

Environmental Assessment

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for Road Repair, Power Line Upgrade, Installation of Balloon Launcher, Cloud Radar System, Relocation of Data System and Right-of-Way Site Expansion

EA# DOI-BLM-LLAK010-2010-0007-EA

Preparing Office: Arctic Field Office

Project Title/Type of Action: Road Repair, Power Line Upgrade, Installation of Balloon Launcher, Cloud Radar System, Relocation of Data System and Right-of-Way Site Expansion (2890.07)

Serial/Lease/Case File Number: Serial #FF093215

Land Use Plans/Acts:

Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated January 22, 2004

Applicant: United States Department of Energy

Climate and Environmental Sciences Division

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Date: April 2, 2010

Land Description

Section 26, Township 23 North, Range 18 West, Umiat Meridian

GLOSSARY

ANILCA - The Alaska National Interest Lands Conservation Act passed in 1980, modified and established designation of federal lands in Alaska for conservation and wilderness. These lands are managed by the National Park Service, US Fish and Wildlife Service, and US Forest Service.

ACRF – ARM Climate Research Facility

ARM – Atmospheric Radiation Measurement

DOE - Department of Energy

MOP – Memorandum of Participations

NEPA - National Environmental Policy Act. This law, passed in 1969, went into effect on January 1, 1970. It requires all Federal Agencies to disclose the environmental effects of their actions.

NOAA – National Oceanographic & Atmospheric Administration

USGS – United States Geological Survey

Contents

GLOSSARY	2
Chapter 1 Introduction	4
1.1 Need for Action	6
1.2 Purpose of Action	7
1.3 Laws, regulations, other EAs that influence this EA	7
1.4 Decision to be made	7
1.5 Scoping and Issues	8
Table 1.1 Issues Considered in Evaluating Impacts	8
Protection provided by Non Oil and Gas Permit Stipulations VIII.A.1, IX.A, IX.B,	9
1.6 Public Involvement	9
Chapter 2 Alternatives Including the Proposed Action	10
2.1 Introduction	10
2.2 Description of Alternatives	10
2.2.1 Alternative A: No Action	10
2.2.2 Alternative B: Proposed Action	12
2.2.2.1 Road Repair	12
2.2.2.2 Power Line Upgrade	13
2.2.2.3 Balloon Launcher Installation	14
2.2.2.4 Cloud Radar System	15
2.2.2.4 Relocation of Data System	16
2.2.2.5 Site Expansion on NOAA Withdrawal and new ROW on USGS Withdrawal	16
Chapter 3 Affected Environment	16
3.1.1 Threatened & Endangered Species	17
Chapter 4 Environmental Impacts	17

4.1 Direct and Indirect Effects	17
4.1.1 Threatened & Endangered Species	17
4.1.1.1 No Action Alternative Alternative A	17
4.1.1.2 Proposed Action Alternative B	18
4.2 Cumulative Effects	18
4.2.1 Threatened and Endangered Species	19
4.3 Mitigation and Monitoring	19
4.4 Summary of Environmental Consequences	19
Chapter 5 Consultation and Coordination	19
5.1 Agencies, Organization, Persons Consulted	20
5.2 List of Preparers	20
ANILCA Requirements	20
Bibliography	20

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DOI-BLM-LLAK010-2010-0007-EA

Chapter 1 Introduction

The United States Department of Energy (USDOE) has requested to amend their current Bureau of Land Management (BLM) right-of-way (ROW) grant at Barrow Alaska, for work to be conducted within the next year. The USDOE, Climate and Environmental Sciences Division, funds scientific user facilities that provide the broad scientific community with climate-related atmospheric and geophysical data essential to current scientific research in global change. The primary goal of the Atmospheric Radiation Measurement (ARM) Program is to refine the treatment of cloud and radiation physics in global climate models, and to improve the climate simulation capabilities of these models. ARM's scientists research issues that span remote sensing, physical process investigation, and modeling on all scales. ARM's site operators focus on obtaining continuous field measurements and providing data products to promote the advancement of climate models.

The DOE ARM has a Memorandum of Participation (MOP) with the National Oceanographic & Atmospheric Administration (NOAA) and the United States Geological Survey (USGS) for operation of a DOE ARM Site at Barrow. The MOP was reviewed by BLM for compliance with BLM regulations on February 5, 2008. The MOP allows DOE ARM to occupy a portion of the NOAA land withdrawals (Green rectangle Figure 1) in compliance with an Inter-Agency Memorandum of Agreement (IA-MOA) between the USGS and NOAA.

The USGS and NOAA have provided BLM with non-objection letters for expansion of the DOE ROW on the NOAA withdrawal (Green rectangle Figure 1). The letters describe the ROW as follows:

The DOE-ARM ROW on the NOAA withdrawal is limited to 5.8 acres more or less as highlighted in green on the attached aerial photo: The northwest corner of the ROW is 150' south of the USGS withdrawal F-81490 northeast corner along the western boundary of the NOAA withdrawal. From the Northwest corner of the ROW the ROW extends 842' south along the western boundary of the NOAA withdrawal, 289' east on the NOAA withdrawal to the southeast corner, 842' north to the northeast corner, and 309' west to the northwest corner.

The USGS and NOAA have also provided BLM with non-objection letters for the establishment of a DOE ROW on the USGS withdrawal (Yellow rectangle Figure 1), and these are described as:

The DOE-ARM ROW on the USGS withdrawal is limited to 10.3 acres more or less, as highlighted in yellow on the attached aerial photo. Starting at the northeast corner of the USGS withdrawal, 1500 feet south along the eastern boundary of the USGS withdrawal and the western boundary of the NOAA withdrawal; 300 feet west on the USGS withdrawal; 1500 feet north to the northern boundary of the USGS withdrawal; 300 feet east along the northern boundary of the USGS withdrawal to the starting point, the northeast corner of the USGS withdrawal, Figure 2 shows the approximate location of the sites at Barrow, Alaska.

Figure 1; DOE, NOAA& USGS Barrow apportionments

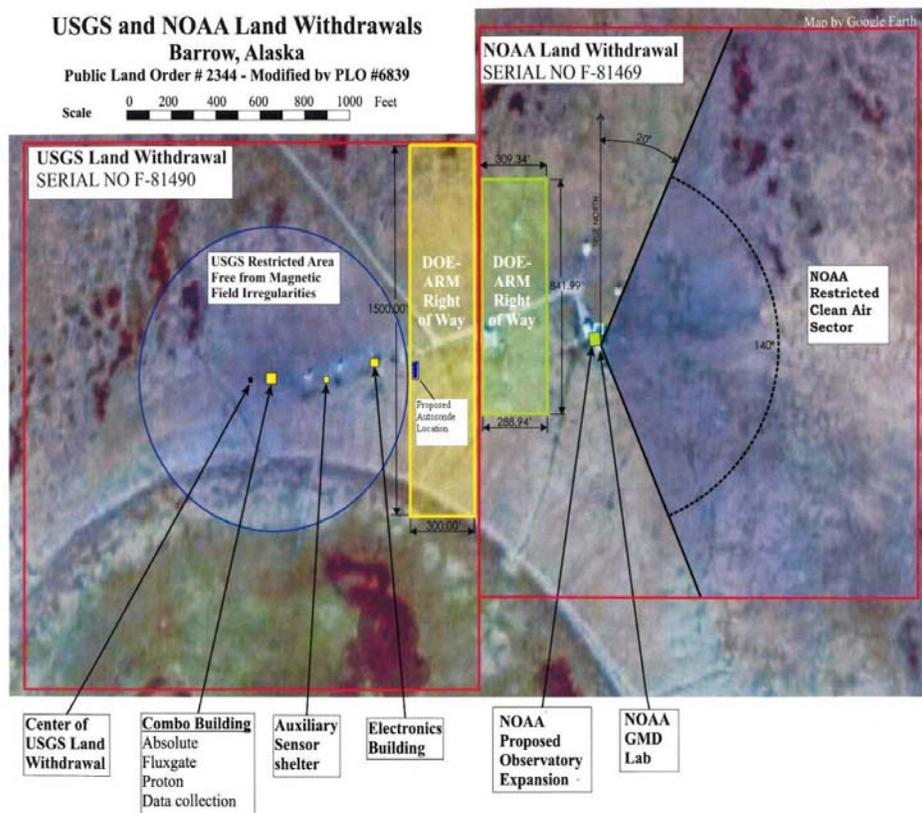


Figure 2: DOE Proposed Project Area Map



1.1 Need for Action

The US DOE ARM Climate Research Facility (ACRF) has been designated a national user facility to provide a unique asset for the study of global climate change to the broader national and international research community. Research at the facility includes the study of alteration in climate, land productivity, oceans or other water resources, atmospheric chemistry, and ecological systems that may alter the capacity of the earth to sustain life. The need for this project is to allow the applicant to improve the facilities at Barrow, Alaska and consequently the ability to continue to collect data.

1.2 Purpose of Action

The specific objectives of this project are to:

- > Repair and improve the gravel road that serves the Barrow ACRF site on the USGS and NOAA withdrawals which is often impassable because of drifted snow.
- > Repair and update to modern code requirements for the current power line that serves the Barrow ACRF site and the projects on the USGS and NOAA withdrawals. Increase the number of sounding weather balloons (sondes) that are launched at the DOE ARM daily.

- > Obtain a better understanding of the effect of clouds on atmospheric radiative processes by installing a Cloud Radar System
- > Move the data system to increase the elevation and reduce vulnerability to storm surge flooding.
- > Expand the size of the current ROW on the NOAA withdrawal
- > Approve a DOE ROW on the USGS withdrawal.

1.3 Laws, regulations, other EAs that influence this EA

This EA will be based on the findings, management controls, and protective measures of the 2004 NW NPR-A IAP/EIS ROD, as well as other laws and regulations. The action, as proposed, is consistent with the objectives outlined in this document and not in conflict with other resources in the area. The proposed use is in conformance with current policy of the Arctic Field Office, BLM.

The proposed action is in conformance with the NW IAP/EIS, associated ROD, National Petroleum Reserve Product Act (NPRPA), Federal Land Policy Management Act (FLPMA), Alaska National Interest Lands Conservation Act (ANILCA) Endangered Species Act, Executive Order (EO) 11988, and EO 11990.

1.4 Decision to be made

The BLM must conduct a project-specific NEPA analysis and determine whether the proposed projects should be approved, rejected, or approved with modifications, and if additional mitigation is needed. The scope of this EA includes analysis that enables the BLM to select among alternatives that meet the purpose and need, and are within the BLM's jurisdiction (40 Code of Federal Regulations 1506.1(a) (2)).

This Environmental Assessment (EA) has been prepared to meet requirements of the National Environmental Policy Act (NEPA), and to support U.S. Department of Interior (USDOI) Bureau of Land Management (BLM) decision-making on permits required to construct and implement the proposed projects. The scope of this EA includes analysis of the effects of the proposed activity and alternatives.

1.5 Scoping and Issues

Public notification of the Environmental analysis was announced in the NEPA register on file at the Arctic Field Office Environmental Assessment web site beginning 12 February 2010. No public comments or inquiries were received through April 2, 2010.

BLM guidelines include a list of issues that are addressed, where applicable, in NEPA assessments, (BLM, 2004, Appendix 1). Some elements are not present in the project area and are, therefore, not discussed further. A summary listing of related issues considered by AFO Field Staff is provided in Table 1.1.

Table 1.1 Issues Considered in Evaluating Impacts

Issues Considered

Determination

Basis of Determination (See Note)

Air Quality

No impact

Protection provided by: State of Alaska Air Non-Point

and Mobile Program and regulations (18 AAC 50)

Cultural and Paleontological Resources

No Impact

Protection provided by: Section 106 of the National Historic Preservation Act,

Subsistence

No Impact

Protection provided by: ANILCA

Environmental Justice

No Impact

Protection provided by: EO 12898

Flood Plains/Wetlands and Riparian Zones

No impact

Protections provided by: EO 11988 and EO 11990

Waste (Hazardous/Solid)

No impact

Protections provided by State of Alaska 18 AAC 30, 60, 62, 63, 72, and 75;

Invasive, Non-native species

Not present

Protections provided by: not applicable to this action

Native American Religious Concerns

Not Present

Water Resources

No impact

Protections provided by: Non Oil and Gas Permit Stipulation II.

Recreation

Not Present

Socialcultural Systems

Not Present

Vegetation

No impact

Protections provided by: Non Oil and Gas Permit Stipulation VII.A.

Threatened & Endangered Species

Spectacled and Steller's eider

Potentially Affected

Protection provided by Section 7 of the Endangered Species Act. (J), by Non Oil and Gas Permit Stipulations VIIIA1, IXA, IXB and Project Specific Stipulations 1-3.

Visual Resource Management

Not Present

Wild & Scenic Rivers

Not Present

Wilderness

Not Present

Threatened & Endangered Species

Polar Bear

Potentially Affect

In accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA), and by Non Oil and Gas Permit Stipulations VIIIA.1, IXA, and IXB.

ACEC's

Not Present

Fish

No impact

Protection provided by: Non Oil & Gas Permit Stipulations IIA, VIIIB. EFH finding "not likely to adversely affect".

non-T&E birds

No impact

Protection provided Non Oil and Gas Permit Stipulations VIII.A.1, IX.A, IX.B and IX.C

non-T&E mammals

No impact

Protection provided by Non Oil and Gas Permit Stipulations VIII.A.1, IX.A, IX.B,

Note1: Determination tiered from: Arctic Field Office Non Oil and Gas Permit Stipulations and laws and regulations as noted.

Key to Table 1.2:

EFH – Essential Fish Habitat

Potentially Affected: The proposed action or alternative could result in potential impacts to resource or issues to the level that additional mitigation may be required, or there is a need to evaluate potentially significant issues.

Minimally Impacted: Resources or issues would not be affected to a degree requiring further analysis because either the expected impacts from the proposed action and alternative would be minimal, or standard protections (e.g., ROPs and Stipulations from overriding BLM plans or other legal protections) would reduce impacts. Minimally impacted resources or issues will not be analyzed further in this EA.

Not Present: Resources or issues are not expected to be affected by the proposed action or alternatives because activities would occur at a different time or place. Resource or issues not present will not be analyzed further in the EA.

In summary, BLM resource specialists have identified the following issue for further evaluation in this EA: Threatened & Endangered Species, specifically Eiders and polar bears.

1.6 Public Involvement

Development of the 2004 NW IAP/EIS involved extensive input from other Federal agencies, the State, the NSB, thousands of individuals, and many institutions. A number of permits and approvals are required work in the NPR-A . These are described in the 2004 NW IAP/EIS (Vol. 3, Appendix 4), many of which are available for public review prior to agency decision-making. Table 1.2 summarizes permits and approvals associated with the proposed project. Public notification of the Environmental analysis was announced in the NEPA register on file at the Arctic Field Office Environmental Assessment web site beginning 12 February 2010. No public comments or inquiries were received through April 2, 2010.

Table 1.2 List Federal, State, or local permits

Federal

United States Fish and Wildlife Service

ESA Consultation

NOAA

Non-objection

USGS

Non-objection

Chapter 2 Alternatives Including the Proposed Action

2.1 Introduction

This chapter both describes the alternatives (potential actions) and compares the alternatives in terms of their environmental impacts (from Section 1.5) and their achievement of objectives (from Section 1.2).

2.2 Description of Alternatives

2.2.1 Alternative A: No Action

Under no action, the BLM would not grant an amendment to DOE's current ROW grant. See Chapter III (Affected Environment) NW NPRA AIP/EIS for a more detailed profile of the current environmental situation.

The current land management situation at the Barrow site would continue. There is a main instrument shelter which is an 8ft x 8ft x 40ft modular structure on pilings. There are also two connex type containers on pilings that contain equipment. Two instrument decks are located around the main shelter and a 130ft lighted tower was erected. Under the no action alternative the ARM program would consist of only the existing instruments and buildings (Figure 3). With this alternative the data collection, the gravel road, the power line and traffic conditions would not be improved. The current size of the ROW on the NOAA withdrawal would not be increased. The no action alternative does not meet the requirements of the purpose and need statements, however its analysis is required by NEPA.

Figure 3: Current Situation



2.2.2 Alternative B: Proposed Action

The proposed action would involve road repair, power line upgrade, installation of a balloon launcher, Cloud Radar System, Relocation of Data System and ROW site expansion on the NOAA withdrawal and new ROW on the USGS withdrawal (Figure 1) at the DOE ARM site at Barrow Alaska. Construction and use would start in April 2010. The current ROW Grant on the NOAA withdrawal expires April 2011. The proposed action would not change the expiration date.

The researchers would occasionally use a few common solvents in small quantities, less than 1 liter. Small quantities of items such as lubricants, paints, and general cleaners, would be used at times. Some items such as commercial cleaners and spray paints would also occasionally be used. Ethyl alcohol would be used for cleaning optics with several quarts on location at a time. WD40, oil and grease may be used

for the normal maintenance of items. All activities involving chemical use and storage would be performed in keeping with Environmental Hazards and Controls (ESH) procedures.

Gasoline, both pre-mixed for 2-stroke engines, and regular gasoline, would continue to be kept in the maintenance building in small quantities to refuel all-terrain vehicles and snow machines that are required on occasion for site access. Secondary containment would be used for the storage of the pre-mixed and regular gasoline. Small amounts of solid waste may be created during installation or upgrades of the listed instruments and facilities. Scrap waste could include wire, metal, and lumber. Used electrical and road material could also be generated. The applicant would dispose of the waste in accordance with the existing plan for solid waste disposal, and in accordance with guidelines from Environmental compliance Coordinators, and local North Slope authorities.

Use of aircraft will not be associated with the proposed action.

2.2.2.1 Road Repair

The gravel road that serves the Barrow ACRF site is often impassable due to drifted snow. The projects proponents would work with a civil engineering design firm to design road repairs and improvements and contract with the local native corporation for the construction services needed to build up and improve the road. The existing footprint of the road would not be modified and the road work would take place between the United State Air Force (USAF) Barrow Dew Line Station and the NOAA Laboratory. The USAF currently maintains the section of road from the public road to the north, to the Dew Line Radar Station. The road is constructed of crushed gravel and due to the high cost of construction-grade gravel, the existing road materials would be re-used. The road may be raised 1 or 2 feet (ft) in places, to reduce the snow accumulation problem. The upgrade would be for a section about 1 mile long and 20 ft wide.

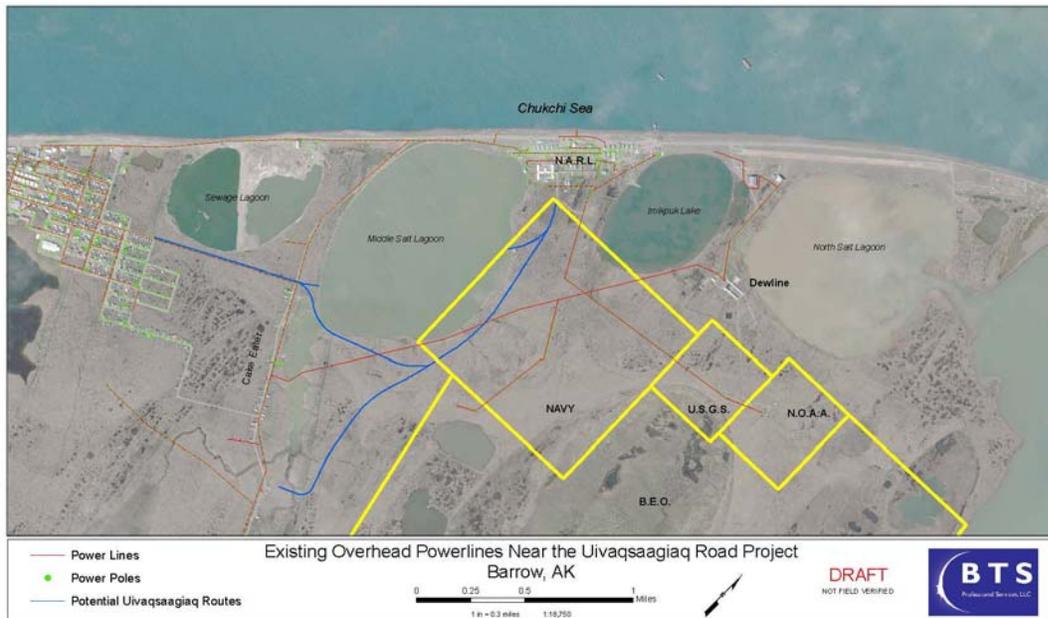
The road work would require initial surveying on the existing road, but the heavy equipment work would be mid to late summer. Proposed equipment for the road repair are: crew cab pickup trucks, water truck, front-end loader, dump truck, road grader, and forklift. The equipment would operate for about 10 to 15 days. Approximately 500 gallons of fuel are to be used for this project.

2.2.2.2 Power Line Upgrade

The power line (Figure 4) that currently serves the Barrow ACRF Site, the NOAA Global Monitoring Division Site and the USGS Barrow Magnetic Observatory Site across the USGS and NOAA withdrawals, needs repair and updating to modern code requirements. The power line and distribution equipment that dates back to 1971 when the NOAA Air Resources Laboratory Monitoring Station was constructed by the federal government, are obsolete, and are prone to frequent disruptions. The proposed action would allow the critical power line to run up to code, would add load capacity, and would increase the power on the DOE ARM ROW's and the USGS and NOAA withdrawals. The applicant does not expect that land disturbances would be required for the upgrade. They are considering two approaches to accomplish the upgrade. One would involve extending the existing power poles and replacing lines. The other would involve a tie into an existing power line, which feeds the USAF Station. The proposed power line repair and upgrade would be performed by the Barrow Utility and Electric Cooperative.

Proposed equipment for the electric line repair would be bucket trucks operating for about 10 days. The proposed action would take place when the ground is frozen.

Figure 4: Existing Powerline



2.2.2.3 Balloon Launcher Installation

DOE ARM proposes to perform instrument upgrades and additions at the DOE ARCF at Barrow, Alaska. The automatic balloon launcher (Figure 5) would be installed by technicians from the manufacturer with technician assistance from a local native-owned corporation as well as staff from the ARM Climate Research Facility.

The applicant estimates that a total of 12 to 16 pilings would be required for the helium storage area. The launcher and anchors would require 8 to 10 pilings and 4 to 6 pilings would be required for the helium storage platform. Installation of pilings would be completed prior to construction of the installation. The construction would take place during the winter season. The balloon launcher would be operated by staff affiliated with the ARM Climate Research Facility in Barrow. The proposed work would add needed instrumentation to the existing instrumentation at the site. The additional instrumentation is of like kind and compatible with existing instrumentation.

Information collected would be used by researchers world-wide to substantially improve the understanding of climate and the information can be used by policy makers to provide for an effective, safe, and secure national energy policy. The proposed project would significantly reduce the cost of balloon soundings and the risk to observers.

Addition of an automatic balloon launcher would reduce traffic on the road serving the site, reduce safety risks to site personnel, and increase the amount of essential atmospheric sounding data available to the scientific community.

The balloons and sondes to be launched by this automatic balloon launcher are exempted under US Federal Aviation Regulations from authorization by the Federal Aviation Authorization. Currently, radiosonde balloons are launched twice per day, 365 days per year. Launches are performed manually by operators.

The applicant estimates that an area of approximately 25 ft × 25 ft would be required for the automatic balloon launcher, and an area of about 25 ft × 10 ft would be required for the helium platform. The automatic balloon launcher must be installed near an existing road for access. The researchers expect a location near the USGS station and near the road to be optimal.

Figure 5: Automated balloon launcher



2.2.2.4 Cloud Radar System

The DOE ARM program has been operating zenith-pointing cloud radars at its ARM Climate Research Facilities for over a decade. Vertically pointing radars have limitations, in that only a two-dimensional view of the cloud is obtained. The applicant proposes to install a cloud radar system to obtain three-dimensional cloud structure data. This would allow them to gain a better understanding of the effect of clouds on atmospheric radiative processes.

The top of the instruments mounted on tripod towers will be a maximum of 4 m tall, stabilized. There would be three guide wires. The guide wires would extend out about twice the distance of the tripod legs (2m), about 4m out from the tripod center.

The Barrow Scanning ARM Cloud Radar System would be installed on the existing user facility deck. An extension of the existing deck would be required. The applicant would contract with an Architecture and Engineering firm to design the deck extension and the extension would be installed by a contractor.

2.2.2.4 Relocation of Data System

Currently, the DOE data system is located at their Barrow Duplex. The applicant is proposing to move it to the ROW site. This would require an update to the utility supply system (See section 2.2.2.2). The data system would also require additional cooling which would be provided by a window-mounted air conditioner.

2.2.2.5 Site Expansion on NOAA Withdrawal and new ROW on USGS Withdrawal

The current ROW on the NOAA withdrawal was granted in 1997 for 2.05 acres. The proposed action to expand the ROW on the NOAA withdrawal to 5.8 acres and establish a new 10.3 acre ROW on the USGS withdrawal is to enlarge the DOE ARM Climate Research Facility footprint to accommodate future changes including addition of instruments and equipment. The proposed action will set aside land for use by DOE ARM Climate Research Facility that will be in the best interest of the public and participating federal agencies.

The expansion of the ROW on the NOAA withdrawal and the new ROW on the USGS withdrawal will facilitate DOE ARM plans for operation of: a) balloon launcher; b) Eddy Correlation Flux Measurement system, and; c) a tower installed on a tripod that is located on a tundra mat or attached to an existing piling.

Chapter 3 Affected Environment

Environmental characteristics of the general project area have been extensively described in the 2004 NW NPR-A IAP/EIS (Vol. 1, Chapter 3), to which this analysis is tiered, with some site-specific issues described below.

Based on the proposed project and the issues analysis in Section 1.5, the following discussion of the affected environment covers Threatened & Endangered Species.

3.1.1 Threatened & Endangered Species

The spectacled eider was designated as threatened under the ESA in 1993 (USDOI BLM, 2003). They are assumed to remain at sea throughout most of the year and come to the coastal plains to nest starting in early-June. Following the nesting season, females leave the coastal tundra at the end of August to return to the sea. The project area is not designated as critical habitat for the spectacled eider (NOAA, 2001).

The steller's eider was designated as threatened under the ESA in 1997. The steller's eider migrates to nesting areas near tundra lakes or ponds in May and eggs begin to hatch in late June. Following the nesting season, individuals move to marine lagoons to molt from late July to late October. The project area is not designated as critical habitat for the Steller's eider (NOAA, 2001).

The polar bear was listed as threatened in May, 2008, under the (ESA). Polar bears have been seen using riverbanks and shore-fast ice for maternity dens during the winter in areas throughout the NPR-A coastal region, primarily east of Barrow. Male and barren female polar bears do not occupy dens. No den has been recorded in the immediate vicinity of the project area, but sightings of non-denning polar bears have been reported in the project area. Polar bears also occur along the coast in the fall open water period in August and September. It is possible there could be polar bear sightings in the project area during the work season.

Chapter 4 Environmental Impacts

Because the proposed activities are not substantially different from those previously evaluated, and because no significant new scientific information or analyses have been developed since the most recent related evaluation (i.e., May 2008), this NEPA analysis will focus on impacts due to the project-specific/site-specific differences of the proposed action.

4.1 Direct and Indirect Effects

The proposed action is built on experience gained from decades of similar operations on the North Slope. This EA is tiered from the 2004 NW IAP/EIS and its ROD. Related discussions of impacts are found in: 2004 NW NPR-A IAP/EIS, Vol. 2, Chapter 4.6 (Environmental Consequences of Alternative D, the preferred alternative).

Issues specifically identified in Section 1.5 for further analysis in this EA are discussed below.

4.1.1 Threatened & Endangered Species

4.1.1.1 No Action Alternative Alternative A

The potential for disturbance impacts to polar bear, spectacled or Steller's eider would be minimal under the no action alternative, and would not change from the current management situation.

4.1.1.2 Proposed Action Alternative B

The proposed action could affect listed eiders through collisions, habitat loss or increase in predator populations. Power lines and the guy wires which support the proposed flux measurement pose a collision risk to eiders. Human activity during the road upgrade and installation of the balloon launcher, flux system and cloud radar system could disturb listed eiders nesting in the area which could lead to nest abandonment. The new balloon launcher and flux station could contain structure for avian predators such as ravens and peregrine falcons to use as nest sites. Nesting habitat is not expected to be lost to the proposed action as all actions will occur on or next to existing infrastructure and there is evidence from the USFWS eider project that suggests the area surrounding the project area is not preferred nesting habitat for either spectacled or Steller's eiders. The subsequent increase in the presence of these predators could result in increased nest predation on Steller's eider nests across a wide area. Overall the proposed action is not likely to adversely affect listed eider species; in fact, by removing extant overhead power lines and marking existing lines with diverters a benefit is expected to listed eiders and other migratory birds. Finally, due to the limited size of the project area, any impact would be highly localized.

Polar bears may be present in the action area year round. Bears that wander near town are typically either hazed by the North Slope Borough of Wildlife to prevent human encounters, or are killed legally for subsistence purposes or defense of life and property. Denning females are not likely to choose den sites near the project location due to its proximity to human development and disturbance. Given the proximity of the action area to human development and disturbance, the lack of negative bear encounters in the past 12 years at the current facility, and the protective measures outlined in the newly created polar bear interaction plan, it is unlikely that the proposed action will adversely affect polar bears.

4.2 Cumulative Effects

Cumulative impacts result from the incremental addition of past, present, and reasonably foreseeable actions. Each action may be individually minor by itself, but when added to others could become significant over a period of time.

The time frame for the proposed action for the project area is 1977 (designation of NPR-A) to 10 years into the future, assuming that the relatively low level of activity and management would remain at about the same level as present. Due to the limited scope and intensity of the proposed action the geographic area would be limited within the Barrow area. Additional past, present, and future activities in the area include recreation, subsistence, and research and monitoring. While the level of such activities may increase slightly within the next 10 years, there are no development proposals that would substantially add to the current levels. The incremental addition of the proposed action would be short-term and highly localized and would not add to increased cumulative effects.

The proposed action is not anticipated to result in cumulative impacts due to the remoteness of the portion of the area where the activity would occur, the low impact levels associated with the activity. Impacts were analyzed in detail in the Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated January 22, 2004, and are incorporated by reference.

4.2.1 Threatened and Endangered Species

The increased activity associated with this project would add a slight, temporary increase in potential disturbance to polar bears and the two listed eider species. Polar bears could be affected cumulatively

from some combination of subsistence activities, construction during the project, and research and monitoring activities by USFWS agency personnel. However, given the proximity of the action area to human development and disturbance, the lack of negative bear encounters in the past 12 years at the current facility, and the protective measures outlined in the newly created polar bear interaction plan, it is unlikely that the action will adversely affect polar bears. The proposed action will likely improve habitat for listed eider species and other bird species by removing overhead power lines and installing bird diverters on remaining power lines and guy wires. There would be no incremental increase in human activity with the no action alternative.

4.3 Mitigation and Monitoring

The stipulations (Appendix A) for the proposed action are a subset of the Arctic Field Office Non Oil and Gas Permit Stipulations and laws and project specific stipulations developed in the NEPA process:

1. Bird diverters will be installed along the upgraded power line from the tie-in site to the ACRF to deter birds.
2. Once the upgraded power line is installed the obsolete power line will be removed.
3. Bird diverters will be installed on the three guy wires supporting the flux measurement system.

4.4 Summary of Environmental Consequences

The potential issues that were identified in the evaluation of the proposed action for this EA was Threatened and Endangered Species .The analysis found that impacts would be short term and localized and that mitigation measures in Appendix A would adequately reduce any adverse effects to identified issues in the area. Likewise, the analysis also found that mitigation measures would adequately reduce any adverse effects to issue Threatened and Endangered Species which would also be short term and localized. The proposed action would not contribute to significant cumulative effects to Threatened and Endangered Species

Chapter 5 Consultation and Coordination

5.1 Agencies, Organization, Persons Consulted

Public notification of the Environmental analysis will be on file at the Arctic Field Office and available on the Arctic Field Office Environmental Assessment web site. The United States Geologic Survey and National Oceanographic & Atmospheric Administration have both provided non-objection letters to the proposed action. The DOE conferred directly with the United States Fish and Wildlife Service.

5.2 List of Preparers

Dave Yokel, Wildlife Biologist

Michael Kunz, Archaeologist

Susan Flora, Environmental Scientist

Richard Kemnitz, Hydrologist

Donna Wixon, Natural Resource Specialist

Debbie Nigro, Wildlife Biologist

Matthew Whitman, Fish Biologist

Stacie McIntosh, Anthropologist/Subsistence Specialist

Roger Sayre, NEPA Specialist

ANILCA Requirements

Section 810 Subsistence Evaluation: FINDING: This proposed action will not significantly restrict subsistence uses. No reasonably foreseeable and significant decrease in the abundance of harvestable resources or in the distribution of harvestable resources, and no reasonably foreseeable limitations on harvester access will result from the proposed action.

Bibliography

BLM, 2004, Appendix 1 (Inventory and Monitoring) , Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated January 22, 2004

BLM 2004 Vol. 3, Appendix 4, Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated January 22, 2004

FF093215
2890.07

Finding of No Significant Impact

Type of Action: Right of Way Grant

Serial Number: FF095631

Environmental Assessment Number: DOI-BLM-LLAKF010-2010-0007-EA

Applicant: United States Department of Energy
Climate and Environmental Sciences Division

Address: 1000 Independence Avenue
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Authorized Agent:
Argonne National Laboratory
Computing, Environment, and Life Sciences Division
9700 South Case Avenue
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District: Arctic Field Office

Planning Unit: Northwest National Petroleum Reserve in Alaska (NPR-A)

Lands Involved: Section 26, Township 23 North, Range 18 West, Umiat Meridian

Context and Intensity of Environmental Impacts

Based upon a review of the EA prepared by the Arctic Field Office and the supporting documents, I have determined that the proposed action will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance as defined at 40 CFR 1508.27. Therefore, an environmental impact statement is not required. We reviewed

the context of the proposed action and found that it would not result in any significant effects to resources and values in NPR-A. The mitigation measures and environmental protections would ensure that the Proposed Action would not add significantly to incremental impacts to NPR-A and surrounding lands.

The need for this project is to allow the DOE to conduct road repair, power line upgrade, installation of balloon launcher, cloud radar system, relocation of data system and right-of-way site expansion at the DOE Barrow field site. The US DOE ARM Climate Research Facility (ACRF) has been designated a national user facility for the purpose of providing a unique asset for the study of global change to the broader national and international research community. Research at the facility includes the study of alteration in climate, land productivity, oceans or other water resources, atmospheric chemistry, and ecological systems that may alter the capacity of the earth to sustain life. The need for this project is to allow the applicant to improve the facilities at Barrow, Alaska and consequently the ability to continue to collect data.

The following factors were considered in the EA to evaluate the significance this proposal (40 CFR 1508.27): Beneficial and adverse impacts; effects on public health and safety; unique cultural or ecological areas within or near the project area: potentially controversial or uncertain effects; whether the action may establish a precedent for future actions with significant effect; cumulative effects; adverse impacts to important scientific, cultural or historical resources; effects to endangered or threatened species or habitat; or whether the action threatens a violation of federal, state, local or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements:

Monitoring and Mitigation

BLM will monitor on the ground activities periodically. Mitigation measures will be implemented as described in the attached authorization stipulations.

APPROVED:

/s/Lon Kelly
Arctic Field Office Manager
April 1, 2010