



IN REPLY REFER TO:

United States Department of the Interior

KENAI NATIONAL WILDLIFE REFUGE

P.O. Box 2139
Soldotna, Alaska 99669-2139
(907) 262-7021

COMPATIBILITY DETERMINATION

The National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C 668dd-668ee, states that "The Secretary is authorized, under regulations as [s]he may prescribe, to - (A) permit the use of any area within the [National Wildlife Refuge] System for any purpose, including but not limited to hunting, fishing, public recreation and accommodations, and access whenever [s]he determines that such uses are compatible" and that "... the Secretary shall not initiate or permit a new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the Secretary has determined that the use is a compatible use and that the use is not inconsistent with public safety." A compatible use is defined as "A proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgement, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge." The compatibility determination is to be a written determination signed and dated by the Refuge Manager and Regional Chief, signifying that a proposed or existing use of a national wildlife refuge is a compatible use or is not a compatible use.

Applicable compatibility regulations in 50 CFR Parts 25, 26, and 29 were published in the Federal Register October 18, 2000 (Vol. 65, No. 202, pp 62458 - 62483).

Use: Southern Intertie Project

Refuge Name: Kenai National Wildlife Refuge (KNWR)

Establishing and Acquisition Authorities: Established as the Kenai National Moose Range by Executive Order 8979 on December 16, 1941. The boundaries were modified, purposes expanded, and name changed to Kenai National Wildlife Refuge under provisions of the Alaska National Interest Lands Conservation Act (ANILCA) on December 2, 1980 (Public Law 96-487 Stat. 2371).

Refuge Purposes:

EO 8979 purpose: "...protect[ing] the natural breeding and feeding range of the giant Kenai moose on the Kenai Peninsula, Alaska...".

ANILCA purposes: “(i) to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to moose, bear, mountain goats, Dall sheep, wolves and other furbearers, salmonoids and other fish, waterfowl and other migratory and nonmigratory birds; (ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats; (iii) to ensure to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity with the refuge; (iv) to provide in a manner consistent with subparagraphs (i) and (ii), opportunities for scientific research, interpretation, environmental education, and land management training; and (v) to provide, in a manner compatible with these purposes, opportunities for fish and wildlife-oriented recreation.”

The Wilderness Act of 1964 (Public Law 88-577) purposes are to secure an enduring resource of wilderness, to protect and preserve the wilderness character of areas within the National Wilderness Preservation System, and to administer this wilderness system for the use and enjoyment of the American people in a way that will leave them unimpaired for future use and enjoyment as wilderness.

Policy (FWS 603 2.8) requires that pre-ANILCA purposes remain in force and effect, except to the extent that they may be inconsistent with ANILCA or the Alaska Native Claims Settlement Act, but such purposes only apply to those areas of the Refuge in existence prior to ANILCA. The Executive Order purpose to protect Kenai moose, however, is treated as complimentary to the broader ANILCA purpose of conserving fish and wildlife populations; therefore, no special attention is given the Executive Order purpose in this compatibility review process.

Sec. 4(a) of the Wilderness Act provides that the purposes of the Act are to be within and supplemental to the purposes for which National Wildlife Refuges are established and administered. These purposes are applied to the approximately 1.3 million acres of Congressionally designated wilderness within the KNWR. They are also applied to the remaining approximately 700,000 acres of Refuge lands (that are not designated as wilderness) in any way that the proposed use might effect the designated wilderness areas.

National Wildlife Refuge System Mission: 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.

Description of Use: The Southern Intertie Project is proposed by The Intertie Participants Group (IPG) and entails the construction of a 138 kilovolt electric transmission line for approximately 73.4 miles from the Soldotna Substation to Anchorage, of which approximately 38.3 miles would be constructed along what is known as the Enstar Route through the Kenai National Wildlife Refuge. Members of the IPG include Golden Valley Electric Association, Matanuska Electric

Association, Chugach Electric Association, Anchorage Municipal Light and Power, Homer Electric Association, and the City of Seward. The Enstar Route is one of two primary alternatives evaluated in a Draft Environmental Impact Statement (DEIS) that was released on October 3, 2001 and is the preferred alternative of the applicant. The other route evaluated in the DEIS is known as the Tesoro Route which follows the coast from Nikiski to Pt. Possession along the northwest boundary of the Refuge. The Tesoro Route was found to be the environmentally preferred alternative evaluated in the DEIS.

The IPG has filed for a right-of-way permit for the Enstar Route consistent with the requirements of Title XI of ANILCA. The DEIS, a required element of the Title XI application process, was developed primarily by IPG contractors under the direction of the Rural Utilities Service (the lead Federal agency for the process). The U.S. Fish and Wildlife Service (Service) and U.S. Army Corp of Engineers were cooperating agencies.

The proposed project is located within the Railbelt electrical systems power grid that electrically connects central and south-central Alaska from Homer to Fairbanks. The system allows the participating utility companies to sell and buy power to and from each other, taking advantage of lower costs in other areas, and to provide back-up power to each other. The purpose of the proposed Southern Intertie Project is to address deficiencies in the existing Railbelt electrical system south of Anchorage. Specifically, the project would increase the power transfer capability over the existing Quartz Creek transmission line (to enable the full utilization of the 120 MW generating capacity of the Bradley Lake Hydroelectric Project) and to provide reliable back-up power in the event of outages of the Quartz Creek (existing) transmission line (which is located in historical avalanche areas, and subject to outages from ice, wind, and snow loading). Either the Enstar Route through the Refuge, or the Tesoro Route to the north of the Refuge, meet the purpose and need of the proposed project. The Enstar Route option is estimated to cost \$ 99.6 million over the life of the project; the Tesoro Route is estimated to cost \$ 114 million over the life of the project. Both the Enstar and Tesoro Route options have several variants in the proposed routes where they would cross the Turnagin Arm of Cook Inlet and enter the city of Anchorage.

The proposed Enstar alternative would begin with an overhead transmission line at the existing substation located outside of the Refuge in Soldotna, replacing an existing 69kV line, running south and then east to the Enstar Pipeline Corridor. The Enstar Pipeline is a buried natural gas pipeline that transports gas from producing fields on the Kenai Peninsula to Anchorage. The right-of-way permit for the line was issued in 1960 by the Bureau of Land Management (BLM). Official notice of the transfer of management responsibility for the line to the Service was received from the BLM in December 1998. The proposed transmission line would parallel the buried pipeline and require a 150- foot right-of-way through the Refuge, in addition to the 50-foot existing pipeline right-of-way. The right-of-way would be cleared of trees and other woody vegetation to allow safe operation and maintenance of the transmission line (including the removal of any hazard trees within or outside the proposed right-of-way that might fall onto the

line). The overhead transmission line would be constructed with conductors supported on steel or wood 90-foot tall towers. A submarine cable would be used for crossing Turnagin Arm, a distance of approximately 10.5 miles. The proposed construction season for most of the project would be April to October; however, winter construction would be undertaken through the Refuge in order to minimize environmental impacts.

A complete description of the proposed project, and the affected environment, is found in the September 2001 Southern Intertie Project DEIS.

Availability of Resources: Right-of-way clearing and construction of the proposed transmission line would increase public access and utility company activity into a large portion of the Refuge necessitating the increase of on-the-ground and aerial monitoring, site visits, evaluation, and law enforcement. Currently additional resources to accomplish the additional monitoring, evaluation, and enforcement are not available and the activities could not be undertaken without reductions in other Refuge program areas. Additional staff time required is estimated at: biology (160 hours), pilots (104 hours), park rangers (LE) (208 hours), and management/administration (32 hours), for an annual estimated additional staff cost of \$16,900. Additional vehicle, airplane, and equipment and supply costs are estimated at \$19,100, for a total annual estimated additional cost of \$36,000.

Anticipated Impacts of the Use:

The DEIS provides an evaluation of the anticipated impacts of the proposed action between the two alternatives analyzed. These impacts are summarized on pp S-22 through S-26 of the DEIS summary document. For the proposed Enstar Route through the Refuge, significant and cumulative impacts which would be short and long term, were predicted to vegetation and wetlands. These would be expected to be irreversible and irretrievable impacts for the life of the project. When evaluating birds, including bald eagles, trumpeter swans and waterfowl in general, the DEIS recognized the potential for local and nationally significant impacts on the Refuge. These included cumulative irreversible and irretrievable impacts during the life of the project. Similarly the DEIS predicted cumulative irreversible and irretrievable impacts to large mammals (including brown bears, black bears, moose, and caribou) on the Refuge. The impacts to brown bears, black bears, and moose were predicted to be nationally significant. Predators, including wolves and lynx, were also predicted to suffer nationally significant impacts. Nationally significant impacts were also projected to recreation and land use (citing conflicts with Refuge management plans and qualification criteria for wilderness designation) and to visual aesthetics because of degradation of natural scenic quality and visual intrusion to residential, recreational, and travel-way views.

In part because of the impacts summarized above, the DEIS rejected the Enstar Route as the environmentally preferred alternative for the Southern Intertie Project, stating: "The environmentally preferred alternative is the Tesoro Route, Option A from Bernice Lake

Substation to Pt. Possession, combined with a submarine cable crossing of the Turnagin Arm from Pt. Possession directly to Pt. Woronzof (Route Option C) for a total of 61.3 miles. This route is environmentally preferred because it exhibits on balance, lower overall environmental impacts than the other alternatives, as shown on Table 2-11 in the DEIS.”

“Any of the other Tesoro Route alternatives would also exhibit overall lower environmental impacts than the Applicant’s proposed alternative and other Enstar Route options, primarily because of the impacts of the Enstar Route where it crosses the KNWR on the Kenai Peninsula...” [DEIS p 2-60].

Direct, indirect, and cumulative impacts are predicted to occur for the proposed project in two categories: (1) impacts associated with ground disturbance that occurs during construction (clearing vegetation for right-of-way and access; preparing tower sites; assembling and erecting tower structures; stringing conductors - wire pulling and splicing sites), and (2) long-term impacts associated with the presence of the line and associated facilities, and maintenance of the right-of-way clearing.

A significant impact to biological resources, as defined in the DEIS Table 3-1, would occur under the following conditions: (1) the resource or species has a designated legal status or protection; (2) the project creates wildlife hazards not currently present in the environment, or the resource has a high susceptibility to the kinds of impacts associated with the project and project-related impacts could result in disturbance, injury, death, or decreased productivity; (3) the project results in a loss of habitat due to right-of-way clearing, or the resource has a high value and quality as wildlife habitat, characterized by high species richness and/or providing critical resources for species of concern; (4) the project results in improved public access into areas that are currently difficult to reach, or the resource is of limited availability within the Project study area; and (5) the project conflicts with or creates obstacles to federal, state, or local resource or wildlife management plans.

The DEIS explains on p 3-6 that, “A national context [of significance] considers resource status at the national level, and federal resource protection. For example, wildlife within KNWR is considered a national resource due to the USFWS mandate to protect wildlife. Adverse impacts on wildlife within the KNWR are considered nationally significant.”

The proposed power line along the Enstar Route would change fire management actions and modify Refuge wildlife management goals for the area. Wildfire zoning changes would result in changing suppression response from “modified” to “full” in order to protect the integrity of the power line. The project would also not only impact management of wildfire, but would hinder the Refuge prescribed fire program. The Refuge’s Moose/Habitat Management Plan authorizes a prescribed burning effort to enhance habitat for moose, and calls for manipulating 2,000 to 4,000 acres per year. The Refuge’s Comprehensive Conservation Plan sets a population objective for moose in Game Management Subunit (GMS) 15A (the area of the proposed project) at 3,600.

The 1995 population estimate for the area was less than 2,000 moose - well below the stated objective, and the only acceptable means to substantially increase moose numbers is through habitat enhancement.

The Moose/Habitat Management Plan calls for manipulation of habitats in the Refuge land management categories of "Moderate" and "Traditional". Within GMS 15A there are approximately 185,000 acres in these two KNWR land management categories. If the Southern Intertie is built along the proposed Enstar Route, it could interfere with normal prescribed burning procedures in approximately 75,400 acres of land in "Moderate" and "Traditional" categories east of the Moose River. The power line could reduce by 41 % Refuge habitats that can be manipulated using normal prescribed burning techniques.

Public Review and Comment: Public review and comment on the Southern Intertie Project was primarily accomplished through the review of the DEIS. The publication of the DEIS was followed by a 60-day comment period (closing December 5, 2001). Public hearings were held October 30, 2001 in Washington, D.C.; November 13, 2001 in Anchorage, Alaska; and November 14, 2001 in Soldotna, Alaska. Notice of the DEIS, hearings, and comment period was published in the Federal Register (Vol. 66, No. 192, pp 50396-50397) Wednesday, October 3, 2001. The DEIS, announcements of availability, and the Federal Register Notice gave notice of the Service's compatibility determination process, and solicited public comment regarding compatibility simultaneously with comments associated with other aspects of the proposed project and related processes. Additionally, the Refuge published a separate announcement in the Anchorage Daily News Legal Section on October 24, 2001, and provided additional information at their compatibility web site (<http://www.r7.fws.gov/compatibility/>).

The issue of compatibility was primarily addressed on pages 1-35 and 1-36 of the DEIS. Copies of the DEIS were mailed to any requester, were provided at public libraries in Anchorage, Chugiak-Eagle River, Girdwood, Hope, Cooper Landing, Soldotna, and Kenai, and made available on the web at <http://www.usda.gov/rus/water/ees/eis.htm>.

The U.S. Department of Agriculture - Rural Utilities Service (RUS) was the lead federal agency for the project and DEIS. Comments, including those regarding Refuge compatibility issues, were sent primarily to RUS; however, most comments were also copied to the Refuge Manager. Total comments received included 6 from Federal agencies, 3 from State agencies, 2 from local agencies, 11 from special interest organizations, 72 individuals (37 of which were in similar form), and over 1200 e-mails and faxes (most of which were in similar form).

The Refuge Manager received a letter from the Center for Biological Diversity that expressed opposition to the project and 1 fax, 4 letters, and 1,215 e-mails from citizens opposed to putting the power line through the Refuge. The e-mails were received from people in 45 states, Washington, D.C., The Virgin Islands, and 12 foreign countries (Australia 4, England 1, China 1,

Ireland 1, Scotland 2, Canada 8, Brazil 3, The Netherlands 8, France 1, Uruguay 1, Sweden 1, and Belgium 1). Three e-mails were received from citizens that supported the proposed Enstar Route through the Refuge. Letters and/or e-mails received from 9 organizations or agencies, including the State of Alaska, Wilderness Society, Sierra Club, Audubon Alaska, Defenders of Wildlife, the Environmental Protection Agency, Anchorage Audubon, Friends of Kenai National Wildlife Refuge, and the National Wildlife Refuge Association. Concern over the Enstar Route was expressed in some form from each of these commenters. Most comments regarding compatibility were general and stated that the proposed project was not compatible, the Refuge should be protected, or other statements that demonstrated opposition to the proposed action.

Additionally, two letters were received far in advance of the public comment period regarding the proposed project. A February 14, 2000 letter from the Alaska Public Interest Research Group to the Rural Utilities Service, with copy to the U.S. Fish and Wildlife Service, submitted a draft report entitled, *The Southern Intertie: Who Will Pay?* The letter stated that the research summarized in their report indicated that the intertie was not needed, not cost effective, and posed serious risks to Turnagin Arm and the KNWR. Also, a letter dated February 15, 2000 from the Alaska Department of Fish and Game to the KNWR manager stated that the proposed power line project through the Refuge had the potential to negatively impact brown bears, a species that the State of Alaska listed as a "population of special concern" on the Kenai Peninsula.

A complete set of all comments received has been retained as part of the administrative record for this project.

Determination (check one below):

Use is Not Compatible

Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility:

Not applicable

Justification: The proposed construction, operation, and maintenance of a 38.3 mile overhead transmission line through the Kenai National Wildlife Refuge materially interferes with and detracts from the Congressionally mandated purposes for which the Refuge was established, and with the Mission of the National Wildlife Refuge System.

Potential stipulations to ensure compatibility, within the context of the proposed action, were deemed inadequate given the overall nature of the project. Only those mitigative measures

addressed in the DEIS, and application for a right-of-way permit, were evaluated (i.e. consideration was not given to such actions as burying the transmission line through the Enstar route within the Refuge because it was not proposed by the applicant, nor was it felt to be economically feasible by the applicant).

Refuge Purposes

The proposed use materially interferes with and detracts from KNWR's primary purpose to conserve fish and wildlife populations and habitats in their natural diversity. It would cause significant, and largely unmitigated, habitat fragmentation, modification and/or loss along its entire route through the Refuge. Policy (Refuge Management: Part 603 National Wildlife Refuge System Uses 2.5) states, "Uses that we reasonably may anticipate to reduce the quality or quantity or fragment habitats on a national wildlife refuge will not be compatible."

The proposed use materially interferes with and detracts from KNWR's purpose to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats. The loss of migratory bird habitat, and threat of mortality to a variety of migratory birds throughout the entire life of the proposed project, materially interferes with the Refuge's ability to implement the general agreements to conserve migratory birds found in treaties with Great Britain (for Canada), Mexico, Russia, and Japan.

Availability of water would not be expected to be a problem, and while water quality may be impacted during construction, or through site-specific erosion during the life of the proposed project, these impacts should be of short duration and can be mitigated; therefore, the proposed use is not believed to exceed the compatibility threshold for ensuring water quality and necessary water quantity.

Likewise, impacts to the Refuge's programs for scientific research, interpretation, environmental education, and land management training would not be expected to be significantly impacted by the proposed project.

The Refuge's purpose to provide for opportunities for fish and wildlife-oriented recreation would be influenced by the proposed action. Additional access created by the new right-of-way may allow additional users and uses of the area over what currently exist. This, however, would potentially negatively impact the users and uses that are currently in the area, and could ultimately result in use restrictions that would significantly impact current users and uses. The adverse impact of the proposed project to recreational users due to visual effects, and the loss of a more natural experience along the route also may outweigh the value of any additional access provided, especially since there is already access to the area. The DEIS recognized significant visual impacts and impacts to land use and recreation. The resources to monitor impacts, and enforce regulations for potential new uses of the area, are also lacking. Policy (Refuge Management: Part 603 National Wildlife Refuge System Uses 2.11 and 2.12) directs that if

adequate resources are not available to properly manage a use, then the use is not compatible.

The proposed use would not occur in Congressionally designated wilderness. There are wilderness-related issues to the proposal, such as impacting the view from designated wilderness areas, looking beyond the wilderness boundaries to the project area, and potentially impacting future wilderness designations for current or future wilderness study areas. While these issues may be significant wilderness management issues, they do not significantly influence the compatibility determination.

System Mission

The proposed use materially interferes with and detracts from the National Wildlife Refuge System Mission of administering lands and waters for the conservation, management, and restoration of fish, wildlife, and plant resources, and their habitats. The project would not only fragment, modify, or destroy significant wildlife habitats, it also would likely impede significant wildlife management efforts, especially implementation of prescribed fire activity called for generally in the Refuge's Comprehensive Conservation Plan, and specifically in the Refuge's Moose/Habitat Management Plan.

Signature: Refuge Manager: John L. West 6-4-02
(Signature and Date)

Concurrence: Regional Chief: [Signature] 6/6/02
(Signature and Date)

Mandatory 10- or 15-year Re-evaluation Date: N/A