Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of AmerernIP, the authorization for the incidental take of the State listed species [Plants: Green trillium, Mock bishop's weed; Wildlife: Bald eagle, Indiana bat, Gray bat, Illinois chorus frog, Short-eared owl, Barn owl, Northern harrier, Snowy egret, Least bittern, Little blue heron, Yellow-crowned night heron, Black-crowned night heron, and Loggerhead shrike] in Washington and St. Clair Counties, Illinois [associated with the Prairie South–Prairie West Interconnection Project; as described/shown in the conservation plan received by the Department on 12 January 2007] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the Prairie South–Prairie West Interconnection Project, in Washington and St. Clair Counties, Illinois.

This Conservation Plan has been prepared in accordance with the requirements outlined in Title 17, Chapter I©, Section 1080 of the Illinois Administrative Code (Incidental Taking of Endangered or Threatened Species). Section 1080 allows the Illinois Department of Natural Resources (IDNR) to authorize the incidental take of species listed as Endangered or Threatened by the State of Illinois following the preparation of an approved Conservation Plan. The Conservation Plan for the Prairie South–Prairie West Interconnection Project includes a description of the proposed project, biological data on the Illinois Endangered or Threatened species that would likely be affected by the proposed project, anticipated effects upon these species, mitigation measures that will be implemented to minimize adverse effects, a description of project alternatives, an assessment of take, and an implementing agreement.
This Conservation Plan identifies state-listed plant species that are likely to occur within the project area, but does not evaluate the incidental take of these plant species. In accordance with Section 3(3) of the Illinois Endangered Species Protection Act (520 ILCS 10), AmerenIP will not take any plant listed as endangered or threatened by the State of Illinois without the express written permission of the landowner.

Procedural History

AmerenIP (and its consultant) prepared a Conservation Plan for the proposed Prairie South–Prairie West Interconnection Project in accordance with the requirements in Title 17, Chapter I©, Section 1080 of the Illinois Administrative Code (Incidental Taking of Endangered or Threatened Species). This plan was received by the Illinois Department of Natural Resources (Department) on 12 January 2007. The Conservation Plan (or "Plan") included a description of the proposed project, biological data on the Illinois Endangered or Threatened species that would likely be affected by the proposed project, anticipated effects upon these species, mitigation measures that will be implemented to minimize adverse effects, a description of project alternatives, an assessment of take, and an implementing agreement.

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In accordance with Section 1080.20 of the Illinois Administrative Code, public notices regarding the availability of the Plan for public review were published in the local newspaper (the Sparta News Plaindealer) on March 21, March 28, and April 4, 2007 and in the official state newspaper (the Edwardsville Intelligencer) on March 21, 2007. The Plan was made available for public review at the Marissa District Public Library (212 North Main Street, Marissa, Illinois 62257) and the Nashville Public Library (219 East Elm Street, Nashville, Illinois 62263). A copy of the Plan was also sent to the Executive Director of the Illinois Endangered Species Protection Board. Public comments on the Plan were submitted to the Illinois Department of Natural Resources during the public comment period. These comments were received through two emails, both from Kathy Andria, President of the American Bottom Conservancy and Conservation Chair of the Kaskaskia Group Sierra Club. The comment e-mails are dated May 4 and 5, 2007. All public comments were adequately addressed in a separate document prepared by AmerenIP dated 14 May 2007. This document is on file with the Department and is not included as part of this Authorization package.

Target Species

*Plants: Green trillium, and Mock bishop's weed

*Wildlife: Bald eagle, Indiana bat, Gray bat, Illinois chorus frog, Short-eared owl, Barn owl, Northern harrier, Snowy egret, Least bittern, Little blue heron, Yellow-crowned night heron, Black-crowned night heron, and Loggerhead shrike

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The Prairie South–Prairie West Interconnection Project is necessary for AmerenIP to provide adequate, reliable, and efficient service to its consumers and to enable the interconnection customer, Prairie State, to reliably deliver capacity and energy to the bulk electric system at the least cost. Pursuant to FERC Order 888, AmerenIP is obligated to fulfill all generation interconnection requests in a nondiscriminatory manner and in compliance with FERC Reliability Standards and Ameren Transmission Planning Criteria and Guidelines. The proposed project would allow interconnection of the Prairie State generation facility in a safe and reliable manner, and would provide for reliable delivery into the Midwest Independent Transmission System, Inc. energy market. The Prairie State generation facility is expected to be operational and connected to the transmission system grid most likely in the next few years. AmerenIP is required to have the Prairie South–Prairie West Interconnection Project completed in the next several years.

The Prairie South–Prairie West Interconnection Project includes construction of two 345kV transmission lines. The "Prairie South Line" is approximately one mile long and extends south from the new Prairie States generation facility to an existing AmerenIP 345kV line. The "Prairie West Line" is approximately seven miles long and extends west from the new Prairie States generation facility to an existing AmerenIP 345kV line. The Prairie South Line is located in Washington County and the Prairie West Line is located in Washington and St. Clair counties. Marissa is the only community in the vicinity of these transmission lines. The proposed transmission lines are located entirely on private lands. Both the Prairie South Line and the Prairie West Line cross Mud Creek.

The Prairie South and Prairie West Lines will consist of double circuit transmission lines on single steel poles. These structures will be approximately 120 feet tall with a typical span of 900 feet between poles. Single shaft steel poles would require drilled pier foundations with anchor bolts. These foundations would be constructed of steel reinforced, cast-in-place concrete and would vary between eight and twelve feet in diameter. Installation depths would vary according to local soil and geologic conditions, as well as structural requirements. Construction of the transmission line will most likely occur in the next few years. The following describes the general chronological sequence of construction activities:

*Surveys (natural resources - wildlife/plants/natural features, etc.)
*Construction of Access Roads:
While existing roads and trails would be used wherever practicable to minimize disturbance, new roads would be constructed (cleared and graded) as necessary to provide access to tower locations and work areas. Access roads would consist of approximately 20-foot wide bladed travel way from which all vegetation is cleared. The lengths and specific locations of new access roads would not be known until the construction phase. Upon completion of construction activities, all new access roads would be rehabilitated by decompacting and spreading stockpiled soils and reseeding disturbed areas with a native seed mixture.
*Clearing Vegetation:
All woody vegetation within the 150-foot wide transmission line ROW would be cut, trimmed, and wind-rowed. Trees and shrubs would be cleared using manual or mechanical methods and stumps will be treated with a FIFRA registered herbicide. At each structure location, work areas would be established for structure footings, assembly, and erection equipment. Work areas would be cleared of brush and vegetation only to the extent necessary to facilitate the safe operation of equipment. Pulling and tensioning sites would be cleared of brush and vegetation, and landings would be leveled as required for equipment setup. After completion of construction, all disturbed work areas would be rehabilitated by ripping, redistributing displaced soils and large woody debris, and reseeding the area with a native seed mixture if not in cultivation.
*Foundation Installation:
A backhoe or vehicle-mounted power auger would be used to excavate pole and tower foundations. Excavation activities would require access by large equipment including a power auger or drill, crane, material trucks, and ready-mix trucks. After excavation is complete, steel reinforced cages would be placed into the excavated holes. Anchor bolts would be installed in the foundation template form, and concrete would be poured into the hole to the required

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height. Poles would be placed on foundation anchor bolts when the foundations are ready. In instances where foundation holes are left open for any period of time, they would be covered. Soils removed from foundation holes would be temporarily stockpiled within the work area and hauled away for disposal in accordance with all regulatory requirements, re-spread per landowner requirements, or used as backfill.

*Structure Assembly and Erection:

Steel pole sections and associated hardware would be transported to work areas by truck. Structures would be assembled within the work area. While the pole is on the ground, davit arms would be mounted and rigged with insulator strings and stringing sheaves at each ground wire and conductor position. The assembled pole would then be hoisted into place by a large crane or helicopter.

*Conductor Wire Installation:

Once the poles are in place, a pilot line would be pulled (strung) from pole to pole via light vehicle, helicopter, or by hand. The line would be threaded through the stringing sheaves on each pole. A larger diameter, stronger line would then be attached to the pilot line and strung through the sheaves. Finally, the conductor would be attached to the pulling line and strung through the sheaves. This process would then be repeated until the conductor is pulled through all the sheaves. Conductor splicing would be required at the end of a conductor spool or if a conductor is damaged during stringing. For public protection during wire installation, guard structures would be erected over roads, railroads, power lines, structures, and other obstacles. Guard structures consist of H-frame or Ytype structures placed on either side of an obstacle. These structures prevent ground wire, conductors, or equipment from falling on an obstacle. Equipment for erecting guard structures is similar to erecting transmission line structures.

*Rehabilitation:

All travel ways and work areas would be ripped, disked or chiseled to remove compaction and re-graded for positive drainage and blended into surrounding topography. Excess material would be disposed of in accordance with all regulatory requirements, re-spread per landowner requirements, or used as backfill. Agricultural lands would be re-cropped by the land owner. For non-agricultural lands, appropriate native seed mixes would be used to provide a stable ground cover.

*Operations and Maintenance Activities:

Typical long-term operations and maintenance activities include line inspections and minor routine maintenance activities. Line inspections will be completed either from the ground utilizing airplanes or helicopters. Inspections would occur over a period of one day (if conducted aerially) to several days (if conducted on the ground). Ground inspections would utilize existing roads where possible. Routine maintenance activities would be completed following inspections, and would involve a few individuals (Ameren employees or contractors) accessing the line in work vehicles. Routine maintenance activities would not require heavy equipment. Periodic right-of-way maintenance would include trimming trees with an aerial saw or for contractor to bring in all terrain aerial buckets (ATAB) to trim trees located on the sides of the right of way. Occasionally, emergency activities may be necessary to repair damaged

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structures or conductors. These activities may require heavy equipment or helicopter operations. Every effort will be made to ensure that emergency activities are conducted in compliance with the measures outlined in this Conservation Plan and do not adversely affect sensitive habitats and state-listed species.

Action Area

The majority of the Prairie South and Prairie West Lines cross through active agricultural lands. Native vegetative communities, which have been reduced and fragmented by agricultural activities, are limited to floodplain forests and upland deciduous forests along Mud Creek. Characteristic tree species in Mud Creek floodplain forest include silver maple (*Acer saccharinum*), cottonwood (*Populus* spp.), sycamore (*Platanus occidentalis*), and elm (*Ulmus* spp.; IDNR 2003). Upland deciduous species include white oak (*Quercus alba*), black oak (*Quercus velutina*), post oak (*Quercus stellata*), and hickory (*Carya* spp.; IDNR 2003*a*). In the ravines, dry upland forests give way to more mesic species such as red oak (*Quercus rubra*), sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), and black walnut (*Juglans nigra*). The principal aquatic habitats that are spanned by the transmission lines include Mud Creek and several small freshwater wetlands.

I. Habitat Requirements/Species Status:

Target Species

*Plants: Green trillium and Mock bishop's weed

*Wildlife: Bald eagle, Indiana bat, Gray bat, Illinois chorus frog, Short-eared owl, Barn owl, Northern harrier, Snowy egret, Least bittern, Little blue heron, Yellow-crowned night heron, Black-crowned night heron, and Loggerhead shrike

A. Green trillium

Habitat Requirements and Species Status in the Action Area

Green trillium grows on non-rocky bluffs, wetlands along the borders of lakes, mesic prairies, mesic floodplain forests, and mesic upland forests (Iverson et al. 1999). The forest cover type is white/black/northern red oak (Iverson et al. 1999). Flowering occurs from late April to May (eFloras 2003). No known populations of green trillium occur in the study area; however, suitable habitat is present.

B. Mock bishop's weed

Habitat Requirements and Species Status in the Action Area

Mock Bishop's weed occurs in wet prairies and wet floodplain forests (Iverson et al. 1999). It has been found in the floodplains of the Mississippi and Ohio Rivers (Iverson et al. 1999). Flowering occurs from June to July (Iverson et al. 1999). No known populations occur in the study area; however, suitable habitat is present.

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C. Bald eagle

Habitat Requirements and Species Status in the Action Area

Bald eagle habitat consists of large trees, which are utilized for perching, roosting, and nesting, within ½ mile of a permanent water body that supports abundant fish populations. While fish represent the primary food source, bald eagles also prey upon waterfowl and small mammals and scavenge carrion (USFWS 1983). There are no IDNR element occurrence records for bald eagle nests within the study area. The closest bald eagle nest is located on the Kaskaskia River west of Baldwin Lake. A helicopter survey for bald eagle nests was conducted in December 5, 2006. No nests were observed within ¼ mile of the proposed transmission line route. Although there are no nests in the area, bald eagles may roost in the Mud Creek floodplain forest along the Prairie South and Prairie West Lines.

D. Indiana bat

Habitat Requirements and Species Status in the Action Area

The Indiana bat hibernates in caves or abandoned mines (occasionally) during the winter months. The species requires cool, humid caves with stable temperatures for hibernation, and few caves within the range of the species possess the conditions to be suitable hibernacula. In early spring, Indiana bats migrate to summer floodplain forest habitats where they forage along forest edges and roost under loose bark on dead or dying trees. Males roost alone or in small groups, while females roost in larger maternity colonies. The tree species most frequently used by maternity colonies are northern red oak, slippery elm, cottonwood, silver maple, and shagbark hickory. Primary causes of the species decline include disturbance of hibernating bats and destruction of hibernacula, loss of summer roosting and foraging habitats, and declines in prey associated with pesticide use (USFWS 1996).

There are no known Indiana bat hibernacula within the study area. In 2006, mist net surveys were conducted in mature forest habitats along the Prairie South and Prairie West Lines. No Indiana bats were captured along the Prairie South Line. One female Indiana bat was captured along the Prairie West Line. This individual was fitted with a radio-transmitter and followed to two different roost trees (Ecological Specialties, LLC, 2006). These roost trees were located outside the right-of-way corridor. The Indiana bat is known to utilize roost trees in forested habitats along the Prairie South and Prairie West Lines.

E. Gray bat

Habitat Requirements and Species Status in the Action Area

The gray bat utilizes caves or cave-like habitats in all seasons (as roosts and hibernacula). The gray bat forages along rivers and lakes for a variety of terrestrial and aquatic insects. Throughout its range, the species is most commonly found in limestone karst cave systems. During summer, the gray bat utilizes caves that meet the species temperature requirements and are within a kilometer of foraging habitat. Winter hibernacula are located in deep, vertical cave systems with stable temperatures between 6 and 11 C°. Primary causes for the species decline include disturbance of caves and pesticide use.

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Southwestern Illinois represents the northern limit of gray bat distribution in the United States. The IDNR has no records of gray bat roosts or hibernacula in the study area. Gray bat calls were recorded with AnaBat II bat detectors along the Prairie West Line in 2006 (Ecological Specialties, LLC, 2006). It is likely that the gray bat forages in forested habitats along the Prairie South and Prairie West Lines.

F. Illinois chorus frog

Habitat Requirements and Species Status in the Action Area

The Illinois chorus frog inhabits sand prairies and agricultural fields with sandy substrates. The species hibernates in burrows, and emerges in the spring to breed in flooded fields, ditches, and vernal pools. The distribution of the Illinois chorus frog includes west-central and southwestern Illinois, and the species has been observed in Monroe County. Primary threats include loss of sand prairie habitats, draining and clearing of bottomlands, and use of herbicides and pesticides (INHS 2006). Although there are no historic observations or IDNR element occurrence records for the species in the study area, the Illinois chorus frog may occur in the vicinity of the Prairie South and Prairie West Lines.

G. Short-eared owl

Habitat Requirements and Species Status in the Action Area

The short-eared owl occurs in open habitats including prairies, grasslands, pastures, wet meadows, and marshes. In Illinois, the species prefers wet prairie habitats for breeding, foraging, and roosting in all seasons. The short-eared owl nests on the ground usually near clump of vegetation in marsh or meadow. Primary threats include shooting, collisions with vehicles and barbed-wire fences, and farm machinery (INHS 2006*a*). Although there are no IDNR element occurrence records for the short-eared owl in the study area, the species may occur in the vicinity of the Prairie South and Prairie West Lines.

H. Barn owl

Habitat Requirements and Species Status in the Action Area

The barn owl utilizes a variety of open habitats (farmlands, prairies, forest edges, etc.) for foraging and nests in cavities of mature and dead trees. The species is relatively tolerant of human activity and often nests in manmade structures (i.e., barns and abandoned buildings) when natural cavities are not available. The species is considered an occasional resident in southern Illinois. Primary threats to the barn owl include loss of nesting habitat, vehicle collisions, and control of prey populations (INHS 2006*b*). Although there are no IDNR element occurrence records for the barn owl in the study area, the species may occur in the vicinity of the Prairie South and Prairie West Lines.

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I. Northern harrier

Habitat Requirements and Species Status in the Action Area

Ecological requirements of the northern harrier are similar to those of the short-eared owl. The species forages in open prairies, meadows, and pastures and nests on the ground in areas sheltered by shrubs, weeds or other vegetation. High quality breeding habitats in Illinois include large tracts of native prairie and marsh habitats. The northern harrier is considered a common migrant and winter resident and occasional summer resident in Illinois. Primary threats include disturbance of nests and nesting habitat (INHS 2006*c*). The northern harrier is known to occur in the vicinity of the Prairie South and Prairie West Lines.

J. Snowy egret

Habitat Requirements and Species Status in the Action Area

The snowy egret utilizes a variety of aquatic habitats including marshes, swamps, shorelines, mudflats, and ponds. The species forages in wetland areas for small fishes, crustaceans, amphibians, reptiles and insects. The snowy egret is considered a rare migrant and post-breeding wanderer in Illinois, although non-breeding snowy egrets often occur in southern portions of the state (INHS 2006*d*). Although there are no IDNR element occurrence records for the snowy egret in the study area, the species may occur in the vicinity of the Prairie South and Prairie West Lines.

K. Least bittern

Habitat Requirements and Species Status in the Action Area

Primary habitats for the least bittern include cattail marshes and shallow waters with emergent vegetation. The species nests in dense emergent vegetation adjacent to open water. The least bittern is considered an uncommon migrant and summer resident in Illinois. Primary threats include habitat loss as a result of development, draining of wetlands, and pollution (INHS 2006*e*). Although there are no IDNR element occurrence records for the least bittern in the study area, the species may occur in the vicinity of the Prairie West and Prairie South Lines.

L. Little blue heron

Habitat Requirements and Species Status in the Action Area

The little blue heron utilizes a variety of shallow water habitats including lakes, ponds, sloughs, shorelines, and marshes in which they forage in for small fish, amphibians, and invertebrates. The species nests in trees of hardwood forests that border foraging habitats. The little blue heron is periodically observed in Illinois, and appears to have a small breeding population in the state. Primary threats include destruction of bottomland forests and draining of wetlands (INHS 2006*f*). Although there are no IDNR element occurrence records for the little blue heron in the study area, the species may occur in the vicinity of the Prairie South and Prairie West Lines.

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M. Yellow-crowned night heron

Habitat Requirements and Species Status in the Action Area

The yellow-crowned night-heron forages in wetlands, marshes, and stream edges and nests in mature bottomland forests. The species is considered a fairly common migrant and summer resident in southern Illinois, but seldom nests in the state. Primary threats include destruction of bottomland forests and draining of wetlands (INHS 2006*g*). Although there are no IDNR element occurrence records for the yellow-crowned night-heron in the study area, the species may occur in the vicinity of the Prairie South and Prairie West Lines.

N. Black-crowned night heron

Habitat Requirements and Species Status in the Action Area

The black-crowned night-heron uses a variety of aquatic habitats including wetlands, marshes, ponds, lakes, sloughs, and shallow lagoons. The species utilizes a wide variety of upland and floodplain tree species for nesting. The black-crowned night-heron is a fairly common migrant and uncommon summer resident in Illinois, but there are few sizeable breeding colonies remaining in the State. Primary threats include destruction of habitat and pollution (INHS 2006*h*). Although there are no IDNR element occurrence records for the black-crowned night heron in the study area, in the study area, the species may occur in the vicinity of the Prairie South and Prairie West Lines.

O. Loggerhead shrike

Habitat Requirements and Species Status in the Action Area

The loggerhead shrike utilizes edge habitats and hedgerows with scattered thorny shrubs and trees (e.g., hawthorn, locust, crab apple, Osage orange) on which they impale their prey. The species is considered a common resident in southern Illinois (INHS 2006*i*). There are several IDNR element occurrence records for the loggerhead shrike throughout the study area, and the species is known to occur in the vicinity of the Prairie South and Prairie West Lines.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

Construction and maintenance of the proposed transmission line could result in a taking of listed plants and terrestrial wildlife species as a result of: 1) ground disturbance and vegetative clearing, 2) construction equipment and vehicle traffic during construction and maintenance activities, and/or 3) the presence of transmission lines and structures.

Ground disturbance (grading) and vegetative clearing could result in the direct mortality of plants and wildlife species with limited mobility that occur within work areas, access roads, and the transmission line right-of-way. These activities could also affect those wildlife species that inhabit/roost in trees or occupy underground burrows or dens. Grading and clearing could destroy bird nests and result in the loss of eggs or young. Finally, reptiles, amphibians, and small mammals could be trapped in excavations (i.e., trenches or holes). These potential hazards would only occur during the construction phase.

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Traffic associated with construction equipment and worker vehicles could result in mortality (crushing) of wildlife species that have limited mobility or utilize underground burrows/dens. Reptiles and amphibians are typically most susceptible to such mortality. Additionally, construction equipment and worker vehicles could result in the loss of eggs or young for ground-nesting bird species. These potential hazards would be present throughout both the construction and maintenance phases. However, maintenance-related traffic would be minimal and most equipment and vehicle activity and associated risk of mortality would occur during construction. Finally, the presence of the transmission lines could cause bird mortality as a result of: 1) collisions with transmission lines and/or structures and 2) electrocution from contact with the conductors. These would represent long-term hazards that would be present over the life of the project.

One of the primary considerations in the routing of the Prairie South and Prairie West Lines was minimizing potential impacts to biological resources, including sensitive habitats and species listed as threatened and endangered by the State of Illinois. Specifically, the routes were designed to minimize the number of crossings of the Mud Creek floodplain forest and upland forest habitats. While the general routing was designed to minimize potential impacts associated with construction, operation, and maintenance of the Prairie South–Prairie West Interconnection Project, a number of mitigation measures will be implemented to further reduce potential impacts associated with the project. The implementation of these measures will help to reduce adverse effects upon sensitive habitats and biological resources, and will minimize the potential for taking of state-listed species. The following describes the generic mitigation measures and species specific mitigation measures that will be implemented as part of the Prairie South–Prairie West Interconnection Project.

Upon completion of construction, all disturbed travel ways and work areas will be reclaimed. Reclamation activities will include the following (as necessary):

- ripping, disking, or chiseling areas to de-compact soils;
- re-distributing displaced soils to facilitate the establishment of vegetation;
- grading to re-create original contours and ensure positive drainage;
- hauling away debris and excess materials in accordance with applicable state and federal waste disposal regulations; and
- seeding disturbed areas with a native seed mixture.

Reclamation activities will help to establish native plant species and restore disturbed areas as potential habitat for a number of plant and wildlife species. Additionally, a Noxious and Exotic Weed Control Plan will be implemented to minimize the potential for the invasion and spread of non-native species. Restoration activities will be monitored annually to ensure that disturbed areas are successfully reclaimed and native vegetation is established. Although some upland forest habitats will be eliminated by the project, reclamation will convert these areas to native grasslands. Although trees will not be allowed to establish within the right-of-way, the area will be managed as native grasslands that provide habitat for listed species.

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3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

Ameren Corporation is the parent of AmerenIP, which provides services to approximately 625,000 electric customers in 313 incorporated municipalities across 15,000 square miles of central, east central and southern Illinois. AmerenIP provides service to nine cities with populations greater than 30,000, including Danville, Decatur, Belleville, Bloomington-Normal, Champaign-Urbana, Galesburg and Granite City. As a large utility, AmerenIP has adequate financial backing to support and implement all mitigation activities described in this Conservation Plan. The costs of mitigation activities will be incorporated into the overall project budget. Therefore, no specific financial instruments such as bonds, certificates of insurance, escrow accounts will be required to implement all aspects of the Conservation Plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

Although the project and mitigation measures are designed to minimize impacts to sensitive habitats and state-listed species, construction and maintenance activities could result in the taking of individuals. While every effort will be made to minimize take, construction equipment and vehicles may result in the mortality of individuals that occur in work areas or on access roads. This is particularly true for species that have limited mobility or use underground burrows, such as reptiles and amphibians. The potential for taking of listed bird species would be minimized through the completion of pre-construction surveys.

The anticipated numbers of takings would most likely not reduce 1) the likelihood of the survival of the endangered or threatened species in the wild within the State of Illinois, 2) the biotic community of which the species is a part, or 3) the habitat essential to the species existence in Illinois. Implementation of the general and species-specific mitigation measures identified within this document will reduce the potential for takings of listed species throughout the life of the project. The potential for species takings were determined through analysis of the project activities, the location and amount of habitats that will be disturbed, and the mitigation measures that will be implemented. Based upon these analyses, estimates of expected take were determined for each of the Illinois endangered or threatened species that is likely to occur within or adjacent to the project area. The estimates of take are based upon a few assumptions, including: 1) no caves or sinkholes will be disturbed, 2) seasonal restrictions on construction activities in all upland and floodplain forest habitats, and 3) bird species are highly mobile and will avoid construction equipment and vehicles. Based upon the numbers of individuals affected by the project, the proposed taking will most likely not reduce the likelihood of the survival of any endangered or threatened species in the wild within the State of Illinois. Although the project will cross through upland forest and floodplain

forest habitats, the transmission lines and associated access roads will affect relatively narrow corridors. Accordingly, the project would most likely not significantly affect any biotic communities. Finally, the project has been designed to avoid ecologically-sensitive areas and will most likely not adversely affect any habitats that are essential to the species existence in Illinois.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and official AmerenIP signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

AmerenIP (and its consultant) prepared a Conservation Plan for the proposed Prairie South–Prairie West Interconnection Project in accordance with the requirements in Title 17, Chapter I©, Section 1080 of the Illinois Administrative Code (Incidental Taking of Endangered or Threatened Species). This plan was received by the Illinois Department of Natural Resources (Department) on 12 January 2007. The Conservation Plan (or "Plan") included a description of the proposed project, biological data on the Illinois Endangered or Threatened species that would likely be affected by the proposed project, anticipated effects upon these species, mitigation measures that will be implemented to minimize adverse effects, a description of project alternatives, an assessment of take, and an implementing agreement.

In accordance with Section 1080.20 of the Illinois Administrative Code, public notices regarding the availability of the Plan for public review were published in the local newspaper (the Sparta News Plaindealer) on March 21, March 28, and April 4, 2007 and in the official state newspaper (the Edwardsville Intelligencer) on March 21, 2007. The Plan was made available for public review at the Marissa District Public Library (212 North Main Street, Marissa, Illinois 62257) and the Nashville Public Library (219 East Elm Street, Nashville, Illinois 62263). A copy of the Plan was also sent to the Executive Director of the Illinois Endangered Species Protection Board. Public comments on the Plan were submitted to the Illinois Department of Natural Resources during the public comment period. These comments were received through two emails, both from Kathy Andria, President of the American Bottom Conservancy and Conservation Chair of the Kaskaskia Group Sierra Club. The comment e-mails are dated May 4 and 5, 2007. All public comments were adequately addressed in a separate document prepared by AmerenIP dated 14 May 2007. This document is on file with the Department and is <u>not</u> included as part of this Authorization package.

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Authorization

It is the determination of the Department that the measures to be implemented by AmerenIP will adequately minimize and mitigate for the anticipated taking (disturbance/harassment) of a number of listed species due to the construction of the Ameren Prairie States South and West 345kV transmission line(s), in Washington and St. Clair Counties, Illinois. Further, it is our opinion that the take (disturbance/harassment) authorized herein would most likely not diminish the likelihood of the survival of either these aforementioned species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a period of 5 (five) years, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].

2. The following measures shall be implemented with regards to this specific AmerenIP Project:

*In the event of a documented "incidental take" of any of the species covered by this Conservation Plan as a direct result of the construction or operation of this specific AmerenIP project, AmerenIP and its consultant(s) shall mitigate for the taking by hiring a qualified biologist with experience with the affected species to conduct a preliminary population survey of the affected species in the area of the taking. The purpose of the survey would be to gain a better understanding of the size, location and movement of the population of the affected species in an effort to avoid any future takings. The final results of the survey shall be provided to the IDNR (Attn: Joseph Kath) within 60 days of completion.

General Mitigation Measures

A. All construction personnel will be briefed on the sensitive biological resources in the area, the system used to mark work areas and avoidance areas, travel restrictions for equipment and vehicles, how to report incidents to the Construction Supervisor, and the importance of avoiding taking of listed species.

B. Pre-construction surveys for listed plant species will be conducted along the transmission line routes and access roads. The locations of listed plants (individuals and populations) will be recorded on GPS units and mapped utilizing GIS. Prior to the initiation of construction, all individuals/populations will be marked in the field as avoidance areas. As necessary, transmission line structures and access roads will be located to span or avoid these areas. If listed plants cannot be avoided, efforts will be made to relocate the plants outside of active work areas.

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C. Pre-construction surveys will be conducted to identify sensitive habitats along the transmission line routes and access roads. As necessary, transmission line structures and access roads will be located to span or avoid sensitive habitats, including wetlands. If a wetland cannot be avoided, mat or corduroy will be used in the work areas to minimize soil compaction and other adverse effects.

D. Pre-construction surveys will be conducted to identify caves and sinkholes along the transmission line routes and access roads. Caves and sinkholes will be marked as avoidance areas, and the transmission line and access roads will be designed to span or avoid these features.

E. All rivers and streams will be spanned by transmission lines, and no structures will be placed within the channels of any waterways. Access roads will be designed to minimize disturbance of river banks and floodplains.

F. Erosion and sediment controls will be conducted in compliance with the site's Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is a requirement for an EPA-approved General Storm Water Permit.

G. All pits, trenches, or holes excavated during construction will either be immediately backfilled or covered overnight to prevent incidental capture of amphibians, reptiles, and small mammals. Construction personnel will check all pits, trenches, or holes each morning and remove any animals that have been accidentally captured overnight.

H. Trees within the Mud Creek floodplain forest will be trimmed or cut as low to ground as possible and treated with a FIFRA registered herbicide to prevent re-sprouting of weak secondary growth off of the stumps. A waterway mix of 50% Tall Fescue (Faun), 30% Perennial Rye, 10% Redtop, and 10% White Clover will be utilized to stabilize floodplain and any stream bank disturbance.

I. Areas where the ground has been disturbed for construction of the transmission lines and access roads will be seeded with a native seed mix. Re-seeding will help to restore vegetative cover, reduce the potential for erosion, and create habitat for a number of plant and wildlife species.

J. The transmission lines have been designed to include a separation of at least 216 inches between conductors. Studies of avian electrocutions on transmission line have shown that a 60-inch minimum horizontal separation between energized conductors eliminates any potential for avian electrocution, including larger species such as cranes and raptors (APLIC and USFWS 2005). This measure will ensure that there is no avian mortality as a result of electrocutions on the transmission lines.

K. A Noxious and Exotic Weed Control Plan will be developed and implemented in coordination with the County Weed Control Authority. This plan will help to prevent the introduction and spread of weed species and associated adverse effects to native habitats throughout the project area.

L. Outside the designated project rights-of-way, construction equipment and vehicle traffic will be limited to existing public roads or designated access roads. This will help to minimize potential adverse effects to sensitive habitats and listed species.

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M. Pre-construction biological surveys will be conducted throughout the project area, including the entire 150-foot wide right-of-way for the two transmission lines, all access road locations, and all work areas. These surveys will target all threatened and endangered plant and wildlife species discussed in the conservation plan. All observations of listed species will be recorded using GPS, and occupied habitats will be delineated in the field and designated as avoidance areas in which no ground disturbance will be permitted.

Species-Specific Measures

N. Specific surveys have been conducted for Indiana bat roosts in all suitable habitats within the project area. These surveys followed USFWS protocols, and the locations of active roosts were recorded using GPS. Roost trees were identified and will be avoided if in the 150 foot wide right-of-way corridor or near access roads. If a roost tree must be removed or pruned for the project, the USFWS will be consulted prior to any action to determine appropriate the appropriate methods and time frame.

O. In order to minimize potential adverse impacts to the Indiana bat, seasonal restrictions on tree clearing, topping, and pruning will be implemented throughout the project area. In accordance with USFWS guidelines, tree clearing, topping, and pruning will be prohibited between April 1 and September 30.

P. Pre-construction surveys for the Illinois chorus frog will be completed within all suitable habitats in the project area. All occupied habitats will be delineated using GPS, and these areas will be marked as avoidance areas in which no ground disturbance will be permitted. The transmission line and access roads will be designed to span or avoid occupied habitats.

Q. Prior to construction, a biologist (first approved by the Department - via Joseph Kath) will survey the work area for all bird species listed in the conservation plan. If any individuals are observed, the biologist will ensure that they are moved or displaced to a safe location outside of the designated work areas. The monitor will also survey the work areas for nests during the appropriate season. Nests will be marked as avoidance areas until the young have fledged or the nest is abandoned.

3. The effective period of this authorization may be altered by mutual agreement between AmerenIP and the Department.

4. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that AmerenIP has failed to comply with any of these terms and conditions or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of this specific AmerenIP project, in Washington and St. Clair Counties, Illinois.

5. The AmerenIP official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

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For the IL. Department of Natural Resources

Mike Conlin

Mike Conlin, Acting Director
Office of Resource Conservation

12.10.07
Date Signed

For AmerenIP

Signature

Dennis W. Weisenborn, VP
Please print name and official title

December 4, 2007
Date Signed

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