MEMORANDUM OF AGREEMENT
BETWEEN

THE FEDERAL ENERGY REGULATORY COMMISSION

AND
GREAT RIVER HYDROPOWER, LLC

AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER

AND
THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER

REGARDING THE LOCK & DAM NO. 21 HYDROELECTRIC PROJECT ON THE MISSISSIPPI RIVER

MARION COUNTY, MISSOURI
AND
ADAMS COUNTY, ILLINOIS

FERC PROJECT NO. 13637

WHEREAS, in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, the Federal Energy Regulatory Commission (FERC) proposes to grant a license to Great River Hydropower, LLC (GR Hydro) to introduce hydroelectric generation at Lock & Dam No. 21.

WHEREAS, Lock & Dam No. 21 is the only property in the Area of Potential Effects (APE) that is listed in or may be eligible for the National Register of Historic Places; and

WHEREAS, to the best of our knowledge and belief, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 USC 3001-13 [PL 101-601]) are expected to be encountered in archaeological investigations within the APE;

WHEREAS, interested federally recognized Native American Tribes have been notified of the proposed project actions and did not respond regarding comments or participation

in the process. Therefore, it is presumed that they do not have any concerns regarding the project.

NOW, THEREFORE, the FERC and the Illinois and Missouri State Historic Preservation Offices (SHPOs) agree that upon the FERC's decision to proceed with the issuance of the license, the FERC shall ensure that the following stipulations are implemented in order to take into account the adverse effects of the development of the Lock & Dam No. 21 Hydroelectric Project to the historic property that is located within the area of potential effect.

Great River Hydropower LLC (GR Hydro) shall ensure that the following measures are carried out:

1. Project facility design

As project details are refined, GR Hydro will continue to work to minimize potential visual impacts in the historic district. Aesthetic details will be considered for the concrete control towers that are compatible with the existing concrete structures within the dam. The exterior of the control building will be painted a shade that blends with the surrounding landscape.

The facility design will follow the guidance provided in the *Secretary of the Interior's Standards for Historic Preservation Projects*. The new construction will be compatible with the size, scale, and materials of the existing facility. Prior to construction activities, GR Hydro will provide the Illinois and Missouri SHPOs with an opportunity to review the facility design plans. The SHPOs will have 30 days to provide written comments. GR Hydro will incorporate comments into the revised plans or consult with the SHPOs regarding proposed revisions.

2. Photographic documentation

GR Hydro will complete digital photographic documentation of the Lock & Dam No. 21 Historic District before, during, and after construction activities. Photographs will be taken of the resources within the historic district and the setting, including the Missouri shoreline, prior to the commencement of construction activities; during construction of the control towers and submersible turbines; and within one year of construction completion.

Within one year of construction completion, GR Hydro will provide a complete set of labeled, 5x7 archival quality color photographs and digital images on CD labeled according to National Park Service guidelines to the Illinois and Missouri SHPOs and the U.S. Army Corps of Engineers-Rock Island District (USACE).

3. Archaeological survey

Ground-disturbing activities on the river floor may extend outside the APE for archaeology. In addition, there may be potential for scour and/or erosion downstream along the Missouri shoreline. Final plans for river floor grading and the identification of potential downstream erosion will likely result in a refined project boundary and APE. In consultation with the Illinois and/or Missouri SHPO, unsurveyed lands within the APE will be surveyed as these project activities are refined. Upon completion of survey, reports

will be submitted to the appropriate SHPO for review prior to commencement of related project activities.

4. Alterations

GR Hydro will coordinate with the FERC for review and comment if they propose future physical alterations to the facility. Based on project activities, the FERC will determine if revisions to the HPMP and Illinois and/or Missouri SHPO coordination is necessary.

5. Emergency Undertakings

GR Hydro will notify the USACE, Illinois SHPO, and Missouri SHPO of an emergency undertaking should it require major project modifications to historic properties in the APE as soon as circumstances permit, but not more than seven days following the emergency. Notification will explain any major modifications required to cope with the emergency.

6. Annual Report

On or before January 15 of each year, GR Hydro will file a report with the FERC and the Illinois and Missouri SHPOs outlining project activities associated with implementing these stipulations undertaken in the preceding year and planned during the ensuing year.

7. Dispute Resolution

Disputes regarding the completion of the terms of this Memorandum of Agreement shall be resolved by the signatories. If the signatories cannot agree regarding a dispute, any on of the signatories may request the participation of the Advisory Council on Historic Preservation to assist in resolving the dispute.

8. Modification or Termination

Modification, amendment, or termination of this agreement as necessary shall be accomplished by the signatories in the same manner as the original agreement.

Execution of this MOA by GR Hydro, FERC, the Missouri SHPO, and the Illinois SHPO and implementation of its terms, shall constitute evidence that GR Hydro and FERC have taken into account the effects of the undertaking on historic properties as required by Section 106 of the National Historic Preservation Act of 1966, as amended.

GR Hydro

By:_____ Date:_____

Federal Energy Regulatory Commission

By:_____ Date:_____

Missouri State Historic Preservation Officer

By:_____ Date:_____

Illinois State Historic Preservation Officer

By: Anne E. Haaker DSHPO Date: 2-18-11

CONCUR:

The U.S. Army Corps of Engineers-Rock Island District

By:_____Date:_____