FINAL PROGRAMMATIC AGREEMENT BETWEEN THE FEDERAL ENERGY REGULATORY COMMISSION AND THE OKLAHOMA STATE HISTORIC PRESERVATION OFFICER FOR MANAGING HISTORIC PROPERTIES THAT MAY BE AFFECTED BY ISSUING AN ORIGINAL LICENSE TO THE CITY OF BROKEN BOW, OKLAHOMA FOR THE CONSTRUCTION AND OPERATION OF THE PINE CREEK LAKE DAM HYDROELECTRIC PROJECT IN MCCURTAIN COUNTY OKLAHOMA (FERC No. 12646-001)

- WHEREAS, the Federal Energy Regulatory Commission or its staff (hereinafter, "Commission") proposes to issue an original license to the City of Broken Bow, Oklahoma (hereinafter, "Licensee") to construct, operate, and maintain the Pine Creek Lake Dam Hydroelectric Project (hereinafter, "Project") as authorized by Part I of the Federal Power Act, 16 U.S.C. sections 791(a) through 825(r) as amended; and
- WHEREAS, the Commission has determined that issuing such a license may affect properties included in or eligible for inclusion in the National Register of Historic Places (hereinafter, "historic properties"); and
- WHEREAS, the area of potential effect (hereinafter, "APE") for the Project includes: (1) the lands enclosed by the Project boundary which would encompass the proposed diversion structure, penstock, powerhouse, tailrace, and transmission line; and (2) any lands or properties outside the Project boundary such as access roads and lay down areas associated with Project construction where Project construction and operation or Project-related actions may cause changes in the character or use of historic properties, if any exist; and
- WHEREAS, Appendix A of this Programmatic Agreement provides a description of the Licensee's proposal for operating and maintaining the Project, area of potential

> effect, historic properties, and anticipated effects identified as of the date of this Programmatic Agreement; and

- WHEREAS, the Commission has consulted with the Oklahoma State Historic Preservation Officer (hereinafter, "SHPO") pursuant to 36 C.F.R. section 800.14(b) of the Advisory Council on Historic Preservation's (hereinafter, "Advisory Council") regulations (36 C.F.R. Part 800), implementing section 106 of the National Historic Preservation Act (16 U.S.C. 470f; hereinafter, "section 106"); and
- WHEREAS, the Licensee has participated in the consultation and has been invited to concur in this Programmatic Agreement; and
- WHEREAS, the Oklahoma State Archaeologist; the Caddo Nation of Oklahoma, Choctaw Nation of Oklahoma, and U.S. Army Corps of Engineers (hereinafter, "consulting parties") have participated in the consultation and have been invited to concur in this Programmatic Agreement; and
- WHEREAS, the Commission will require the Licensee to implement the provisions of this Programmatic Agreement as a condition of issuing an original license for the Project; and
- **NOW THEREFORE**, the Commission and the SHPO agree that the Project will be administered in accordance with the following stipulations in order to satisfy the Commission's section 106 responsibilities during the term of the Project's license.

STIPULATIONS

The Commission, upon issuing a license for this Project, will ensure that the Licensee implements the following stipulations. All stipulations that apply to the Licensee will similarly apply to any and all of the Licensee's successors. Compliance with any of the following stipulations does not relieve the Licensee of any other obligations it has under the Federal Power Act, the Commission's regulations, or its license.

I. HISTORIC PROPERTIES MANAGEMENT PLAN

- A. Within one year of license issuance for this Project, the Licensee will file for the Commission's approval a Historic Properties Management Plan (hereinafter, "HPMP") specifying how historic properties will be managed in the Project's APE, as defined in 36 C.F.R. section 800.16(d), during the term of this license. During development of the HPMP, the Licensee will consult with the SHPO and consulting parties, as defined in 36 C.F.R. section 800.2. The Licensee will seek concurrence of the SHPO in the HPMP.
- B. The Licensee will take into account "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines" (*Federal Register*, September 29, 1983, Vol. 48, No. 190, Part IV, pp. 44716-44740; hereinafter, "Secretary's Standards") and the "Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Projects"¹ while developing the HPMP. The HPMP will be developed by or developed under the direct supervision of a person or persons who meet, at a minimum, the professional qualifications standards for architectural history and archeology in the Secretary's Standards (48 *Federal Register* 44738-39).
- C. The HPMP will, at a minimum, address the tasks listed below. The HPMP will also specify how each task will be carried out and when it will be completed.
 - 1. Conducting an archaeological inspection of the APE prior to project construction and, for any resources found during the inspection including those of religious and cultural significance to Indian tribes, determination of potential effects and consideration of reasonable alternatives for avoiding, minimizing, or mitigating adverse effects to those resources;
 - 2. Completion, if necessary, of identification of historic properties within the Project's APE, including those of religious and cultural significance to Indian tribes;

¹ This document was issued jointly by the Commission and the Advisory Council on May 20, 2002. The document is available at http://www.ferc.gov/industries/hydropower/gen-info/guidelines/hpmp.pdf.

- 3. Continued use and maintenance of historic properties;
- 4. Treatment of historic properties threatened by looting or vandalism;
- 5. Treatment of historic properties threatened by project-induced erosion and other project-related ground-disturbing activities;
- Treatment and disposition of any human remains that may be discovered, taking into account any applicable state laws and the Advisory Council's "Policy Statement Regarding Treatment of Human Remains and Grave Goods" (September 27, 1988, Gallup, NM);
- 7. Compliance with the Native American Graves Protection and Repatriation Act (25 U.S.C. section 3001), if Tribal or Federal lands are within the APE.
- 8. Mitigation of unavoidable adverse effects on historic properties;
- Discovery of previously unidentified properties during project construction and operation;
- 10. Public interpretation of the historic and archaeological values of the Project; and
- 11. Coordination with the SHPO and consulting parties during implementation of the HPMP.

II. HPMP REVIEW AND IMPLEMENTATION

- A. The Licensee will submit the HPMP, along with documentation of the views of the SHPO and consulting parties, to the Commission for review and approval.
- B. If the SHPO has concurred in the HPMP, and the Commission determines that the HPMP is adequate, the Commission will forward a copy of the HPMP to the Advisory Council for filing.

- C. If the SHPO has not concurred in the HPMP, or the Commission finds the HPMP inadequate, the Commission will consult with the licensee and the SHPO to seek agreement on the HPMP. If concurrence is not reached within 45 days, the Commission will request that the Advisory Council enter into consultation to seek agreement on the HPMP.
 - 1. If agreement is reached on the HPMP, the Commission will forward a copy of the revised HPMP to the Advisory Council for filing.
 - 2. If agreement on the HPMP cannot be reached among the Commission, SHPO, Licensee, and the Advisory Council, the Commission will request that the Advisory Council comment pursuant to Stipulation IV.B of this Programmatic Agreement; or the Advisory Council may terminate consultation and comment on its own.
- D. The Licensee will, within 30 days of every anniversary of the date of issuance of the original license, file a report with the SHPO of activities conducted under the implemented HPMP.

III. INTERIM TREATMENT OF HISTORIC PROPERTIES

- A. Pending review and implementation of the HPMP pursuant to Stipulation II, the Licensee will consult with the SHPO and consulting parties regarding the impact of the following:
 - 1. all project-related activities that require ground-disturbance; and
 - 2. project-induced shoreline erosion of archeological sites not attributable to flood flows or phenomena, such as wind-driven wave action, erodible soils, and loss of vegetation due to natural causes.
- B. Consultation will be in accordance with 36 C.F.R. sections 800.4 and 800.5, with the Licensee acting as the Agency Official. If the Licensee and the SHPO agree that the activity will not adversely affect historic properties, the Licensee may proceed in accordance with any agreed-upon treatment measures or conditions.

C. If either the licensee or the SHPO determines that the activity will have an adverse effect, and the affected property is a National Historic Landmark, the licensee will submit the matter to the Commission, which will initiate the process set forth at 36 C.F.R. section 800.6. Otherwise, the licensee and the SHPO will consult to develop a strategy for avoiding or mitigating such adverse effects. If the licensee and the SHPO can reach agreement, the licensee will implement the agreed-upon strategy. If they disagree, the licensee will submit the matter to the Commission, which will initiate the process set forth at 36 C.F.R. sections 800.6 and 800.7(a) through (c)(3).

IV. DISPUTE RESOLUTION

- A. If at any time during implementation of this Programmatic Agreement and the resulting HPMP, the SHPO, the Licensee, or a consulting party objects to any action or any failure to act pursuant to this Programmatic Agreement or the HPMP, the party may file written objections with the Commission.
 - 1. The Commission will consult with the objecting party, and with other parties or consulting party as appropriate, to resolve the objection.
 - 2. The Commission may initiate on its own such consultation to remove any of its objections.
- B. If the Commission determines that the objection cannot be resolved, the Commission will forward all documentation relevant to the dispute to the Advisory Council and request that the Advisory Council comment. Within 45 days after receiving all pertinent documentation, the Advisory Council will either:
 - 1. Provide the Commission with recommendations, which the Commission will take into account in reaching a final decision regarding the dispute; or
 - Notify the Commission that it will comment pursuant to 36 C.F.R. section 800.7(c)(1) through (c)(3) and section 110(a)(1) of the National Historic Preservation Act, and proceed to comment.

C. The Commission will take into account any Advisory Council comment provided in response to such a request, with reference to the subject of the dispute, and will issue a decision on the matter. The Commission's responsibility to carry out all actions under this Programmatic Agreement that are not the subject of dispute will remain unchanged.

V. AMENDMENT AND TERMINATION OF THIS PROGRAMMATIC AGREEMENT

- A. The Commission, the SHPO, or the Licensee may request that this Programmatic Agreement be amended, whereupon these parties will consult in accordance with 36 C.F.R. section 800.14(b) to consider such amendment.
- B. The Commission or the SHPO may terminate this Programmatic Agreement by providing 30 days written notice to the other parties, provided that the Commission, the SHPO, and the Licensee consult during the 30-day notice period in order to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the Commission will comply with 36 C.F.R. sections 800.3 through 800.7(c)(3), with regard to individual actions covered by this Programmatic Agreement.

Execution of this Programmatic Agreement by the Commission and the State Historic Preservation Officer, and subsequent implementation of this Programmatic Agreement, evidences that the Commission has satisfied its responsibilities pursuant to section 106 of the National Historic Preservation Act, *as amended*, for all individual actions carried out under the license. Provided, however, that unless and until the Commission issues a license for the Project and this Programmatic Agreement is incorporated by reference therein, this Programmatic Agreement has no independent legal effect for any specific license applicant or Project.

FEDERAL ENERGY REGULATORY COMMISSION

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Ann F. Miles Director, Division of Hydropower Licensing

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OKLAHOMA STATE HISTORIC PRESERVATION OFFICER

acklow Date: 2-25-09 By: <

Bob Blackburn State Historic Preservation Officer

CONCUR: OKLAHOMA ARCHEOLOGICAL SURVEY

By:_____ Date: _____ Robert L. Brooks

State Archaeologist

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CONCUR: CITY OF BROKEN BOW, OKLAHOMA

By: ______ Date: ______ Date: ______

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CONCUR: CADDO NATION OF OKLAHOMA

By:_____ Date: _____

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CONCUR: CHOCTAW NATION OF OKLAHOMA

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CONCUR: U.S. ARMY CORPS OF ENGINEERS

By: Sum AG Date: 25 FEB. 2009

Sherman Jones South Western Division Corps of Engineers

Appendix A²

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL ENERGY REGULATORY COMMISSION AND THE OKLAHOMA STATE HISTORIC PRESERVATION OFFICER, FOR MANAGING HISTORIC PROPERTIES THAT MAY BE AFFECTED BY ISSUING AN ORIGINAL LICENSE TO THE CITY OF BROKEN BOW, OKLAHOMA FOR THE CONSTRUCTION AND OPERATION OF THE PINE CREEK LAKE DAM HYDROELECTRIC PROJECT IN MCCURTAIN COUNTY OKLAHOMA

PROJECT, HISTORIC PROPERTIES, AND ANTICIPATED EFFECTS

The purpose of this appendix is to specify the factual basis of the Programmatic Agreement. Here, relevant facts concerning the Project and modifications to the Project proposed by the Licensee under the Commission's licensing procedures are reviewed; historic properties subject to the Programmatic Agreement's stipulations are, in part, identified; and the anticipated effects of issuing the license are disclosed.

On July 6, 2006, the Licensee filed an application for an original license to construct, operate, and maintain the proposed Pine Creek Lake Dam Hydroelectric Project (FERC No. 12646) at the Pine Creek dam located on the Little River in McCurtain County, Oklahoma.

We, the parties to the Programmatic Agreement, anticipate that issuing an original license to construct, operate, and maintain the proposed Project may pose adverse effects to historic properties. We anticipate that any adverse effects can be mitigated by executing a Programmatic Agreement requiring the Licensee to develop and implement an HPMP, and incorporating the executed Programmatic Agreement into any license that the Commission issues for the Project.

² Information in this Appendix is taken from: the City of Broken Bow's license application for the Pine Creek Lake Dam Hydropower Project, P-12646, filed July 6, 2006; The City of Broken Bow's Response to Commission Staff's Request for Additional Information for the Pine Creek Lake Dam Hydropower Project, filed February 26, 2007; and the Environmental Assessment for Hydropower License for the Pine Creek Lake Dam Hydropower Project, issued by FERC – Office of Energy Projects, Division of Hydropower Licensing, September 2008.

I. THE PROJECT

A. Existing Features and Operation

The U.S. Army Corps of Engineers' (hereinafter, "Corps") existing Pine Creek dam consists of a 7,712-foot-long by 124-foot-high earthfill dam and 608-foot-wide uncontrolled gravity ogee weir-type saddle spillway at the southwest end of the dam. There is also an earthfill dike southwest of the spillway. The total length of the dam, dike and spillway is 22,470 feet. The outlet works are located near the original Little River channel and consist of one 13-foot-diameter conduit, a 4-foot-diameter low-flow pipe, and one 3-foot-diameter water supply pipe. The outlet works are controlled by two slide gates, each 5.67 feet by 13 feet, operated in tandem.

Pine Creek Lake was authorized for use for flood control, water supply, water quality, recreation, and fish and wildlife habitat. The reservoir, constructed in 1969, is about 14.8 miles long, has an area of 3,800 acres at the normal conservation pool elevation of 438.0 feet National Geodetic Vertical Datum, and has a storage capacity of 53,800 acre-feet. Additional flood control storage of about 390,000 acre-feet is available between the conservation pool elevation and elevation 480.0 feet, the top of the flood control pool. At the normal conservation pool, the reservoir is relatively shallow, with an average depth of 14.2 feet and a maximum depth of 55.5 feet. The dam is operated with a minimum flow release of 65 cubic feet per second to provide for protection of water quality and aquatic habitat and for water supply in the Little River downstream of the Project.

B. Proposed Project Features and Operation

The Licensee proposes to construct a new 130-foot-wide by 23-foot-long outlet structure connecting to the existing 13-foot-diameter outlet conduit. A steel liner would be placed in the existing 13-foot-diameter outlet conduit to withstand the increased pressures caused by the turbine generators. The end of the 13-foot-diameter conduit would be used to divert flows from the 13-foot conduit into the powerhouse intakes. The 112-foot-wide by 73-foot-long powerhouse would be located approximately 460 feet downstream of the dam. Two turbine generator units would be installed: one small low-flow Kaplan S-type turbine, which would have a rated capacity of 702 kilowatts at a maximum power head of 49 feet, and one large high-flow Kaplan Eco-Bulb turbine, which would have a 104-inch-diameter adjustable blade runner, adjustable wicket gates, and a hydraulic governor. The larger unit would have a rated capacity of 6.01 megawatts at a maximum power head of 49 feet. The Project would be operated in accordance with the Corps' daily release schedule, using available flow releases from the Corps' Pine Creek dam. The Project would have an average annual generation of 15,900 megawatt-hours.

C. Proposed Project Boundary

The proposed Project boundary encloses a portion of the existing Pine Creek dam, a portion of the 13-foot conduit intake and a new intake structure, powerhouse, tailrace, and transmission line. The Project would occupy approximately 10.12 acres of lands administered by the Corps. The primary transmission line would parallel the downstream face of the dam and tie into an existing distribution line.

D. Licensee's Proposed Environmental Measures

The Licensee proposes to conduct an archaeological survey of the Project area along the transmission line route and in the construction areas prior to any landdisturbing activities. Broken Bow has also proposed various environmental measures for other environmental resources.

II. HISTORIC PROPERTIES IDENTIFIED

A. Area of Potential Effect

The APE for the Project includes: (1) the lands enclosed by the Project boundary which would encompass the proposed diversion structure, penstock, powerhouse, tailrace, and transmission line; and (2) any lands or properties outside the Project boundary such as access roads and lay down areas associated with Project construction where Project construction and operation or Project-related actions may cause changes in the character or use of historic properties, if any exist.

B. Historic Properties

In a letter to the Licensee dated August 17, 2005, the SHPO stated that there are no known historic properties within the project's APE. Although the proposed project area was disturbed during construction of the Pine Creek dam, the Oklahoma State Archaeologist stated, in a letter to the Licensee dated July 29, 2005, that (a) there are known archaeological sites near the project, (b) archaeological materials are likely to be encountered, and (c) an archaeological inspection is necessary prior to project construction.

III. ANTICIPATED EFFECTS

A. Archaeological Resources

The proposed issuance of an original license to Broken Bow for the Pine Creek Lake Dam Hydroelectric Project could have adverse effects on archaeological historic resources in the project's APE.

Although there are no known archaeological resources in the project's APE, there is a possibility that as-yet-unknown archaeological resources would be encountered during project-related ground disturbing activities. Thus, as the Oklahoma State Archaeologist recommends and Broken Bow proposes, an archaeological inspection should be conducted prior to project construction to identify any archaeological resources that may exist in the Project's APE.

The HPMP would provide for conducting an archaeological inspection within the Project's APE prior to project construction to identify archaeological resources, and for: (a) evaluation of archaeological resources that may be found, including those of religious and cultural significance to Indian tribes; (b) determination of potential effects, and (c) consideration of reasonable alternatives for avoiding, minimizing, or mitigating adverse effects. The HPMP would also provide for appropriate treatment and disposition of any human remains that may be discovered, and for compliance with the Native American Graves Protection and Repatriation Act.

B. Previously Undiscovered Historic Properties

Although the HPMP would provide for an archaeological inspection of the Project's APE prior to project construction to identify archaeological resources that may exist in the APE, there remains a possibility that historic and archaeological resources not discovered during the inspection could still be encountered during project construction and operation. Therefore, the HPMP should address discovery of previously unidentified properties during project construction and operation.