetings Acts**. The Parties acknowledge that the WIA, as an agent and instrumentality of the State of Wyoming, is subject to the requirements of the Wyoming Public Meetings Act (Wyo. Stat. Ann §§ 16-4-401-408) and the Wyoming Public Records Act (Wyo. Stat. Ann. §§ 16-4-20-205) (Acts).

The Parties acknowledge that the Acts may require the WIA to conduct certain business in public and make certain records available for public inspection, upon proper request. The WIA shall provide Lessee with all public notices required under the Public Meetings Act. If Lessee is concerned about any information that could be revealed or discussed during the noticed public meeting, Lessee and the WIA shall work together prior to the public meeting to address those concerns, with the final decision on any disclosure being made in the sole discretion of the WIA.

If the WIA receives a public records request related to the ITC or this Sublease, the WIA shall forward a copy of the request to Sublessee. Sublessee shall communicate any objection or concerns regarding the request to the WIA within ten (10) business days of receipt of the request. Sublessee and the WIA shall work together to respond to any public records request and shall fully cooperate and assist one another in responding to any such request, with the final decision on any disclosure being made in the sole discretion of the WIA.

The WIA shall work in good faith to protect from disclosure any materials properly exempted under the Acts, and Sublessee shall hold the WIA harmless for any disclosures the WIA is required to make under either Act or any accidental disclosures made in the course of seeking to comply with the Act.

**J**. **Severability**. Should any portion of this Sublease be judicially determined to be illegal or unenforceable, the remainder of the Sublease shall continue in full force and effect, and the Parties may renegotiate the terms affected by the severance.

**K. Sovereign Immunity.** The State of Wyoming and the WIA do not waive sovereign immunity by entering into this Sublease, and specifically retain immunity and all defenses available to them as sovereigns pursuant to Wyo. Stat. § 1-39-104(a) and all other applicable law. Designations of venue, choice of law, enforcement actions, and similar provisions should not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Sublease shall not be strictly construed, either against or for either party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.

**L. Successors and Assigns.** This Sublease and the terms and conditions hereof apply to and are binding on the purchasers, heirs, legal representatives, successors, assignees, agents and employees of both Parties.

**M. Termination.** In addition to any other event provided for herein whereby this Sublease may be terminated, either party may terminate this Sublease upon thirty (30) days written notice of termination.

**N.** **Third Party Beneficiary Rights.** The Parties do not intend to create in any other individual or entity the status of third party beneficiary, and this Sublease shall not be construed so as to create such status. The rights, duties and obligations contained in this Sublease shall operate only between the Parties to this Sublease, and shall inure solely to the benefit of the Parties to this Sublease. The provisions of this Lease are intended only to assist the Parties in determining and performing their obligations under this Sublease.

**O. Time is of the Essence.** Time is of the essence in all provisions of this Sublease.

**P. Unlawful Activity.** Neither the WIA nor Sublessee shall use or occupy the premises or any part thereof for any unlawful purpose. A violation of this section by either party shall constitute a material breach of this Sublease and shall constitute sufficient grounds for immediate termination of this Sublease by the non-violating party. Sublessee agrees to use the sublet premises in full compliance with all state and federal laws, rules and regulations, and with all City ordinances.

**Q. Waiver.** The failure by the WIA or Sublessee to insist upon the strict performance of any term or condition of this Sublease or to exercise any right, power or remedy consequent upon a breach thereof shall not constitute a waiver of any such breach of such term or condition or a waiver of any other breach of this Sublease. A waiver of any breach shall not affect or alter this Sublease. Each and every term and condition of this Sublease shall continue in full force and effect with respect to any other then existing or subsequent breach thereof.

**R.** **Sublease Modification.** The WIA and Sublessee agree that any modification of this Sublease’s language without the express approval of the Wyoming Attorney General’s office renders this Sublease null and void in its entirety.

**THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK.**

**9. Signatures.** IN WITNESS THEREOF, the Parties to this Sublease, through their duly authorized representatives, have executed this Sublease on the dates set out below, and certify that they have read, understand, and agree to the terms and conditions of this Sublease.

The effective date of this Sublease is the date of the signature last affixed to this page.

**THE WYOMING INFRASTRUCTURE AUTHORITY:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Jason Beggar, Executive Director Date

**SUBLESSEE:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name/Title Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sublessee's Tax Identification/Social Security Number:

**WITNESS:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Signature of Witness) Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Witness’ name printed)

**ATTORNEY GENERAL’S OFFICE: APPROVAL AS TO FORM**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Elizabeth Morrisseau, Assistant Attorney General Date

**Attachment 3: Project Management Document**

**Attachment 4: Quarterly Progress Report**

The Research Tenant shall submit to the Wyoming Infrastructure Authority on a quarterly basis, progress reports including an updated Critical Path Schedule(s) as defined in the lease agreement. The Critical Path Schedule shall be updated against the baseline schedule proposed by the Research Tenant. Electronic copies of the Quarterly Progress Report shall be provided in Microsoft Word, Microsoft Excel, MS Project (for schedules) and Adobe Acrobat.

**Progress Reporting Requirements**

The Research Tenant shall submit a Quarterly Progress Reports meeting the following minimum requirements:

1. **Executive Summary - Current Quarter**

Provide a synopsis of project status addressing specific aspects of the project to include, site work and any major changes to the schedule or scope of the project. The report shall identify key testing achievements over the quarter; this may include amount of flue gas processed, quantity of CO2 removed, and criteria pollutants removed. The report shall identify major utilities/stream consumed/generated (cooling water, electric energy, steam, waste water).

1. **Personnel Safety**

A synopsis of the tenant’s safety performance for the quarter by month, including numbers and types of injuriesand lost time accidents, audit results, and site safety initiatives shall be provided.

1. **Environmental Report**

A synopsis of the Tenant`s environmental compliance for the Quarter shall be provided, including a description of any deviations and reporting from applicable regulations, codes and standards. The report shall include a synopsis of any spills or releases, cleanup and mitigation efforts, notifications and practices put in place to eliminate recurrence.

1. **Summary of Progress and Status of Engineering, Procurement, of Current Quarter**

A synopsis of the Project progress completed as of the current Quarter. Reporting format shall be based on completion of Milestones and other critical path activities, and construction, status of Tenant acquired permits or regulatory approvals.

Next Quarter — The expected progress for the project shall be provided in outline form based on engineering, procurement, shipment, construction, equipment installation and commissioning, and any issues related to obtaining utilities or other support from the ITC.

1. **Priorities/Issues/Concerns**

Identification and evaluation of problem areas, including financial problem areas, which are anticipated to have tenant require a modification of the contract, site coordination issues requiring owner support, or resolution or community relations issues requiring owner support or involvement.

1. **Schedule Update**

Report important items and events, such as test dates and durations, identify completion of milestones.

1. **Major Activities and Achievements**

The Report shall identify key activities and achievements, which may include amount of flue gas processed, tons of CO2 removed, and major utilities consumed (cooling water, electricity, steam, waste water generated).

**Attachment 5: Proposal Application Form**

***1. Project Title:***

***2. Key Project Personnel:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | PI Name/Title: | Co-PI Name/Title: | Co-PI Name/Title: | Co-PI Name/Title: |
| Organization |  |  |  |  |
| Mailing Address |  |  |  |  |
| Contact Info  (Phone/Email/Fax) |  |  |  |  |
|  |  |  |  |  |
| **Information for:** | **Project Director** | **Contract Administrator** | **Signature Authority** |  |
| Name |  |  |  |  |
| Organization |  |  |  |  |
| Mailing Address |  |  |  |  |
| Contact Info  (Phone/Email/Fax) |  |  |  |  |

***3. Signature Line:***

|  |  |
| --- | --- |
| ***Signature of Investigator*** | ***Date*** |
| ***Signature of Authority*** | ***Date*** |

1. CO2 purity specifications: www.netl.doe.gov/File%20Library/Research/Energy%20Analysis/Publications/QGESS\_CO2Purity\_Rev3\_20130927\_1.pdf [↑](#footnote-ref-1)