Endangered Species Act (ESA)

Federally-listed animal species and their habitat are protected from "take" on any property by the ESA. Take of a federally-listed species can be allowed if it is "incidental" to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Federally-listed plants are not protected from take except on lands under federal jurisdiction or for which a federal nexus (i.e., permits or funding) exists. Take of a federally-listed species or its habitat without allowance from USFWS is a violation of the ESA. The USFWS rare species lists can be obtained by choosing *Initial Project Scoping* at http://ecos.fws.gov/ipac/.

The TXNDD identified no known occurrences of federally-listed threatened, endangered or candidate species within the study area and six occurrences of the federally-listed endangered Red-cockaded Woodpecker (*Picoides borealis*) (EOIDs 870, 3294, 3606, 4599, 4600, and 6874) within ten miles of the study area; see enclosed Figure 1 map and EOID tables.

Recommendation: TPWD recommends that the siting study identify the federally-listed and candidate species with potential to occur within the study area. TPWD recommends GPL-Rusk conduct site surveys of the route alternatives to identify suitable habitat for federally-listed species, to assess potential impacts to federally-listed species, and to determine route adjustments to avoid or minimize adverse impacts to federally-listed and candidate species.

Recommendation: If impact to a federally-listed species is anticipated, TPWD recommends that GPL-Rusk consult with USFWS – Arlington Ecological Services pursuant to the ESA. The USFWS should be contacted for additional species occurrence data, guidance, permitting, survey protocols, and mitigation for federally-listed species.

Bald and Golden Eagle Protection Act (BGEPA)

The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" Bald Eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs. The BGEPA provides criminal penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any Bald Eagle ... [or any Golden Eagle], alive or dead, or any part, nest, or egg thereof. The BGEPA defines "take" as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.

The TXNDD identified a known occurrence of the Bald Eagle (EOID 1663) within the study area and one additional known occurrence (EOID 6425) within ten miles of the study area; see enclosed Figure 1 map and EOID tables. Although the nests representing these occurrences may be inactive or no longer present, other active eagle nests that have not been reported may occur in the study area in the vicinity of large bodies of water or along the Sabine River.

Recommendation: TPWD recommends that route alternatives in the vicinity of lakes and rivers be assessed for nesting, foraging, or roosting habitat for the Bald

Eagle. Disturbance near eagle nests should be avoided. For protection of Bald Eagles, please refer to the USFWS National Bald Eagle Management Guidelines http://www.fws.gov/midwest/eagle/guidelines/index.html. When potential impacts to the Bald Eagle are anticipated, TPWD recommends consultation with USFWS – Arlington Ecological Services at (817) 277-1100 regarding compliance with the BGEPA. TPWD also recommends consultation with TPWD because the Bald Eagle is state-listed as threatened.

Clean Water Act (CWA)

Section 404 of the Clean Water Act establishes a federal program to regulate the discharge of dredge and fill material into the waters of the U.S., including wetlands. The USACE and the Environmental Protection Agency are responsible for regulating water resources under this act. Although isolated wetlands may not be applicable to the USACE permitting process, both isolated and jurisdictional wetlands provide habitat for wildlife and help protect water quality.

Recommendation: If the proposed project would impact waterways or associated wetlands, TPWD recommends consulting with the Regulatory Branch of the Fort Worth District of the USACE at (817) 886-1731 pursuant to the CWA, including jurisdictional determinations, delineations, and mitigation. Waterways, floodplains, riparian corridors, lakes, and wetlands provide valuable wildlife habitat and TPWD recommends protecting them to the maximum extent possible. TPWD recommends allowing natural buffers contiguous to wetlands or aquatic systems to remain undisturbed to preserve wildlife cover, food sources, and travel corridors. During construction, trucks and equipment should use existing bridges to cross creeks. TPWD recommends avoiding disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, creek banks, pools, and gravel stream bottoms, as these provide habitat for a variety of fish and wildlife species and their food sources. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site specific native vegetation.

State Regulations

State-listed Species

Section 68.015 of the Parks and Wildlife Code regulates state-listed species. Please note that there is no provision for take (incidental or otherwise) of state-listed species. The *TPWD Guidelines for Protection of State-Listed Species*, which includes a list of penalties for take of species, can be found at http://www.tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/media/tpwd_statelisted_species.pdf. For purposes of relocation, surveys, monitoring, and research, terrestrial state-listed species may only be handled by persons permitted through the TPWD Wildlife Permits Office. For the above-listed activities that involve aquatic species please contact the TPWD Kills and Spills Team (KAST) for the appropriate authorization. For more information, visit http://www.tpwd.texas.gov/business/permits/land/wildlife/research/ and http://www.tpwd.texas.gov/landwater/water/environconcerns/kills_and_spills/regions/.

In addition to the state-listed threatened Bald Eagle, which was discussed above in the *BGEPA* section of this letter, the TXNDD identified a known occurrence of the state-listed threatened Texas heelsplitter (*Potamilus amphichaenus*) within the study area; see enclosed Figure 1 map and EOID tables. Within ten miles of the study area, the TXNDD identified occurrences of the state-listed Bald Eagle, Alligator snapping turtle (*Macrochelys temminckii*), and several freshwater mussel species. Additional specific locations of rare resources may not be known by TPWD or included in the TXNDD, therefore rare resources may exist where suitable characteristics are present.

TPWD Annotated County Lists of Rare Species are available at http://tpwd.texas.gov/gis/rtest/. These lists provide information regarding state-listed and rare species that have potential to occur within each county in Texas. State-listed species could potentially be impacted if suitable habitat is present at or near the project site.

Recommendation: TPWD recommends that the siting study identify the state-listed species with potential to occur within the study area. TPWD recommends GPL-Rusk conduct site surveys of the route alternatives to identify suitable habitat for state-listed species, to assess potential impacts to state-listed species, and to determine route adjustments to avoid or minimize adverse impacts to state-listed species that are identified on the TPWD lists for Rusk and Panola Counties.

Impact avoidance and minimization measures to protect state-listed species can be chosen based on species and their habitat. Many mitigation strategies can be utilized for avian and terrestrial species including, but not limited to:

- Avoiding vegetation clearing by co-locating the proposed transmission line onto existing transmission line structures and ROW.
- Reducing fragmentation and edge effect impacts by placing the route within or parallel to an existing utility or road ROW, *except* when placing the line along an existing ROW would have a greater impact on natural resources.
- Routing the line through non-native grassland and previously cleared areas to avoid native habitats and to avoid forest clearing, thus strategically placing the route away from native grasslands and bottomland, riparian, and upland woodlands.
- Mitigating avian collisions by reducing the number of stream and wetland crossings and appropriately marking lines.
- Fencing or flagging areas for exclusion to prevent disturbance when sensitive species or habitats are located within the proposed ROW.
- Reducing risk of injury or harm to state-listed species by educating GPL-Rusk and contract personnel about the state-listed species with potential to occur and establishing company policies regarding wildlife encounters within the ROW during construction, operation and maintenance.
- Planting and maintaining the ROW with native species of grasses, forbs, and shrubs for the benefit of wildlife.

Recommendation: TPWD recommends that the siting study identify impact avoidance and minimization measures that would be employed to protect state-listed species that may occur within the study area.

Terrestrial State-listed Species: Of the terrestrial species listed as potentially occurring in Rusk and Panola Counties, the state-threatened Timber rattlesnake (*Crotalus horridus),* Northern scarlet snake (*Cemophora coccinea copei*) and Texas horned lizard (*Phrynosoma cornutum*) are more at risk for being impacted by construction activities due to their limited mobility and because the Northern scarlet snake is semi-fossorial and because the Texas Horned Lizard hibernates underground. The Timber rattlesnake is a long-lived species with a high age at maturity and low annual fecundity, thus survival through adulthood is important to population viability. The Timber rattlesnake is a slow-moving, cryptic species that is less able to readily escape from heavy machinery than other wildlife. The Northern scarlet snake is secretive, spending most of its time burrowed in soft, sandy or loamy soils, thus susceptible to earth moving equipment and compaction. Texas horned lizards are generally active from mid-April through September. At that time of year, they may be able to avoid slow (less than 15 miles per hour) moving equipment, although when a threat is perceived they often flatten themselves against the ground to blend into their surroundings. The remainder of the year, this species hibernates only a few inches underground and will be susceptible to earth moving equipment and compaction. Various small vertebrates including snakes, lizards, toads and mice fall into trenches and become trapped. Wildlife unable to escape from trenches are susceptible to loss from backfilling activities, exposure to elements, starvation, dehydration, and predation by other wildlife.

Recommendation: Because snakes are generally perceived as a threat and sometimes killed when encountered during clearing or construction, TPWD recommends GPL-Rusk inform employees and contractors of the potential for the state-listed threatened Timber rattlesnake and Northern scarlet snake to occur in the study area. Contractors should be advised to avoid impacts to these and other snakes. Compared to other rattlesnakes, the Timber rattlesnake is a rather docile species. Injury to humans usually occurs when the snake becomes agitated following harassment or when someone attempts to handle a recently dead snake that still contains its bite reflex. Therefore, contractors should avoid contact with snakes if encountered and allow snakes to safely leave the premises.

Recommendation: If the site is found to contain unavoidable habitat of the Timber rattlesnake, Northern scarlet snake and Texas horned lizard, then TPWD recommends a biological monitor be present during clearing and construction activities to assist in detecting state-listed species in the ROW. If the presence of a biological monitor during construction is not feasible, state-listed threatened species observed during construction should be allowed to safely leave the site or be translocated by a permitted individual to a nearby area with similar habitat that would not be disturbed during construction. TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100-200 yards from the initial encounter location. As a reminder, for purposes of relocation, surveys, monitoring, and research, terrestrial state-listed species may only be handled by persons permitted through the TPWD

Wildlife Permits Office, http://www.tpwd.texas.gov/business/permits/land/wildlife/research.

Recommendation: If trenching is involved with the proposed project, TPWD recommends that contractors keep trenching and backfilling crews close together to minimize the amount of trenches left open at any given time during construction. TPWD recommends that any open trenches or excavation areas be covered overnight and/or inspected every morning to ensure no reptiles or other wildlife species have been trapped. Trenches left open for more than two daylight hours should be inspected for the presence of trapped reptiles prior to backfilling. If trenches cannot be backfilled the day of initial trenching, then escape ramps should be installed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface at an angle of less than 45 degrees (1:1).

Recommendation: For soil stabilization and/or revegetation of disturbed areas within the proposed project area, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting should be avoided.

Recommendation: To aid in the scientific knowledge of a species' status and current range, TPWD encourages reporting encounters of state-listed species to the TXNDD according to the data submittal instructions found at http://tpwd.texas.gov/txndd.

Aquatic State-listed Species: Project area waters may contain suitable habitat for state-listed turtles, fish, and freshwater mussels as identified on the lists of rare species for Rusk and Panola Counties and as indicated by the TXNDD occurrences within and near the study area. Project activities involving work within streams, temporary or permanent haul roads/crossings within streams and dewatering activities may impact state-listed turtles, fish or freshwater mussels if occurring within the project area.

Recommendation: TPWD recommends that GPL-Rusk ensure protection of state-listed turtles, fish and freshwater mussels during construction activities. TPWD recommends utilizing construction methodologies and best management practices to avoid or minimize adverse impacts to state-listed species, such as avoiding unnecessary temporary or permanent access roads across streams, avoiding the placement of tower structures in streams, retaining riparian and stream vegetation, and employing appropriate sediment controls.

Recommendation: If the project would require work within streams, the project may need to be coordinated with the TPWD KAST for appropriate authorization

and to ensure protection of aquatic wildlife, see *Aquatic Resources* section below for more information.

Aquatic Resources

TPW Code Section 1.011 grants TPWD authority to regulate and conserve aquatic animal life of public waters. Title 31, Chapter 57, Subchapter B, Section 57.157 of Texas Administrative Code (TAC) regulates take of mussels **which are not limited to state-listed mussels**. Section 12.301 of TPW Code identifies liability for wildlife taken in violation of TPW Code or a regulation adopted under TPW Code.

Under TPW Code Section 12.015, 12.019, 66.015 and TAC 52.101-52.105, 52.202, and 57.251-57.259, TPWD regulates the introduction and stocking of fish, shellfish, and aquatic plants into public waters of the state. The *Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters* allows for movement (i.e., introduction, stocking, transplant, relocation) of aquatic species in waters of the state. Movement of aquatic species, even within the same river or estuary, has potential natural resources risk (e.g., exotics, timing for successful survival); therefore, a permit is required to minimize that risk.

Dewatering activities can impact aquatic resources through stranding fish and mussels. Other harmful construction activities can trample, dredge or fill areas exhibiting stationary aquatic resources such as plants and mussels. To avoid or reduce impacts, TPWD recommends relocating aquatic life, including, but not limited to, fish, turtles, and mussels, to an area of suitable habitat outside the project footprint. Relocation activities are done under the authority of a TPWD *Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters.* Information regarding this permit can be obtained at http://www.tpwd.texas.gov/publications/fishboat/forms/. Aquatic Resource Relocation Plans (ARRPs) are used to plan resource handling activities and assist in the permitting process. If dewatering activities and other project-related activities cause mortality to fish and wildlife species, then the responsible party would be subject to investigation by the TPWD KAST and will be liable for the value of the lost resources under the authority of TPW Code Sections 12.0011 (b) (1) and 12.301.

The proposed project would cross streams and either the Sabine River or Toledo Bend Reservoir.

Recommendation: TPWD recommends that impact avoidance measures for aquatic organisms, including **all** native freshwater mussel species, regardless of state-listing status, be considered during project planning and construction activities.

Recommendation: TPWD recommends avoiding placement of temporary fills, culverts or structures into waters serving as suitable habitat for freshwater mussels. If construction occurs during times when water is present in streams and dewatering, fill or trampling activities are involved, then TPWD recommends relocating potentially impacted native aquatic resources in conjunction with a *Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters* and an ARRP. The ARRP should be completed and approved by the department **30 days**

prior to activity within project waters and/or resource relocation and submitted with an application for a no-cost *Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters.* ARRPs can be submitted to Greg Conley or Adam Whisenant, TPWD Region 2 KAST. Please contact Greg Conley at 903-566-2518 or Greg.Conley@tpwd.texas.gov or Adam Whisenant at 903-566-8387 or Adam.Whisenant@tpwd.texas.gov for more information or to initiate coordination for a permit.

Parks, Public Recreation Areas, Scientific Areas, Wildlife Refuges, or Historic Sites

Chapter 26 of the Parks and Wildlife Code requires that before a state agency can approve any project that will result in the use or taking of public land designated and used as a park, public recreation area, scientific area, wildlife refuge, or historic site, that state agency must provide certain notices to the public, conduct a hearing, and render a finding that there is no feasible and prudent alternative and that the project includes all reasonable planning to minimize harm to the property.

The TPWD maintains a statewide inventory of Land and Water Resources Conservation and Recreation Plan (LWRCRP) data depicting conservation and recreation lands in Texas, which can be found at http://www.tpwd.texas.gov/gis/apps/lwrcrp//. The following properties are within the study area and may be subject to Chapter 26, as shown on the enclosed Figure 2 map and LWRCRP inventory list: the Panola County Fresh Water District's Decker-Hill Park, Rosie Jones Park and Tinkle Park; and the Sabine River Authority's (SRA) Yellow Dog Recreation Site and Panola County Unit 630 Hunting Area.

Recommendation: TPWD recommends avoiding lands owned or managed for conservation or recreation by public entities such as the USFWS, USACE, US Department of Agriculture Forest Service, TPWD, the Texas Historical Commission, Panola County Fresh Water District, and SRA. Such entities should be contacted early in the planning process to determine if a transmission line may impact their property.

Conservation Easements

A conservation easement is a legal agreement between a landowner and a land trust or governmental agency that permanently limits uses of the land (including future fragmentation) to protect and conserve the land's natural values such as wetlands, fertile soils, mature trees, and wildlife habitat. Lands with conservation easements protect existing wildlife habitat from future fragmentation and therefore have greater environmental integrity than comparable lands without conservation easements. Fragmentation of wildlife habitat from transmission line construction on properties where conservation agreements serve to protect the state's natural resources now and in the future is of concern to TPWD. The TPWD LWRCRP inventory, the Protected Areas Data Portal at http://gapanalysis.usgs.gov/padus/, and the National Conservation Easement Database at http://conservationeasement.us/ revealed the following conservation easements within the study area, as shown on the enclosed Figure 2 map and National Conservation Easement Database list: four U.S. Natural Resources Conservation Service Wetland Reserve Program easements. Please note

that these data sources may be incomplete; county records may provide a greater accounting of conservation easements in the study area.

Recommendation: TPWD recommends properties protected by conservation easements be identified in the constraints analysis and avoided during development of alternative routes. If a property protected by a conservation easement is unavoidable and would be crossed by a route alternative(s), TPWD recommends the length of routes through the property be included in any accounting of alternative route impacts presented in the siting study. TPWD also recommends avoiding impacts to existing mitigation banks if they occur within the study area.

State Fish and Wildlife Resources

The Texas Conservation Action Plan (TCAP) provides guidance toward addressing Species of Greatest Conservation Need (SGCN) and important habitats and includes a statewide handbook as well as handbooks for each ecoregion of the state. To help guide your planning efforts, information on the TCAP, handbooks and lists of SGCN can be found at http://www.tpwd.texas.gov/landwater/land/tcap/. The TCAP identifies priority habitats as well as priority issues such as power development and transmission issues and non-native invasive species that can impact native species and habitats.

In addition to federal- and state-threatened and endangered species, Texas contains over 1,300 species that are considered to be SCGN that, due to limited distributions and/or declining populations, may face threat of extirpation or extinction but lack the legal protections given to threatened or endangered species. Information regarding SGCN can be obtained at http://www.tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/tcap/sgcn.phtml . Special landscape features, natural plant communities, and SGCN are rare resources tracked by TPWD, and TPWD actively promotes conservation of these rare resources. TPWD considers it important to minimize impacts to special landscape features, natural plant communities, and SGCN to reduce the likelihood of endangerment.

The project is located within the Western Gulf Coastal Plain (also known as the Pineywoods) Ecoregion. Within the Pineywoods, bottomland hardwood forest communities have been impacted by agricultural conversion, silviculture, inundation, fragmentation and development. Within the study area and within ten miles of the study area the TXNDD identified Water Oak – Willow Oak (*Quercus nigra – Quercus phellos*) (WO-WO) Series G4S3 Communities (EOID 1290, 5541, and 6461), as shown on the enclosed Figure 1 map and EOID tables. The WO-WO community and other bottomland hardwood forests are vegetative communities associated with bottomland ecosystems and contain valuable resources that are biologically and ecologically rich in animal and plant species. Fragmentation and loss of bottomland hardwood forest communities is strongly discouraged.

Recommendation: TPWD recommends that precautions be taken to avoid SGCN, natural plant communities, bottomland hardwood forests or special features when developing alternative routes and if encountered in the project ROW

during construction and maintenance. Areas exhibiting a native grass and forbs component should be protected from disturbance and from introduction of non-native vegetation during construction, maintenance, and operation activities. Individual rare plants or areas found to contain rare plants should be clearly marked as avoidance areas prior to construction, maintenance and operation activities.

Vegetation

The Texas Ecological Systems Classification Project created Ecological Mapping Systems of Texas (EMST) data that are downloadable by ecoregion at http://www.tpwd.texas.gov/gis/data/. The EMST is a recent land classification project which provides systems, mapping subsystems, and vegetation types for Texas and can assist in planning projects to avoid impacts to important habitats or SCGN in an ecoregion.

Recommendation: TPWD recommends incorporating land classification information from the EMST into the siting study to assist with avoiding, minimizing or mitigating impacts to habitats in the project area. For assistance with EMST, please contact Ms. Amie Treuer-Kuehn of the TPWD GIS Lab at Amie.Treuer-Kuehn@tpwd.texas.gov.

Aerial imagery and EMST vegetation cover data indicate the dominant cover types within the study area are:

- Floodplain bottomland forest near the Sabine River
- A patchwork of pine forest or plantations, upland hardwood forest, and disturbance or tame grassland
- Disturbance or tame grassland, pine forest or pine plantation, and upland hardwood forest intermixed in upland areas across the study area
- Riparian forest and herbaceous vegetation along major creeks

The study area also contains roadways, utility ROWs, oil and gas well pads and access roads, pastures, rural residences, Lake Murvaul, the Sabine River, a portion of Toldeo Bend Reservoir, and less dominant areas of floodplain marsh and swamps, flatwoods marsh, and flatwoods forest.

Recommendation: TPWD recommends minimizing impacts to native vegetation during project design and construction. TPWD recommends avoiding sensitive ecological areas and routing through lower-quality habitat that has been converted to introduced pasture for livestock, has been previously fragmented by other development, or has been planted to pine plantation woodlands compared to natural woodland communities. TPWD recommends revegetating areas disturbed by project activities with site-specific native species to mitigate for unavoidable loss of native vegetation including pollinator species. Species appropriate for the study area can be found by accessing the Lady Bird Johnson Wildflower Center at http://www.wildflower.org/collections/.

Significant declines in the population of migrating monarch butterflies (*Danaus plexippus*) have led to widespread concern about this species and the long-term persistence of the North American monarch migration. As part of an international conservation effort TPWD has developed a Texas Monarch and Native Pollinator Conservation Plan, which includes a broad category action to augment larval feeding and adult nectaring opportunities. The plan can be found online at http://tpwd.texas.gov/publications/pwdpubs/media/pwd_rp_w7000_2070.pdf.

Recommendation: TPWD recommends revegetation efforts include planting or seeding native milkweed (*Asclepias* spp) and nectar plants as funding and seed availability allow and scheduling ROW maintenance to occur once the seed from pollinator plants has been released. Information about monarch biology, migration, and butterfly gardening can be found at http://www.monarchwatch.org.

Invasive Species

The zebra mussel (*Dreissena polymorpha*), a highly invasive aquatic species, has been documented is Texas lakes. See map at http://tpwd.texas.gov/huntwild/wild/species/exotic/ including lakes in the Red River Basin, Trinity River Basin, and Brazos River Basin. The zebra mussel larvae and post-larval forms are known to spread between waters via contaminated equipment; post-larval forms can survive several days out of water before being carried to other waters. Post-larval zebra mussels attach to hard surfaces, such as boats, intake structures and piers. The larvae, called veligers, are microscopic and are visually undetectable, thus they are unknowingly carried to other waters via live wells, bait buckets, scuba equipment, and anything that carries small amounts of water.

Statewide rules have been enacted per Texas Administrative Code Title 31, Part 2, Chapter 57, Subchapter A that requires persons leaving or approaching public fresh water to drain all water from their vessels and on-board receptacles (includes live wells, bilges, motors and any other receptacles or water-intake systems coming into contact with public waters). This rule applies to all sites where boats can be launched and includes all types and sizes of boats whether powered or not, personal watercraft, sailboats, kayaks/canoes, or any other vessel used to travel on public waters.

Construction of transmission lines may require equipment to come in contact with inland streams or water bodies such as at stream crossings during installation or removal of temporary or permanent access roads or if structures are placed in or across lakes.

Recommendation: To minimize the risk of transporting zebra mussels or other aquatic invasive species on construction and maintenance equipment and materials, TPWD recommends GPL-Rusk review and adhere to the *TPWD Clean/Drain/Dry Procedures and Zebra Mussel Decontamination Procedures for Contractors Working in Inland Public Waters* which can be obtained at http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/media/WHAB_ZebraMussel_CleanDrainDryDecontaminationProcedures__Final_02052015.pdf.

Disturbed areas are especially susceptible to infestation of invasive terrestrial plant species such as Johnson grass (*Sorghum halepense*), Bermudgrass (*Cynodon dactylon*), King Ranch bluestem (*Bothriochloa ischaemum var. songarica*), other old world bluestems, and Bastard cabbage (*Rapistrum rugosum*). Other species with potential to invade portions of the project ROW can be accessed at the Texasinvasive.org website at http://www.texasinvasives.org/i101/ecoalert.php.

Recommendation: TPWD recommends GPL-Rusk prepare and follow a revegetation and maintenance plan to monitor, treat and control invasive species within the construction and operation ROWs.

Mitigation

TPWD recommends GPL-Rusk prepare a mitigation plan to provide compensatory mitigation for those habitats where impacts from the transmission line cannot be avoided or minimized. This would include impacts to species and habitats covered under federal law (wetlands and associated habitats, threatened or endangered species) and state resource habitat types not covered by state or federal law (riparian areas, isolated wetlands, native prairies, bottomland hardwood forest). At a minimum, TPWD recommends a replacement ratio of 1:1 for state resource habitat types.

Mitigation plans can be developed after the selection of a route, when the acres of impact and the value of impacted habitats can be evaluated on-the-ground. However, mitigation costs and opportunities should be considered when selecting a route. Impact to federally-listed species and their habitats will need to be coordinated with the USFWS, and impact to jurisdictional wetlands will need to be coordinated with the USACE.

I appreciate the opportunity to provide preliminary input on potential impacts related to this project. Please contact me at Karen.Hardin@tpwd.texas.gov or (903) 322-5001 if you have any questions.

Sincerely,

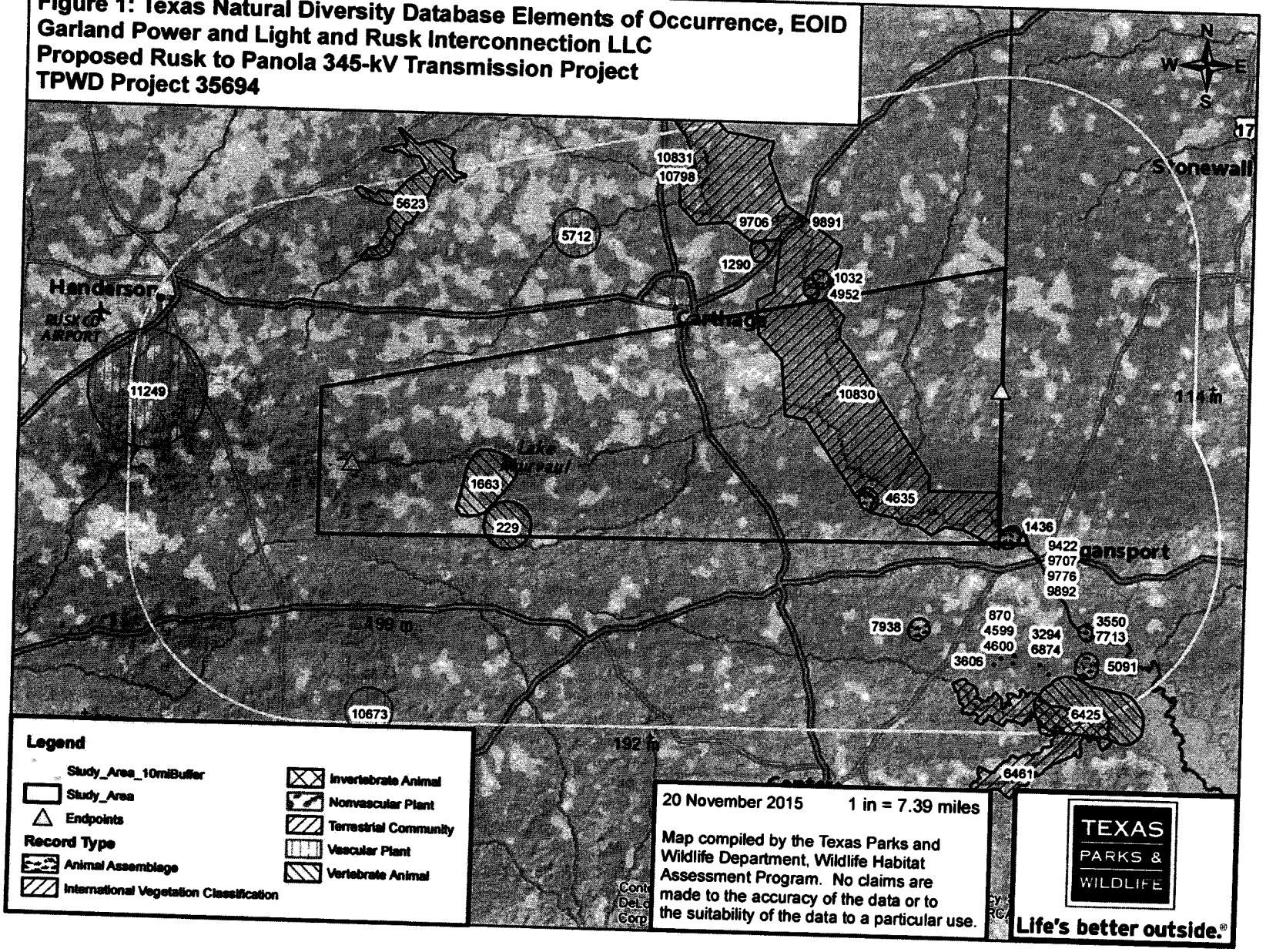
Karen B. Hardin
Wildlife Habitat Assessment Program
Wildlife Division

KBH:35694

Enclosures (5)

cc: Ms. Karen Hubbard, PUC (w/out attachments)
Ms. Debra Bills, USFWS-Arlington (w/out attachments)

Figure 1: Texas Natural Diversity Database Elements of Occurrence, EOID
Garland Power and Light and Rusk Interconnection LLC
Proposed Rusk to Panola 345-kV Transmission Project
TPWD Project 35694



Garland Power and Light and Rusk Interconnection LLC
Rusk to Panola 345-kV Transmission Project
TPWD Project Number 35694
TPWD Search of TXNDD by Karen Hardin, November 18, 2015

Texas Natural Diversity Database (TXNDD) Elements of Occurrence (EOID) within the Study Area

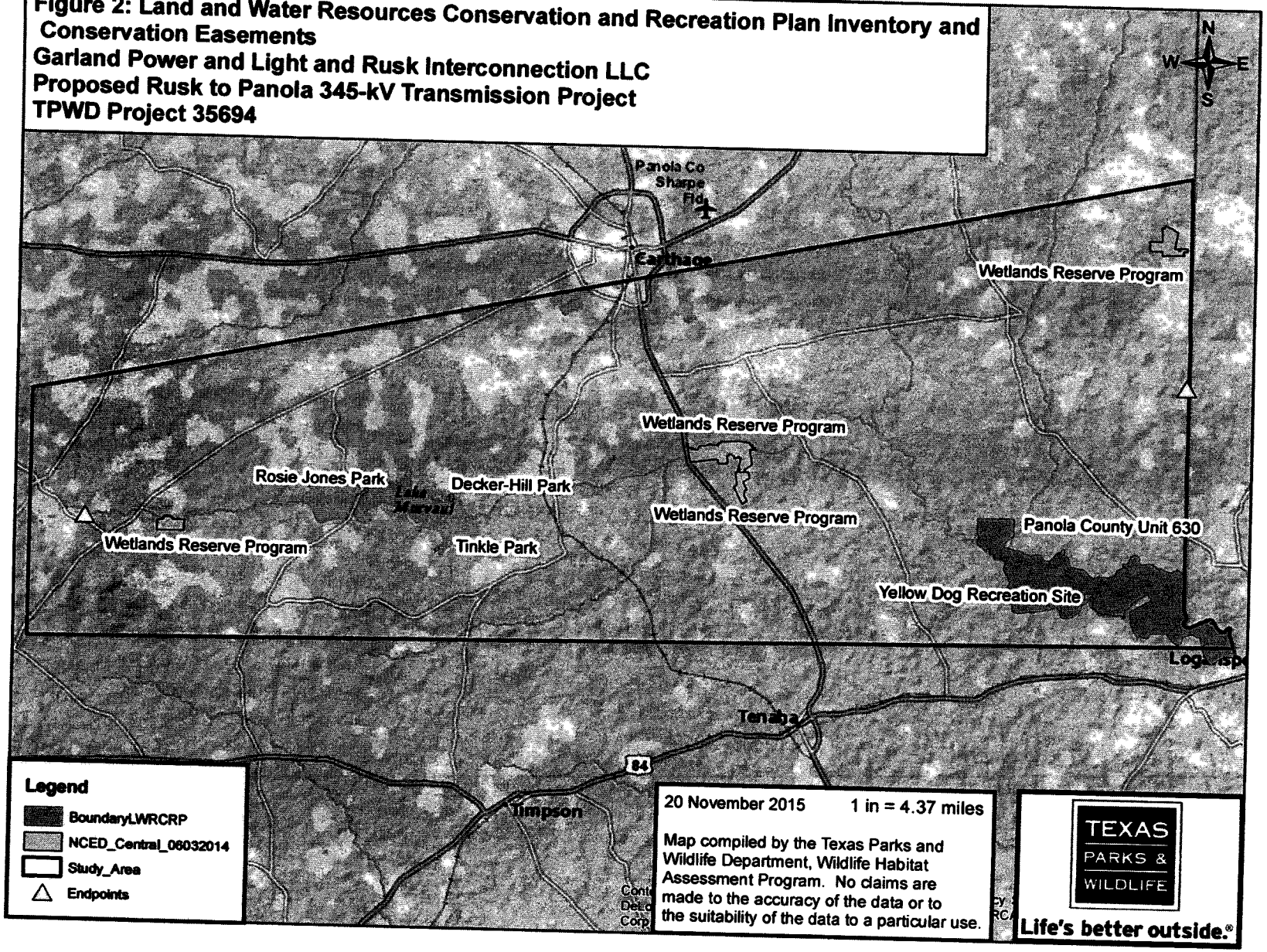
EO_ID	ELCODE	SCIENTIFIC	COMMON_NAM	GROUP_CLAS	GRANK	SRANK	USESA	SPROT
1663	ABNKC10010	Haliaeetus leucocephalus	Bald Eagle	Vertebrate Animal	G5	S3B,S3N		T
10830	IMBIV37020	Potamilus amphichaenus	Texas Heelsplitter	Invertebrate Animal	G1G2	S1		T
229	AMACC01030	Myotis austroriparius	Southeastern myotis bat	Vertebrate Animal	G3G4	S3		
5541	CETP002328	Quercus nigra-quercus phellos series	Water Oak-willow Oak Series	Terrestrial Community - Other Classification	G4	S3		
1436	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
4635	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		

Texas Natural Diversity Database (TXNDD) Elements of Occurrence (EOID) within Ten Miles of the Study Area

EO_ID	ELCODE	SCIENTIFIC	COMMON_NAM	GROUP_CLAS	GRANK	SRANK	USESA	SPROT
870	ABNYF07060	Picoides borealis	Red-cockaded Woodpecker	Vertebrate Animal	G3	S2B	LE	E
3294	ABNYF07060	Picoides borealis	Red-cockaded Woodpecker	Vertebrate Animal	G3	S2B	LE	E
3606	ABNYF07060	Picoides borealis	Red-cockaded Woodpecker	Vertebrate Animal	G3	S2B	LE	E
4599	ABNYF07060	Picoides borealis	Red-cockaded Woodpecker	Vertebrate Animal	G3	S2B	LE	E
4600	ABNYF07060	Picoides borealis	Red-cockaded Woodpecker	Vertebrate Animal	G3	S2B	LE	E
6874	ABNYF07060	Picoides borealis	Red-cockaded Woodpecker	Vertebrate Animal	G3	S2B	LE	E
9706	IMBIV17010	Fusconaia askewi	Texas Pigtoe	Invertebrate Animal	G2G3	S2S3		T
9707	IMBIV17010	Fusconaia askewi	Texas Pigtoe	Invertebrate Animal	G2G3	S2S3		T
1663	ABNKC10010	Haliaeetus leucocephalus	Bald Eagle	Vertebrate Animal	G5	S3B,S3N		T
6425	ABNKC10010	Haliaeetus leucocephalus	Bald Eagle	Vertebrate Animal	G5	S3B,S3N		T
9776	IMBIV21190	Lampsilis satura	Sandbank Pocketbook	Invertebrate Animal	G2	S1		T
10798	IMBIV21190	Lampsilis satura	Sandbank Pocketbook	Invertebrate Animal	G2	S1		T
5623	ARAAB02010	Macrochelys temminckii	Alligator Snapping Turtle	Vertebrate Animal	G3G4	S3		T
9422	IMBIV31010	Obovaria jacksoniana	Southern Hickorynut	Invertebrate Animal	G2	S1		T
9891	IMBIV37020	Potamilus amphichaenus	Texas Heelsplitter	Invertebrate Animal	G1G2	S1		T
9892	IMBIV37020	Potamilus amphichaenus	Texas Heelsplitter	Invertebrate Animal	G1G2	S1		T
10830	IMBIV37020	Potamilus amphichaenus	Texas Heelsplitter	Invertebrate Animal	G1G2	S1		T
10831	IMBIV37020	Potamilus amphichaenus	Texas Heelsplitter	Invertebrate Animal	G1G2	S1		T
11249	PDFAB080C0	Amorpha paniculata	panicled indigobush	Vascular Plant	G2G3	S2		
10673	PDROS0H810	Crataegus nananixonii	Nixon's dwarf hawthorn	Vascular Plant	G1	S1		
5712	PDROS0H5G0	Crataegus warneri	Warner's hawthorn	Vascular Plant	G3Q	S3		
229	AMACC01030	Myotis austroriparius	Southeastern myotis bat	Vertebrate Animal	G3G4	S3		
3550	AMACC01030	Myotis austroriparius	Southeastern myotis bat	Vertebrate Animal	G3G4	S3		
1032	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
1436	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		

EO_ID	ELCODE	SCIENTIFIC	COMMON_NAM	GROUP_CLAS	GRANK	SRANK	USESA	SPROT
4635	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
4952	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
5091	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
7713	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
7938	OWADINGCA1	Rookery		Animal Assemblage	G5	SNR		
1290	CETP002328	Quercus nigra-quercus phellos series	Water Oak-willow Oak Series	Terrestrial Community - Other Classification	G4	S3		
5541	CETP002328	Quercus nigra-quercus phellos series	Water Oak-willow Oak Series	Terrestrial Community - Other Classification	G4	S3		
6461	CETP002328	Quercus nigra-quercus phellos series	Water Oak-willow Oak Series	Terrestrial Community - Other Classification	G4	S3		

Figure 2: Land and Water Resources Conservation and Recreation Plan Inventory and Conservation Easements
Garland Power and Light and Rusk Interconnection LLC
Proposed Rusk to Panola 345-kV Transmission Project
TPWD Project 35694



Land and Water Resources Conservation and Recreation Plan (LWRCRP) Inventory within Study Area
Garland Power and Light and Rusk Interconnection LLC
Proposed 345-kV Rusk to Panola Transmission Project
TPWD Project No. 35694

OBJECTID	Owner	OwnerType	OwnerClass	OwnerPropN	Manager
5655	Panola County Fresh Water District	Utility District	Park	Decker-Hill Park	Panola County Fresh Water District
5656	Panola County Fresh Water District	Utility District	Park	Rosie Jones Park	Panola County Fresh Water District
5657	Panola County Fresh Water District	Utility District	Park	Tinkle Park	Panola County Fresh Water District
6303	Sabine River Authority	River Authority	Hunting Area	Panola County Unit 630	Sabine River Authority
6310	Sabine River Authority	River Authority	Recreation	Yellow Dog Recreation Site	Sabine River Authority

National Conservation Easement Database
Garland Power and Light and Rusk Interconnection LLC
Proposed Rusk to Panola 345-kV Transmission Project
TPWD Project 35694

unique_id	sitename	esmthldr	eholdtyp	owntype	purpose	duration
972031	Wetlands Reserve Program	U.S. Natural Resources Conservation Service	Federal	Private	Environmental System	Permanent
966132	Wetlands Reserve Program	U.S. Natural Resources Conservation Service	Federal	Private	Environmental System	Permanent
966368	Wetlands Reserve Program	U.S. Natural Resources Conservation Service	Federal	Private	Environmental System	Permanent
960398	Wetlands Reserve Program	U.S. Natural Resources Conservation Service	Federal	Private	Environmental System	Permanent

BURNS McDONNELL

October 27, 2015

Mr. Michael Warriner
Program Supervisor
Texas Parks and Wildlife Department
4200 Smith School Rd
Austin, TX 78744

Re: Rusk – Panola Transmission Project

Dear Mr. Warriner:

Garland Power and Light and Rusk Interconnection LLC (Rusk) are developing the Rusk to Panola Transmission Project (Project) in order to interconnect the Electric Reliability Council of Texas (ERCOT) transmission grid to the Southern Cross electric transmission line that is planned to connect ERCOT and the southeastern United States. We are requesting your input on the Project, which will be submitted to the Public Utility Commission of Texas for approval of a Certificate of Convenience and Necessity (CCN). The Project will begin at a new switching station in Rusk County and extend eastward for approximately 40 miles to a new switchyard adjacent to a new converter station, both to be located at the border of Texas and Louisiana (see enclosed map of the Project study area). Rusk and Garland have retained Burns & McDonnell to assist in the alternative route development and route selection for the Project.

Enclosed with this letter is a map depicting the study area for the Project. Burns & McDonnell is requesting your assistance inventorying the human and natural resources in the Project area to identify any routing constraints or opportunities within the area that should be considered as part of the Project. The new transmission line in the Project, and the subject of the CCN application, will be double circuit, 345-kV AC. Routing constraints include those areas or resources which may not be compatible with transmission line construction, such as airports, protected species habitat, or dense residential areas. Route opportunities include such things as previously disturbed areas, industrial corridors, and existing utility rights-of-way. Your input will assist the project team in developing preliminary alternative routes that take advantage of opportunities while minimizing potential environmental and land use impacts, including the following:

- Land use (current or proposed land development projects, park/recreation areas, etc.)
- Aesthetics
- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomics (population, employment, growth, current/future development)
- Cultural resources (historic and archaeological)
- Transportation and roads (airport and roadway expansions, construction, operations, and maintenance)

9400 Ward Parkway \ Kansas City, MO 64114
O 816-333-9400 \ F 816-333-3690 \ burnsmcd.com

BURNS McDONNELL

Mr. Michael Warriner
Texas Parks and Wildlife Department
October 27, 2015
Page 2

In addition to the above requested items, we are also requesting information regarding any permits or any type of approval for construction of the Project within your jurisdiction.

Your input is important. The information we collect will be used to help Burns & McDonnell develop alternative routes that are compatible with existing and planned land uses as well environmentally compatible. We request that responses be submitted by Monday, November 30th to allow us time to incorporate the information into the study and CCN application. Additional Project information can be found at the following website: http://www.ruskpanolatransmissionproject.com/

We appreciate your assistance. If you have any questions or require additional information please contact me at (816) 822-3446 or dwerth@burnsmcd.com.

Sincerely,

Dusty Werth
Senior Environmental Scientist

DEW

Enclosure: Study Area Map

BURNS McDONNELL

October 27, 2015

Mr. Bob Gottfried
Supervisor
Texas Parks and Wildlife Department
4200 Smith School Rd
Austin, TX 78744

Re: Rusk – Panola Transmission Project

Dear Mr. Gottfried:

Garland Power and Light and Rusk Interconnection LLC (Rusk) are developing the Rusk to Panola Transmission Project (Project) in order to interconnect the Electric Reliability Council of Texas (ERCOT) transmission grid to the Southern Cross electric transmission line that is planned to connect ERCOT and the southeastern United States. We are requesting your input on the Project, which will be submitted to the Public Utility Commission of Texas for approval of a Certificate of Convenience and Necessity (CCN). The Project will begin at a new switching station in Rusk County and extend eastward for approximately 40 miles to a new switchyard adjacent to a new converter station, both to be located at the border of Texas and Louisiana (see enclosed map of the Project study area). Rusk and Garland have retained Burns & McDonnell to assist in the alternative route development and route selection for the Project.

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Texas Parks and Wildlife Department
October 27, 2015
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Sincerely,

Dusty Werth
Senior Environmental Scientist

DEW

Enclosure: Study Area Map

BURNS McDONNELL

October 27, 2015

Ms. Debra Bills
Arlington Field Office Supervisor
U.S. Fish and Wildlife Service
2005 Northeast Greed Oaks Blvd, Suite 140
Arlington, TX 76006

Re: Rusk – Panola Transmission Project

Dear Ms. Bills:

Garland Power and Light and Rusk Interconnection LLC (Rusk) are developing the Rusk to Panola Transmission Project (Project) in order to interconnect the Electric Reliability Council of Texas (ERCOT) transmission grid to the Southern Cross electric transmission line that is planned to connect ERCOT and the southeastern United States. We are requesting your input on the Project, which will be submitted to the Public Utility Commission of Texas for approval of a Certificate of Convenience and Necessity (CCN). The Project will begin at a new switching station in Rusk County and extend eastward for approximately 40 miles to a new converter station, both to be located at the border of Texas and Louisiana (see enclosed map of the Project study area). Rusk and Garland have retained Burns & McDonnell to assist in the alternative route development and route selection for the Project.

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BURNS McDONNELL

Ms. Debra Bills
U.S. Fish and Wildlife Service
October 27, 2015
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Sincerely,

Dusty Werth
Senior Environmental Scientist

DEW

Enclosure: Study Area Map

Werth, Dusty

From: Small, Brian <brian_small@fws.gov>
Sent: Monday, November 02, 2015 2:33 PM
To: Werth, Dusty
Subject: Rusk to Panola Transmission Project

Follow Up Flag: Follow up
Flag Status: Completed

Mr. Werth,

If you go to the IPaC website: http://ecos.fws.gov/ipac/, select initial project scoping and click state/county list and continue, select Texas and County and continue, and select project type and continue, you will find federally listed endangered/threatened species listed for your particular County of interest.

This is a new site and the old pathway may not work.

Please note that our office is currently utilizing the U.S. Fish and Wildlife Service's Information, Planning, and Conservation System (IPaC). The IPaC is an online conservation planning tool intended to streamline the environmental review process. Using IPaC, you may obtain a simple threatened and endangered species list, or map a project area and obtain information on federally listed species, wetlands, and other fish and wildlife resources. For future projects, we recommend IPaC be the first source of information in the environmental review process. If, after utilizing IPaC, you determine the project would have "no effect" on listed species or critical habitat, no further contact with this office is necessary.

--
Brian Small
Fish & Wildlife Biologist
U.S. Fish & Wildlife Service
2005 Green Oaks Blvd., Suite 140
Arlington, TX 76006
(817) 277-1100 ext. 2105

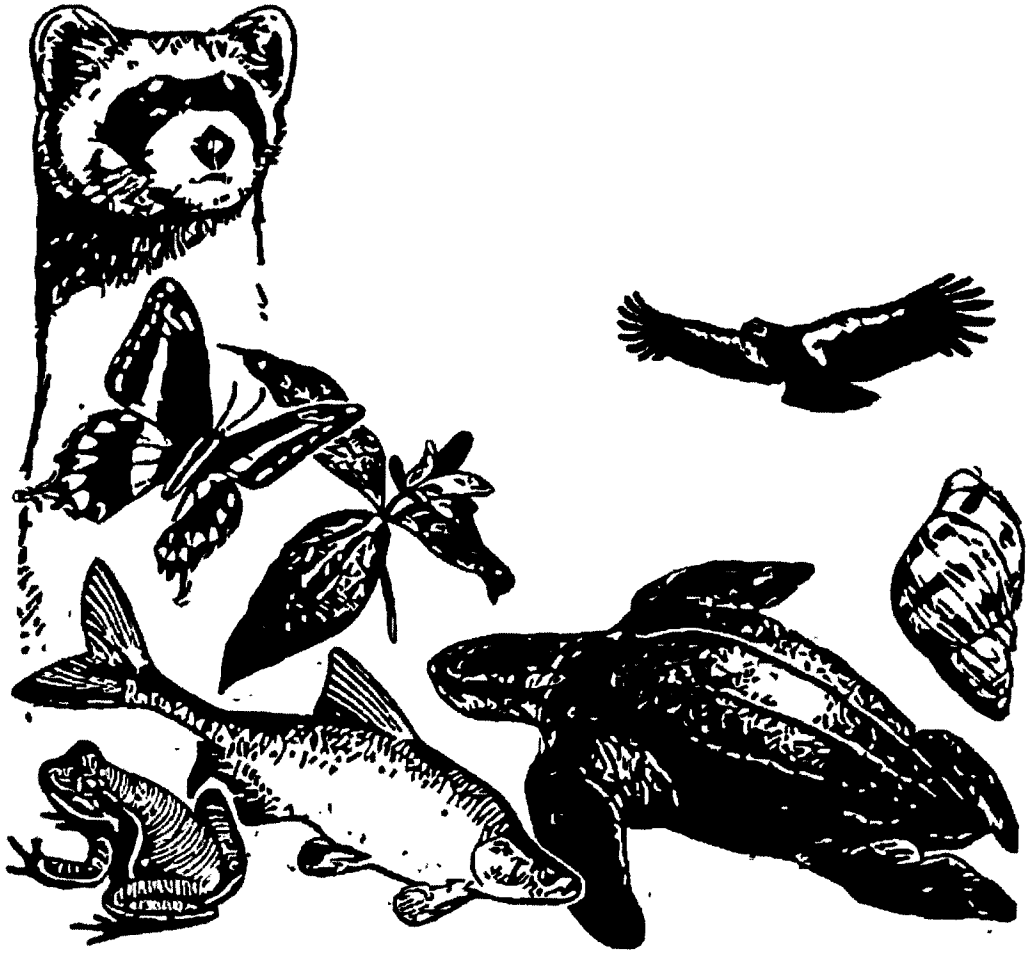
U.S. Fish & Wildlife Service

Rusk to Panola Transmission Line

IPaC Trust Resource Report

Generated November 09, 2015 11:19 AM MST

This report is for informational purposes only and should not be used for planning or analyzing project-level impacts. For projects that require FWS review, please return to this project on the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report

Project Description

NAME

Rusk to Panola Transmission Line

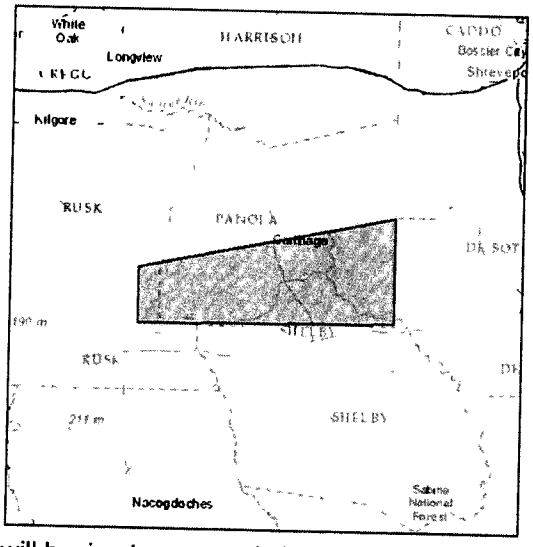
PROJECT CODE

W4WQT-EPZNB-B2XKP-66J4M-NSDQPI

LOCATION

Panola and Rusk counties, Texas

DESCRIPTION



The Rusk to Panola Transmission Project is being developed to interconnect the Electric Reliability Council of Texas (ERCOT) transmission grid to the Southern Cross electric transmission line that is planned to connect ERCOT and the southeastern United States. The Project will begin at a new switching station in Rusk County and extend eastward for approximately 40 miles to a new switchyard adjacent to a new converter station, both to be located at the border of Texas and Louisiana.

U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Arlington Ecological Services Field Office
2005 Ne Green Oaks Blvd
SUITE 140
Arlington, TX 76006-6247
(817) 277-1100

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an official species list on the Regulatory Documents page.

Birds

Least Tern Sterna antillarum — Endangered

THIS SPECIES ONLY NEEDS TO BE CONSIDERED IF THE FOLLOWING CONDITION APPLIES
Wind Energy Projects

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B07N

Piping Plover Charadrius melodus — Threatened

THIS SPECIES ONLY NEEDS TO BE CONSIDERED IF THE FOLLOWING CONDITION APPLIES
Wind Energy Projects

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B079

Red Knot Calidris canutus rufa — Threatened

THIS SPECIES ONLY NEEDS TO BE CONSIDERED IF THE FOLLOWING CONDITION APPLIES
Wind Energy Projects

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DM

Flowering Plants

No Common Name Geocarpon minimum — Threatened

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q1WK

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

American Kestrel Falco sparverius paulus Year-round	Bird of conservation concern
American Bittern Botaurus lentiginosus Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0F3	Bird of conservation concern
Bachman's Sparrow Aimophila aestivalis Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B07F	Bird of conservation concern
Bald Eagle Haliaeetus leucocephalus Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008	Bird of conservation concern
Bewick's Wren Thryomanes bewickii ssp bewickii Season: Wintering	Bird of conservation concern
Brown-headed Nuthatch Sitta pusilla Year-round	Bird of conservation concern
Chuck-will's-widow Caprimulgus carolinensis Season: Breeding	Bird of conservation concern
Dickcissel Spiza americana Season: Breeding	Bird of conservation concern
Fox Sparrow Passerella iliaca Season: Wintering	Bird of conservation concern
Harris's Sparrow Zonotrichia querula Season: Wintering	Bird of conservation concern
Henslow's Sparrow Ammodramus henslowii Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09D	Bird of conservation concern
Hudsonian Godwit Limosa haemastica Season: Migrating	Bird of conservation concern
Kentucky Warbler Oporornis formosus Season: Breeding	Bird of conservation concern
Le Conte's Sparrow Ammodramus leconteii Season: Wintering	Bird of conservation concern

Least Bittern Ixobrychus exilis
Season: Breeding
Bird of conservation concern

Lesser Yellowlegs Tringa flavipes
Season: Wintering
Bird of conservation concern

Little Blue Heron Egretta caerulea
Season: Breeding
Bird of conservation concern

Loggerhead Shrike Lanius ludovicianus
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FY
Bird of conservation concern

Louisiana Waterthrush Parkesia motacilla
Season: Breeding
Bird of conservation concern

Orchard Oriole Icterus spurius
Season: Breeding
Bird of conservation concern

Painted Bunting Passerina ciris
Season: Breeding
Bird of conservation concern

Prairie Warbler Dendroica discolor
Season: Breeding
Bird of conservation concern

Prothonotary Warbler Protonotaria citrea
Season: Breeding
Bird of conservation concern

Red-headed Woodpecker Melanerpes erythrocephalus
Year-round
Bird of conservation concern

Rusty Blackbird Euphagus carolinus
Season: Wintering
Bird of conservation concern

Short-eared Owl Asio flammeus
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD
Bird of conservation concern

Swainson's Warbler Limnothlypis swainsonii
Season: Breeding
Bird of conservation concern

Wood Thrush Hylocichla mustelina
Season: Breeding
Bird of conservation concern

Worm Eating Warbler Helmitheros vermivorum
Season: Breeding
Bird of conservation concern

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS
The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS
Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The area of this project is too large for IPaC to load all NWI wetlands in the area. The list below may be incomplete, or the acreages reported may be inaccurate. Please contact the local U.S. Fish & Wildlife office or visit the NWI map for a full list.

Freshwater Emergent Wetland

PEM5Fh	32 5 acres
PEM5C	25.6 acres
PEM5A	10.4 acres
PEM1C	6.17 acres
PEM1A	3.29 acres
PEM5F	2.48 acres
PEM1Hh	0.911 acre
PEM1F	0.734 acre

Freshwater Forested/shrub Wetland

PFO1A	4880.0 acres
PFO1C	334.0 acres
PFO1/SS1A	122.0 acres
PFO2F	108.0 acres
PFO1/2Fh	66.7 acres
PSS2/UBGh	46.4 acres
PFO1Ch	10.5 acres
PFO2/1C	10 3 acres
PFO1/2C	9 34 acres
PFO2/UBG	9.06 acres
PFO2Hh	6.43 acres
PFO5/UBHh	6 28 acres
PSS1Fh	6.12 acres
PFO1/FO2C	4.89 acres
PFO2/UBF	4.09 acres
PSS1C	3.21 acres
PFO1/UBF	2.57 acres
PSS1/UBF	2.43 acres
PSS1A	1.93 acres
PSS1/ABF	1.49 acres
PSS2/UBG	1.41 acres
PSS1F	1.14 acres
PFO1/SS1Ch	0.996 acre
PSS1Ch	0.693 acre
PFO1/ABF	0.482 acre
PFO1/EM5C	0.451 acre
PSS1/EM5C	0 298 acre

Freshwater Pond

PUBHh	258.0 acres
PUBH	23.8 acres
PUBHx	22.9 acres
PAB/UBHh	6.41 acres
PABF	6.21 acres
PUBF	2.58 acres
PUSC	0.991 acre
PABHh	0.366 acre

Lake

L1UBHh	179.0 acres

L2AB/UBHh	9.82 acres
L2ABGh	8.97 acres

Riverine

R2UBH	855.0 acres
R2USC	3.13 acres
R2UBF	0.888 acre

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BURNS McDONNELL

October 27, 2015

Mr. Brian Kamisato, P.E.
Fort Worth Deputy District Engineer
U.S. Army Corps of Engineers
819 Taylor St, Room 3A37
Fort Worth, TX 76102

Re: Rusk – Panola Transmission Project

Dear Mr. Kamisato, P.E.:

Garland Power and Light and Rusk Interconnection LLC (Rusk) are developing the Rusk to Panola Transmission Project (Project) in order to interconnect the Electric Reliability Council of Texas (ERCOT) transmission grid to the Southern Cross electric transmission line that is planned to connect ERCOT and the southeastern United States. We are requesting your input on the Project, which will be submitted to the Public Utility Commission of Texas for approval of a Certificate of Convenience and Necessity (CCN). The Project will begin at a new switching station in Rusk County and extend eastward for approximately 40 miles to a new converter station, both to be located at the border of Texas and Louisiana (see enclosed map of the Project study area). Rusk and Garland have retained Burns & McDonnell to assist in the alternative route development and route selection for the Project.

Enclosed with this letter is a map depicting the study area for the Project. Burns & McDonnell is requesting your assistance inventorying the human and natural resources in the Project area to identify any routing constraints or opportunities within the area that should be considered as part of the Project. The new transmission line in the Project, and the subject of the CCN application, will be double circuit, 345-kV AC. Routing constraints include those areas or resources which may not be compatible with transmission line construction, such as airports, protected species habitat, or dense residential areas. Route opportunities include such things as previously disturbed areas, industrial corridors, and existing utility rights-of-way. Your input will assist the project team in developing preliminary alternative routes that take advantage of opportunities while minimizing potential environmental and land use impacts, including the following:

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- Cultural resources (historic and archaeological)
- Transportation and roads (airport and roadway expansions, construction, operations, and maintenance)

9400 Ward Parkway \ Kansas City, MO 64114
O 816-333-9400 \ F 816-333-3690 \ burnsmcd.com

BURNS McDONNELL

Mr. Brian Kamisato, P.E.
U.S. Army Corps of Engineers
October 27, 2015
Page 2

In addition to the above requested items, we are also requesting information regarding any permits or any type of approval for construction of the Project within your jurisdiction.

Your input is important. The information we collect will be used to help Burns & McDonnell develop alternative routes that are compatible with existing and planned land uses as well environmentally compatible. We request that responses be submitted by Monday, November 30th to allow us time to incorporate the information into the study and CCN application. Additional Project information can be found at the following website: http://www.ruskpanolatransmissionproject.com/

We appreciate your assistance. If you have any questions or require additional information please contact me at (816) 822-3446 or dwerth@burnsmcd.com.

Sincerely,

Dusty Werth
Senior Environmental Scientist

DEW

Enclosure: Study Area Map

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

November 12, 2015

Regulatory Division

SUBJECT: Project Number SWF-2015-00475, Rusk-Panola Transmission Project

Dusty Werth
Burns & McDonnell Consultants, Inc.
Environmental Scientist
9400 Ward Parkway
Kansas City, MO 64114-3319

Dear Mr. Werth:

Thank you for your letter received November 2, 2015, concerning a proposal by Garland Power and Light and Rusk Interconnection LLC to construct a transmission line, switching station, converter station, and new switchyard located in Panola County, Texas. This project has been assigned Project Number SWF-2015-00475. Please include this number in all future correspondence concerning this project.

Mr. Billy Standridge has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible.

You may be contacted for additional information about your request. For your information, please reference the Fort Worth District Regulatory Branch homepage at www.swf.usace.army.mil/Missions/Regulatory.aspx and particularly guidance on submittals at www.media.swf.usace.army.mil/pubdata/environ/regulatory/introduction/submital.pdf and mitigation at www.usace.army.mil/Missions/Regulatory/Permitting/Mitigation.aspx that may help you supplement your current request or prepare future requests.

If you have any questions about the evaluation of your submittal or would like to request a copy of one of the documents referenced above, please refer to our website at http://www.swf.usace.army.mil/Missions/Regulatory.aspx or contact Mr. Billy Standridge at the address above or telephone 817-886-1662 and refer to your assigned project number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

Please help the regulatory program improve its service by completing the survey on the following website: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Stephen L Brooks
Chief, Regulatory Division

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DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

December 1, 2015

Regulatory Division

SUBJECT: Project Number SWF-2015-00475, Rusk-Panola Transmission Project

Mr. Dusty Werth
Burns & McDonnell Consultants, Inc.
9400 Ward Parkway
Kansas City, Missouri 64114-3319

Dear Mr. Werth:

This letter is in regard to information received November 2, 2015, concerning a proposal by Garland Power and Light and Rusk Interconnection LLC to construct a transmission line, switching station, converter station, and new switchyard located in Rusk and Panola Counties, Texas. This project has been assigned Project Number SWF-2015-00475. Please include this number in all future correspondence concerning this project.

We have reviewed this project in accordance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Under Section 404, the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into waters of the United States, including wetlands. Our responsibility under Section 10 is to regulate any work in, or affecting, navigable waters of the United States. Any such discharge or work requires Department of the Army authorization in the form of a permit. For more information on the USACE Regulatory Program, please reference the Fort Worth District Regulatory Branch homepage at www.swf.usace.army.mil/regulatory.

Based on the information provided, it appears this project may require authorization under Section 404 and Section 10. The proposed construction activities may be authorized by general permit, such as Nationwide Permit (NWP) 12 for Utility Line Activities. We have enclosed a copy of this general permit for your reference. If the project does not meet the terms and conditions of a general permit, an individual permit would be required for authorization. Please note the notification requirements found on page 2 of the attached NWP-12. Additionally, please be aware of the notification requirements of General Condition 18 and 20 of all Nationwide Permits and please refer to 33 CFR 322.5(i) for special policy information on power transmission lines.

So that we may continue our evaluation of your proposed project, we request that you provide the following information once available:

1. A detailed project description.

2. A map (or maps) showing the entire route of the project.

3. The proposed route of the project on 8 ½ by 11-inch copies of 7.5-minute United States Geological Survey (USGS) quadrangle maps, national wetland inventory maps, published soil survey maps, scaled aerial photographs, and/or other suitable maps. Identify all base maps, (e.g. "Fort Worth, Texas" 7.5-minute USGS quadrangle, Natural Resources Conservation Service Tarrant County Soil Survey sheet 10). Clearly mark (such as by circling) and number the location of each proposed crossing of a water of the United States and any appurtenant structure(s) in waters of the United States on the map. Waters of the United States include streams and rivers and most lakes, ponds, mudflats, sandflats, wetlands, sloughs, wet meadows, abandoned sand and gravel mining and construction pits, and similar areas.

4. For each potential crossing or appurtenant structure in a water of the United States, the following site specific information when applicable:

   a. 7.5-minute USGS quadrangle map name, universal transverse mercator (UTM) coordinates, county or parish, waterway name;

   b. a brief characterization of the crossing area (stream, forested wetland, non-forested wetland, etc.) including the National Wetland Inventory classification and soil series;

   c. distance between ordinary high water marks;

   d. proposed method of crossing (trench, bore, span, bridge, culvert etc.);

   e. length of proposed crossing;

   f. width of temporary and permanent rights-of-way;

   g. type and amount of dredged or fill material proposed to be discharged;

   h. acreage of proposed temporary and permanent adverse impacts to waters of the United States, including wetlands; and

   i. a typical cross-section.

Please refer to the enclosed guidance for Department of the Army submittals for additional details about what you should submit for this and future linear projects. Additional information, including more detailed jurisdictional determination data, may be needed to complete our evaluation of your project in some cases. We encourage you to consult with a qualified specialist (biologist, ecologist or other specialist qualified in preliminary jurisdictional determinations) who is familiar with the Atlantic and Gulf Coastal Plain Regional Supplement to the 1987 Corps of Engineers Wetlands Delineation Manual and the USACE Regulatory Program (33 CFR Parts 320-331).

Important cultural resources are known to occur in Rusk and Panola Counties. Several endangered and threatened species, including Geocarpon minimum are known to occur within the project study area. Please consider the potential effects of your proposed action on cultural resources and endangered species in your planning efforts. For additional information about endangered and threatened species, please contact the U. S. Fish and Wildlife Service.

We encourage you to avoid and minimize adverse impacts to streams, wetlands, and other waters of the United States in planning this project. Please forward your response to us as soon as possible so that we may continue our evaluation of your request. If we do not receive the requested information within 30 days of the date of this letter, we will consider your application administratively withdrawn. If withdrawn, you may re-open your application at a later date by submitting the requested information.

Please note that it is unlawful to start work without a Department of the Army permit when one is required.

You may be contacted for additional information about your request. For your information, please refer to the Fort Worth District Regulatory Branch homepage at http://www.swf.usace.army.mil/Missions/regulatory.aspx and particularly guidance on submittals at http://media.swf.usace.army.mil/pubdata/environ/Regulatory/introduction/submital.pdf, and mitigation at http://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Mitigation.aspx that may help you supplement your current request or prepare future requests.

If you have any questions about the evaluation of your submittal or would like to request a copy of one of the documents referenced above, please contact Mr. Billy Standridge at the address above or telephone 817-886-1662 and refer to your assigned project number.

Sincerely,

for Stephen L Brooks
Chief, Regulatory Division

Enclosures

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NATIONWIDE PERMIT 12
Utility Line Activities
Effective Date: March 19, 2012
(NWP Final Notice, 77 FR 10184)

Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel

roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 31.) (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 4: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an

ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the

activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for