PROGRAMMATIC AGREEMENT
AMONG
THE ILLINOIS HISTORIC PRESERVATION AGENCY, THE FUTUREGEN INDUSTRIAL ALLIANCE, INC., AND THE U.S. DEPARTMENT OF ENERGY REGARDING THE DESIGN, CONSTRUCTION, AND OPERATION OF THE FUTUREGEN 2.0 PROJECT, AN OXY-COMBUSTION POWER GENERATION FACILITY, PIPELINE, AND CO_2 STORAGE RESERVOIR PROJECT IN MORGAN COUNTY, ILLINOIS

WHEREAS, the United States Department of Energy has entered into two Cooperative Agreements with the FutureGen Industrial Alliance, Inc. (Alliance) for the development, construction and operation of the FutureGen 2.0 Project (Project) (Cooperative Agreement Nos. DE-FE0001882 and DE-FE0005054), including the modification of an existing Meredosia Power Generation Station near Meredosia, Illinois; construction of approximately 30 miles of a carbon dioxide (CO_2) transport pipeline; and the development of surface and subsurface facilities for the storage of CO_2 into an underground storage field. The Project will include associated above and below ground facilities (such as pump stations, transmission facilities, access roads, and injection and monitoring wells) and ancillary facilities (such as utilities, office and visitor space, temporary workplace areas, and contractor lay down yards); and

WHEREAS, DOE recognizes its role as the "Agency Official" responsible for ensuring that, in the provision of financial assistance for the Project, DOE complies with Section 106 of the *National Historic Preservation Act (NHPA)* (16 U.S.C. 470f, as amended), and its implementing regulations, "*Protection of Historic Properties*," (36 CFR § 800); and

WHEREAS, DOE has determined that the activities associated with the construction and operation of the Project may have an adverse effect on archaeological properties that are eligible for the National Register of Historic Places (NRHP), and has consulted with the Illinois Historic Preservation Agency, which is designated as the State Historic Preservation Officer for Illinois (SHPO) and Native American Tribes pursuant to 36 CFR § 800; and

WHEREAS, no other properties of historic or architectural significance exist within the project area, and no human remains are likely to be encountered; and

WHEREAS, this Project is complex and its effects on historic properties cannot be fully determined at this time, and DOE intends to use the provisions of this Programmatic Agreement (PA) to address applicable requirements of Sections 106 of the *National Historic Preservation Act (NHPA)*, as amended (16 U.S.C. 470f and 470h-2(f)), and its implementing regulations (36 CFR 800.14(b)); and

WHEREAS, the Alliance acknowledges (as the Project's managing and operating contractor and recipient of Federal funding) its responsibility for preparing the necessary information and analysis for *National Historic Preservation Act* (NHPA) compliance pursuant to 36 CFR § 800.2(a)(3) and has therefore been invited to participate in this PA document as a consulting party; and

WHEREAS, the definitions listed in 36 CFR § 800 are applicable throughout this Programmatic Agreement;

NOW, THEREFORE, the signatories to this Programmatic Agreement agree that the undertaking shall be implemented in accordance with the following stipulations which the signatories agree will ensure all necessary compliance with the relevant provisions of the NHPA.

Stipulations

I. Professional Qualifications Standards

All actions prescribed by this agreement that involve the identification, evaluation, analysis, recording, treatment, monitoring, or disposition of historic properties, or that involve the reporting or documentation of such actions in the form of reports, forms, or other records, shall be carried out by or under the direct supervision of a person or persons who meets, at a minimum, the qualifications for history, archaeology, or architectural history specified in the Secretary of Interior's "*Professional Qualifications Standards*" (36 CFR § 800.2(a)(1)) and (48 FR 44739-190), as appropriate.

II. Identification and Evaluation of Potential Historic Properties

A. Identification of Historic Properties

1) The Alliance will take all measures necessary to discover, preserve, and avoid significant historic properties eligible for listing on the National Register of Historic Places (NRHP). In consultation with the SHPO, the Alliance will describe and define the Area of Potential Effect (hereafter referred to as the APE) in accordance with the definition contained in 36 CFR § 800.16(d). The APE may be modified upon consultation with the SHPO to facilitate avoidance and will be documented through the implementation of historic property surveys and testing, documentary research, recordation, and other investigation data. The APE may be amended without amending the Programmatic Agreement. The APE may be amended by agreement of the signatories and shall be memorialized in writing.
2) The Alliance will ensure that all reconnaissance surveys and subsurface testing are conducted in a manner consistent with the Secretary of the Interior's *Standards and Guidelines for Identification and Evaluation* (48 FR 44720-23) and take into account the National Park Service publication "*The Archaeological Survey: Method and Uses*" (1978) and any extant or most recent version of appropriate SHPO guidelines for historic properties reconnaissance survey/reports, related guidance, etc.

B. Evaluation of Historic Properties

1) In consultation with the SHPO, the Alliance will evaluate the eligibility of significant historic properties by applying the National Register of Historic Places (NRHP) criteria (36 CFR § 60.4).
2) For those properties that the SHPO agrees are not eligible for inclusion in the NRHP, no further historic properties investigations will be required, and Project activities may proceed in those areas.
3) If the survey results in the identification of properties that the SHPO agrees are eligible for inclusion on the NRHP, the Alliance shall treat such properties in accordance with Part III below.
4) If the Alliance and the SHPO do not agree on NRHP eligibility, or if the ACHP or the National Park Service so request, DOE will request a formal determination of eligibility from the Keeper of the NRHP, National Park Service, whose determination shall be final.
5) Relative to the treatment of historic properties and the identification of traditional cultural properties, DOE and/or the SHPO will provide the appropriate Tribe(s) and the Tribal Historic Preservation Officer(s) (THPO) information related to the treatment measures proposed by the Alliance.

III. Treatment of Historic Properties

Those individual historic properties that DOE and the SHPO agree are eligible for nomination to, or that the Keeper has determined are eligible for inclusion on the NRHP, will be treated in the following manner:

1) If DOE, in consultation with the SHPO, determines that no other actions are feasible to avoid and minimize effect to archaeological properties, then the Alliance will develop a treatment plan, which may include various levels of data recovery, recordation, documentation, and active protection measures. Alliance will implement the treatment plan in consultation with DOE and the SHPO.
2) If data recovery is the agreed-upon treatment, the data recovery plan will address substantive research questions developed in consultation with the SHPO. The treatment plan shall be consistent with the Secretary of the Interior's *Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37) and take into account the ACHP's publication *Treatment of Archaeological Properties* (1980) and pertinent SHPO guidance. It will specify, at a minimum, the following:

    a. The property, properties, or portions of properties where the treatment plan is to be carried out;
    b. The research questions to be addressed, with an explanation of research relevance and importance;
    c. The methods to be used, with an explanation of methodological relevance to the research questions;
    d. Proposed methods of dissemination results of the work to the interested public; and
    e. Proposed schedule for the submission of the results to the SHPO.

3) The Alliance will submit the treatment plan to DOE and/or the SHPO for 30 days' review and comment. The Alliance will take into account DOE and/or SHPO comment(s) and will ensure that the data recovery plan is implemented.
4) The Alliance will ensure that the treatment plan is carried out by or under the direct supervision of an archaeologist(s), architectural historian(s), and/or other appropriate cultural resource specialist that meets, at a minimum, the Secretary of the Interior's *Professional Qualifications Standards* (48 FR 44738-9).
5) The Alliance will ensure that adequate provisions, including personnel, equipment, and laboratory space is available for the analysis and temporary curation of materials, artifacts, and biological specimens recovered from historic properties.
6) The Alliance will develop and implement an adequate program in consultation with the SHPO to secure and protect historic properties from vandalism during the process of data recovery.

IV. Treatment of Human Remains, Funerary Objects, Sacred Objects, or Objects of Cultural Patrimony

A. Should human remains, funerary objects, sacred objects, or objects of cultural patrimony be encountered or collected, the Alliance will comply with all provisions outlined in applicable Federal or state law, regulations, guidance, provisions, etc., and any decisions regarding the treatment of human remains will be made recognizing the rights of lineal descendants, Tribes and other recognized Native American groups in consultation with the SHPO, THPO, and /or other appropriate legal authority regarding the evaluation, assessment, documentation, and disposition of remains or objects.

B. If burials are discovered during the investigations covered by this PA, the Alliance shall ensure that required notifications of the discovery will be made to the county coroner and the SHPO as stipulated in *the Human Skeletal Remains Protection Act* (20 ILCS 3440, 17 IAC 4170). Then, if authorized by the SHPO under *the Human Skeletal Remains Protection Act* (20 ILCS 3440, 17 IAC 4170) and its rules, human burials, human remains, and any associated burial artifacts will be removed following procedures for recordation and reporting that are similar to those established under the *Human Skeletal Remains Protection Act* (20 ILCS 3440, 17 IAC 4170). No excavation of human remains will be performed except under the direction of a "Certified Skeletal Analyst" (17 IAC 4170.300(f)).

V. Unexpected Discoveries

The Alliance will notify DOE and the SHPO as soon as practicable if it appears that the Project will affect a previously unidentified property that may be eligible for the NRHP or affect a known historic property in an unanticipated manner.

1) The Alliance will stop construction activities in the vicinity of the discovery and will take all reasonable measures to avoid or minimize harm to the

property until consultation with the SHPO. (In the case of human remains, The Alliance will notify the appropriate agencies as detailed in Part IV, subpart B of this PA.)

2) DOE will notify the SHPO at the earliest possible time and consult with the SHPO to develop actions that will take into account the effects of the Project. DOE will notify the SHPO of any time constraints, and DOE and the SHPO will mutually agree upon time frames for this consultation.
3) The Alliance may participate in this consultation.
4) DOE will provide the SHPO with written recommendations that take the effect of the Project into account.
5) If the SHPO does not object to DOE's recommendations within the agreed upon time frame, DOE will require the Alliance to modify the activities as necessary to implement the recommendations.

VI. Dispute Resolution

A. Should the SHPO, the ACHP, the Alliance or any other consulting party object within time frames provided by this PA to any plans, specifications, or actions provided for review pursuant to this PA, DOE will consult further with the objecting party to seek resolution.

B. Should DOE object within time frames provided by this PA to any plans, specifications, or actions provided for review pursuant to this PA, DOE will consult further with the other parties to seek resolution. If DOE determines within 14 days of receipt that the SHPO, the ACHP, or the Alliance objection cannot be resolved, DOE will forward to the ACHP all documentation relevant to the dispute including DOE's proposed resolution to the objection.

C. Any recommendation or comment provided by the ACHP will pertain only to the subject of the dispute. The responsibility of the signatories to carry out all actions under this PA that are not subject to the dispute will remain unchanged. The signatories will continue to implement other terms of the PA that are not subject to dispute.

VII. Duration, Amendments, and Termination

A. Unless terminated pursuant to Subpart C below, this PA shall remain in effect from the date of execution until DOE, in consultation with all other signatories, determines that the terms of this PA have been fulfilled in a satisfactory manner. Upon a determination by DOE that the terms of this PA have been satisfactorily fulfilled, this PA will terminate and have no further force or effect. DOE will provide all other signatories with written notice of its determination and of termination of this PA. Unless amended otherwise, this will expire on December 31, 2020.

B. If any signatory to the PA determines that the stipulations of the PA cannot be fulfilled, the signatories may consult to seek amendment of the PA. Amendments to this PA will be specific to the applicable and legitimate circumstances unless otherwise agreed to by the signatories.

C. DOE, the SHPO, the ACHP, or the Alliance may terminate this PA by providing 30 days written notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this PA will require compliance with 36 CFR § 800. This PA may be terminated without further consultation by the execution of a subsequent PA that explicitly terminates or supersedes its terms, or by DOE's implementation of Program Alternatives, pursuant to 36 CFR §800.14.

VIII. Execution of this Programmatic Agreement

This PA may be executed in counterparts, with a separate page for each signatory, and DOE will ensure that each party is provided with a fully executed copy. This PA will become effective on the date of the last signature to this PA.

The execution and implementation of this Programmatic Agreement evidences that DOE has afforded the SHPO and the ACHP reasonable opportunity to comment on its administration of all aforementioned activities associated with the FutureGen 2.0 Project and, in addition, further evidences that DOE has satisfied its responsibilities with regard to complying with Section 106 of the *National Historic Preservation Act* (NHPA) (16 U.S.C. 470f, as amended), its implementing regulations, "*Protection of Historic Properties*," (36 CFR § 800) and the *American Indian Religious Freedom Act (AIRFA)* (42 U.S.C. 1996 and 1996a) for all undertakings associated with the FutureGen Project.

U.S. Department of Energy

By:_____ **Date:** 8/5/13

Illinois State Historic Preservation Officer

By:_____ **Date:** 7/25/13

CONCUR:

FutureGen Industrial Alliance, Inc.

By: Keith K. Humphrey **Date:** 7/18/13