



# United States Department of the Interior

FISH AND WILDLIFE SERVICE

Post Office Box 1306  
Albuquerque, New Mexico 87103



In Reply Refer To:  
FWS/R2/NWRS/AZ-NM/064736

January 26, 2017

Ms. Jennifer Rouda  
Vice President, Environmental Development  
Abengoa Transmission & Infrastructure  
2929 North Central, Suite 1000  
Phoenix, Arizona 85012

Dear Ms. Rouda:

The U.S. Fish and Wildlife Service (Service) has completed the enclosed Finding of Appropriateness of a Refuge Use (Finding) for the project proposed by Delaney Colorado River Transmission to construct a 500 kV transmission line across about 25 miles of Kofa National Wildlife Refuge (NWR).

The Finding was conducted pursuant to policy in the Service Manual (Chapter 603 FW 1). As previously advised, for a use to be found appropriate, it must be a wildlife-dependent recreational use; contribute to fulfilling the refuge purpose(s), National Wildlife Refuge System (NWRS) mission, or goals or objectives described in a refuge management plan; or meet the criteria addressed in the enclosed FWS Form 3-2319. This proposed transmission line is outside of any permitted right of way and based on our evaluation, the proposed project does not meet the criteria for an appropriate use and would interfere with and detract from fulfilling the NWRS mission and purpose of Kofa NWR. As such, the Service has found that the proposed project cannot be authorized and a right of way permit will not be granted for this project on Kofa NWR.

If you have questions, please contact me at 928-783-7861.

Sincerely,

Elaine Johnson, Complex Manager

Enclosure (s)

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Kofa National Wildlife Refuge

Use: 500 KV transmission line Right Of Way (ROW) request

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria:   | YES                                 | NO                                  |
|--|-------------------------------------|-------------------------------------|
| (a) Do we have jurisdiction over the use?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (c) Is the use consistent with applicable Executive orders and Department and Service policies?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (d) Is the use consistent with public safety?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (g) Is the use manageable within available budget and staff?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (h) Will this be manageable in the future within existing resources?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes  No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate

Refuge Manager: Elaine E Johnson

Date: 21 Oct 2016

If found to be Not Appropriate, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found Not Appropriate outside the CCP process, the refuge supervisor must sign concurrence.

If found to be Appropriate, the refuge supervisor must sign concurrence.

Refuge Supervisor: J. Callahan

Date: 1/24/17

A compatibility determination is required before the use may be allowed.

Cc: Richard Weiss, Project Manager, Starwood Energy Group  
Emilio Rodríguez-Izquierdo Serrano, VP Business Development, Phoenix Office, Abbengoa  
Cary Olson, Senior Project Manager, HDR Engineering  
Joseph Incardine, National Project Manager, Bureau of Land Management  
Eduardo Arreola, Supervisory Project Manager, AZ State Office, Bureau of Land  
Management  
John MacDonald, Field Manager, Yuma Office, Bureau of Land Management  
Steve Spangle, Field Supervisor, AZ Ecological Services, U.S. Fish and Wildlife Service  
Juliette Fernandez, Refuge Supervisor AZ/NM, U.S. Fish and Wildlife Service

## Finding of Appropriateness of a Refuge Use

**Proposed Use:** Issuance of new right-of-way permit to DCR Transmission, LLC for construction and operation of Ten West Link 500 kV transmission line through the Kofa National Wildlife Refuge

DCR Transmission, LLC (DCRT), a California-based electric company, is proposing to construct a segment of a 500 kV line from east to west across the 24.8-mile width of Kofa National Wildlife Refuge (NWR). This would be part of the 114-mile, 500 kV Ten West Link transmission line that originates at the Delaney Substation in Maricopa County (AZ), traverses through La Paz County, and crosses the Colorado River into the Southern California Edison Colorado River Substation in Riverside County, CA. DCRT is requesting a new right-of-way (ROW) permit from the U.S. Fish and Wildlife Service (Service) for this proposed line which would be constructed on Kofa NWR adjacent to an existing Southern California Edison (SCE) transmission line (Devers Palo Verde 1). This new ROW request is from a different company (DCRT). It cannot be accommodated within the existing SCE ROW and therefore, would require a new ROW.

The ROW requested would include a 24.8-mile long, 180-foot wide easement (90 feet on each side of the proposed transmission line). The requested ROW totals about 542 acres. It would be separated from the existing SCE ROW which is 160 feet wide by an 80-foot wide gap. The cumulative width of the existing SCE ROW (160ft), the gap (80ft), and the ROW requested by DCRT (180ft) would be 420 feet.

In May 2016, the Service's Southwest Regional Realty Division received an April 16, 2016 letter from DCRT requesting a "Certificate of Compatibility and Right of Way". Prior to review of a proposed use of a National Wildlife Refuge for compatibility, the use must first be found to be an Appropriate Use as outlined in 603 FW 1.

For a potential use of a refuge to be found appropriate, the use must meet at least one of the following conditions: (1) it is one of the six wildlife-dependent recreational uses identified in the National Wildlife Refuge System Improvement Act of 1997; (2) the use contributes to fulfilling the refuge purpose, the National Wildlife Refuge System mission, or goals and objectives of a refuge management plan; (3) the use involves the take of fish and wildlife under State regulations; or (4) the Refuge Manager has evaluated the use and found it to be appropriate.

Construction of a transmission line is clearly not a wildlife-dependent recreational use; it does not contribute to fulfilling the refuge purpose, NWR System mission, or goals and objective of a refuge management plan; and it does not involve hunting or fishing under State regulations. This proposed transmission line has not previously been evaluated for appropriateness and has thus not previously been found to be appropriate.

Based on these criteria and the justifications presented below for responding to the questions in the "Finding of Appropriateness of a Refuge Use" form (see attached), this proposed use is not appropriate and construction of a new transmission line across Kofa NWR should not be considered as a viable alternative in the Environmental Impact Statement under preparation by

the U.S. Bureau of Land Management (BLM). Further consideration by the Service of the ROW permit application submitted by DCRT should be discontinued.

The following discussion provides our reasoning for addressing each of the decision criteria in the attached Finding of Appropriateness checklist:

**(a) Does the Service have jurisdiction over the use?**

YES - Portions of the proposed electrical transmission line would be on lands managed as part of the Kofa NWR and owned in fee title. The Service has full jurisdiction over all uses proposed on this land. Service policy 340 FW3 states, "It is the policy of the Service to discourage the types of uses embodied in right-of-way requests. On areas in the National Wildlife Refuge System (System), if a right-of-way cannot be certified as compatible with the purposes for which a unit was established, it cannot be granted without authorization by Congress (50 CFR 29.21(g))."

**(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?**

YES - It is unknown if the proposed electrical transmission line would be compliant with all applicable laws and regulations. It is assumed that construction of a new electrical transmission line at any location would only be permitted if it were consistent with all applicable laws and regulations.

**(c) Is the use consistent with applicable Executive orders and Department and Service policies?**

NO - It is the policy of the Service to discourage the types of uses embodied in ROW requests. If a ROW cannot be certified as compatible with the purposes for which a refuge was established and the mission of the NWR System, it cannot be granted without authorization by Congress (340 FW 3, Rights-of Way and Road Closings). In this case, Kofa NWR was established for the conservation of natural wildlife resources with an emphasis on conservation of desert bighorn sheep. Before any project is evaluated regarding its compatibility, it must first be determined by the Refuge Manager to be an appropriate use.

This proposed ROW would also be inconsistent with the NWR System Improvement Act of 1997 which mandates maintaining biological integrity, diversity and environmental health. Each refuge is required to protect and where appropriate, restore natural, historic ecological conditions including associated processes (e.g., native semi-desert grassland succession and regeneration). Historic conditions are those which were present prior to substantial, human-related changes to the landscape (601 FW 3.6D - Biological Integrity, Diversity, and Environmental Health).

ROWs and other construction projects may cause habitat fragmentation, degrade habitat quality through introduction of contaminants, disrupt wildlife movement corridors, alter hydrology, facilitate introduction of invasive species, and disturb wildlife. Proposed uses which would conflict with the legal requirement to maintain ecological integrity are not considered appropriate or compatible. Service policy (603 FW 2.5A) further states that proposed refuge uses that would

conflict with the legal requirements to maintain biological integrity, diversity, and environmental health are not compatible. This proposed use does not support these criteria.

**(d) Is the use consistent with public safety?**

YES - While likely no direct threat to public safety, the establishment of a new ROW for the construction and long term maintenance of a new transmission line will create additional traffic on the east-west road across the northern part of Kofa NWR. Additional traffic will increase the likelihood of off-road vehicular incursions and the potential for accidents involving motor vehicles, bicycles, horseback riders, and pedestrians on the refuge. In addition, the construction of a new transmission line would increase fire danger from the power line directly, and by maintenance activities such as vegetation clearing near and under the transmission line. Potential health effects of exposure to electromagnetic fields are unknown and may be a concern to some visitors.

**(e) Is the use consistent with goals and objectives in an approved management plan or other document?**

NO - The proposed project is contrary to specific refuge objectives, the establishment purpose of the refuge, the mission of the NWR System, and Service policy regarding management of wilderness.

Construction of a 500kV transmission line would be in conflict with the specific goals and objectives outline in the 1996 Kofa NWR and Wilderness and New Water Mountains Wilderness Interagency Management Plan and Environmental Assessment (Interagency Management Plan and EA). Refuge management programs are designed to protect natural resources and values of the refuge for the long-term and to provide for public appreciation of the refuge as appropriate and compatible with the refuge establishment purposes.

Management objectives and issues identified in the 1996 Interagency Management Plan and EA include:

- **Preservation of Wilderness Values:** Maintain or enhance the wilderness values of naturalness; maintain outstanding opportunities for solitude and primitive recreation and special features; and preserve and enhance scenic qualities.
- **Wildlife and Habitat Management:** Within a dominant wilderness context, maintain and enhance the natural diversity of flora and fauna, in particular listed and candidate species, sensitive species and special status species; recover population and maximize genetic diversity of desert bighorn sheep; reintroduce Sonoran pronghorn and establish a viable population; manage fire; manage wildlife waters; and prevent establishment of invasive species.
- **Recreation and Public Access:** Maintain high quality opportunities for recreation and wildlife dependent and/or primitive recreation that is compatible with the purposes for which

Kofa NWR was established including wildlife observation, hunting, camping, photography and wilderness opportunities for solitude.

Kofa NWR encompasses just over 666,000 acres of Sonoran desert habitat. It was established in 1939, and was "...reserved and set apart for the conservation and development of natural wildlife resources" (Executive Order 8039, 4 FR 438), with an emphasis on improving the population of desert bighorn sheep.

The overall management of the Kofa NWR focuses on providing for a diversity of plants and wildlife that currently exists or historically occurred on the refuge. The various habitats throughout the refuge are home to over 193 bird species, 43 species of reptiles and amphibians, 50 mammal species, including desert bighorn sheep, mule deer, bobcats, mountain lions and the endangered Sonoran pronghorn. The Sonoran desert tortoise, although not currently listed, still remains a species of concern.

Kofa NWR was established for the recovery of desert bighorn sheep populations. While the sheep have largely done well on the refuge, a recent population decline of nearly half the historic population of 800 sheep prompted investigations into possible causes of the decline and management actions targeted specifically toward recovery. Increased habitat fragmentation and construction activities that would occur as a result of a ROW for a transmission line, may slow population recovery and restrict sheep movements between mountain ranges. North-south movement between mountain ranges is important for sheep to maintain genetic diversity and since habitat conditions may vary dramatically between different locations based on sporadic and localized rainfall. It is important for the long-term survival of desert bighorn sheep to be able to move to areas with sufficient food and water, particularly during dry seasons or dry years and prolonged droughts.

The mission of the NWR System is "To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." Construction of a 500kV transmission line would not support nor be consistent with this mission.

The Wilderness Act of 1964, as amended, established the National Wilderness Preservation System and mandates that wilderness areas be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness. Congress designated 547,719 acres or over 80 percent of Kofa NWR, as wilderness through the 1990 Arizona Desert Wilderness Act. For refuges that encompass Congressionally-designated wilderness, the purposes of the Wilderness Act are additional purposes of the wilderness portion of that refuge (603 FW 2 2.6). While the proposed ROW would not lie directly within wilderness, it would be in close proximity and a project of this magnitude will inevitably have negative effects on the wilderness values and character of the refuge.

At least 22 species of plants protected under the Arizona Native Plant Law (Arizona Revised Statutes Title 3) have been documented or are highly likely to occur within the potential ground-

disturbing area. One endangered species has been documented and 10 wildlife species considered a Sensitive Species by BLM or Arizona Game and Fish Department (AGFD) Wildlife of Special Concern have moderate to high potential to occur in the area. Ground disturbance, construction and maintenance activities, and subsequent increase in traffic will increase possible introduction and dispersal of invasive species and disturbance to cryptobiotic soils and desert “pavement”.

In 2011, the refuge began work to re-establish a population of the endangered Sonoran pronghorn on Kofa NWR which lies within the historic range of the species. This was undertaken to support recovery and down-listing of the species. The wild population has reached about 70 animals through reproduction and supplemental releases. Sonoran pronghorn are nomadic and require large expanses of land to survive as localized droughts are frequent and summer rains are sporadic. These animals must be able to move to areas with sufficient food and water throughout the year. Sonoran pronghorn have repeatedly been documented within the area of the proposed ROW and may be negatively impacted by general human disturbance, construction and maintenance activities, and associated habitat loss and fragmentation.

The Sonoran desert tortoise is a species of concern. Past surveys on Kofa NWR have indicated a healthy but low density tortoise population. Density and diversity of vegetation are important to tortoise distribution. An additional powerline would alter plant communities and reduce already limited cover, further fragment habitat, and increase the potential for encounters between people and tortoises.

Construction of spur roads and expansion of the utility corridor would impact small mammals and herpetofauna through habitat fragmentation and potential isolation of populations. Species affected may include BLM Sensitive Species or AGFD Wildlife of Special Concern such as the rosy boa and Gila monster. Construction activities would result in unavoidable direct mortality of a number of mammals and reptiles. Construction and maintenance activities associated with the ROW could negatively impact the four Arizona Partners in Flight Priority Species that occur on the refuge (Lucy’s warbler, Le Conte’s thrasher, lesser nighthawk, gilded flicker) by destroying nesting or foraging habitat or disrupting nesting activities. Collisions with towers and associated power lines would result in direct mortalities of migratory birds passing through the refuge. An increased width of disturbed area would affect the ability of small animals to move from one area of cover to another.

The cumulative and incremental impacts of the new proposed ROW in addition to the existing power line and pipeline ROWs may pose the greatest impact to the refuge. An expanded corridor of over 2.5 times the width of the existing power line ROW plus an additional high-voltage line would result in greater fragmentation of habitat for desert bighorn sheep, Sonoran pronghorn, Sonoran desert tortoise and other wildlife. Human activity associated with construction and maintenance, habitat disturbance and destruction, noise and dust from construction and maintenance, and the transmission line itself, as well as visual separation can discourage wildlife from crossing the disturbed area. As has been well documented with roads, the width and traffic level on a road largely determines the ability of wildlife to move from one area to another. Expansion of the disturbed area and increased activity could lead to greater separation of the north part of the refuge from the remainder, leading to reduced values for wildlife, increased

potential of accidents between wildlife and people, and reduced wilderness and recreational values for visitors.

Establishing a ROW for construction and long-term maintenance of a transmission line through Kofa NWR would not contribute to the purposes of the refuge nor the NWR System mission. In fact, a new ROW would detract from the refuge purposes. It is anticipated that such a ROW would have significant negative effects on wilderness values (e.g. noise impacts) and overall scenic qualities of the area; native plant and wildlife species, including desert bighorn sheep and endangered Sonoran pronghorn; nationally important species including the Sonoran desert tortoise and migratory birds; and would promote expansion of invasive plants and habitat fragmentation.

**(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?**

NO - The Ten West Link transmission line is a new project and DCRT's request for a ROW through Kofa NWR has not previously been considered.

**(g) Is the use manageable within available budget and staff?**

NO – A new ROW for a transmission line would require routine vegetation control and road maintenance. These activities would typically be conducted by the utility company but require oversight by refuge staff to ensure compliance with any stipulations in the ROW or special use permits. The commitment of staff may be significant, particularly in the vicinity of important natural resources and in proximity to wilderness. We would anticipate increased traffic from a ROW and potential widening of the road. This would necessitate increased law enforcement to prevent off-road violations and wilderness incursions and provide general oversight of the new activity. Resources required to oversee these additional activities are currently not available at the refuge and unlikely to be available in the future.

**(h) Will this be manageable in the future within existing resources?**

NO - Current resources are not available to manage these activities (see justification above for g) and are unlikely to become available in the future.

**(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?**

NO - The construction of a transmission line through Kofa NWR would not contribute to the public's understanding and appreciation of refuge natural and cultural resources; nor is it beneficial to the refuge natural or cultural resources. The proposed use would be damaging to natural and cultural resources including fragile desert habitats, wildlife, and scenic landscapes. In particular, the scenic quality and wilderness values of the refuge would be compromised by the ROW. Due to their close proximity, activities associated with the proposed use would

detract from the values of nearby designated wilderness that the refuge is mandated to preserve and degrade the visitor experience in the vicinity of the transmission line.

**(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?**

NO - A new ROW and associated construction and maintenance on Kofa NWR would be damaging and detrimental to the quality of wildlife-dependent recreation including hunting, wildlife viewing, wildlife photography, and interpretation. The scenic quality and wilderness values of the refuge would be compromised by the ROW and wildlife and visitors engaged in hiking or camping would be disturbed by construction and maintenance activities, increased traffic, degradation of scenic refuge view sheds, and reduced opportunities to view wildlife due to disturbance and fragmentation and destruction of habitat.

The refuge encompasses approximately 666,000 acres and provides a wide range of wildlife-dependent recreation for visitors. Eleven criteria for “quality” wildlife-dependent recreation are defined in the Service Manual (605 FW 1, Section 1.6) and include providing opportunities for visitors to experience wildlife. Although open to visitors, Kofa NWR is largely designated wilderness and does not offer improved access (i.e. paved roads and trails) that support high visitor use. Therefore, the refuge provides a unique opportunity for wildlife-dependent recreation in a relatively isolated setting. Allowing a new ROW would impact wildlife-dependent recreational opportunities due to reduced habitat quality which directly impacts wildlife species upon which recreation is based. Additionally, the wilderness and scenic qualities of Kofa NWR would be compromised by the presence of a new ROW and the large size of the proposed transmission line. Allowing a new ROW would impair the quality of the visitor experience, lead to an increase in vehicle trespass into wilderness and other parts of the refuge, and likely reduce the opportunity of visitors to experience wilderness and wildlife.

In addition, the additional refuge resources needed to manage and oversee the new ROW activities would further reduce resources available for protecting wilderness values, native wildlife, endangered species, and providing for future wildlife dependent recreation.

**Decision Justification**

The proposal to construct a 500kV transmission line across nearly 25 miles of Kofa NWR does not meet the criteria for an appropriate use. As this proposed project does not promote wildlife-dependent recreation and does not support the purpose for which the refuge was established and the mission of the NWR System or the goals and objectives of the Interagency Management Plan and EA, we do not find it an appropriate use of the refuge.