

**U.S. Department of the Interior**  
**Bureau of Land Management**

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**Finding of No Significant Impact**  
**DOI-BLM-NV-S000-2015-0002-EA**  
**October 2015**

**ARES Nevada, LLC's**

File Number: N-92514

PREPARING OFFICE

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# 1 INTRODUCTION

## 1.1 *Proposed Action Title/Type*

The Proposed Action is to construct and operate a Regulation Energy Management (REM) facility to address current and future electrical grid reliability and stability issues, in accordance with Federal Energy Regulatory Commission (FERC) objectives and in conformance with the objectives set forth in the Las Vegas Resource Management Plan (RMP) and Record of Decision approved in October 1998. The proposed facility has been designed to provide environmentally-friendly and sustainable large-scale energy storage in support of promoting electrical grid stability and renewable energy consistency.

## 1.2 *Applicant/Proponent*

ARES Nevada, LLC is a Santa Barbara, California based company providing a deployable solution for grid-scale energy storage. ARES mission is to enable the electric grid to integrate unprecedented amounts of clean, environmentally responsible, renewable energy while maintaining the reliable electric service necessary to power growth and prosperity.

## 1.3 *Location of Proposed Action*

ARES proposes to locate this project exclusively on BLM-managed lands in the Carpenter Canyon area, east of Pahrump, in Nye and Clark Counties, Nevada. The alignment of the Proposed Action, including the facilities, maintenance area, and transmission, is contained within Township 20 South, Range 54 East, Sections 34 and 35; Township 20 South, Range 55 East, Sections 22, 27, 28, 31, 32, 33; Township 21 South, Range 54 East, Sections 01, 02, 03, 12; and Township 21 South, Range 55 East, Sections 06 and 07.

The Proposed Action would include 72 acres of permanent and 98 acres of temporary disturbance on BLM lands.

## 1.4 *Overview of the Proposed Action*

ARES is proposing to construct, operate and maintain a REM facility on BLM managed land in Clark and Nye Counties, Nevada, to assist in transmission system stability and reliability, and electricity supply management on the regional electrical transmission grid. The Proposed Action is a 50 megawatt (MW) gravity based Energy Storage System which utilizes multiple electric locomotives operating on a single steep grade railroad track to store or deliver electric energy into the regional electrical grid -- using electricity from the grid to power the locomotives uphill, returning that electricity to the grid as the locomotives descend with their motors operating as generators. The Proposed Action is designed to balance variable energy demands and renewable energy contributions across an electrical grid system. The Proposed Action does not produce more energy than is introduced into its system; therefore it is not an electrical generation facility.

The Proposed Action includes the following components:

- A rail line corridor which will include an access/maintenance road and an overhead catenary system to connect the locomotives to the electrical system.
- Maintenance and operation facilities, including two buildings and a substation.

- Valley Electric Association (VEA) transmission upgrades, including new transmission lines to connect the REM facility to the existing Gamebird Switch Station, upgrading existing transmission lines directly affected by the project, and removing lines made redundant by the project.
- Expansion of the existing VEA Gamebird Switch Station to accommodate the new system.
- A facilities access road connecting to the existing transmission line maintenance road.

## **2 CONSISTENCY WITH LAND USE PLANS, LAWS, REGULATIONS, AND POLICIES**

The Proposed Action conforms to the Las Vegas RMP and Record of Decision approved in October 1998. Sections that specifically apply to this Project include:

- RW-1-h, Management Direction: “All public land within the planning area, except as stated in RW-1-c through RW-1-g area available at the discretion of the agency for rights-of-way under the Federal Land Management Policy Act.”

In conjunction with FLPMA, the BLM’s applicable authorities include the following:

- Executive Order 13212, dated May 18, 2001, which mandates that agencies act expediently and in a manner consistent with applicable laws to increase the production and transmission of energy in a safe and environmentally sound manner.
- Section 211 of the Energy Policy Act of 2005, which establishes a goal for the Secretary of the Interior to approve 10,000 MW of non-hydropower renewable energy on public lands by 2015.
- Secretarial Order 3285A1, dated February 22, 2010, which establishes the development of renewable energy as a priority for the Department of the Interior.

## **3 SELECTED ALTERNATIVE**

Based on review of the EA (EA# DOI-BLM-NV-S000-2015-002) and supporting documents, the Proposed Action is the Selected Alternative.

The REM facility will provide up to 50 megawatts (MW) of gravity-based electrical energy regulation on 72 acres of BLM managed land, with temporary impacts to an additional 98 acres. The Selected Alternative was developed taking into consideration the technical aspects of the project and minimizing the facilities to be included within the West-wide Energy Corridor (Section 368 of the Energy Policy Act of 2005, 42 U.S.C. § 15926).

The Selected Alternative includes the following components:

- A 5.5 mile rail corridor, averaging 75 feet in width, which contains the rail line, a track-side maintenance/access road, and an overhead catenary system for interconnecting the locomotives to the electrical system.
- An Operations, Maintenance and Control Facilities Area includes both an operations and control building, a maintenance building for the train vehicles, and an employee and visitor parking lot. Both buildings will be constructed on concrete pads. Adjacent to this area, a transmission interconnection substation will be constructed.

- A Transmission and Access road corridor including a new transmission interconnection connecting the ARES substation to an existing VEA transmission line; upgrades to the affected portion of the existing transmission line; two new sections of transmission lines constructed to route the existing line into Gamebird Switch Station; removal of the existing 230kV transmission line currently bypassing Gamebird Switch Station; and expansion of the existing VEA Gamebird Switch Station within the existing Station right-of-way boundary.
- The new Operations, Maintenance and Control Facilities access road will be co-located with the new transmission interconnection from the existing transmission maintenance road.

#### **4 ADDITIONAL SCOPING**

*Describe scoping methods and dates done after those discussed in Chapter 1 of the EA, if applicable.*

No additional scoping activities were conducted after the public meeting described in Section 5.

#### **5 PUBLIC INVOLVEMENT**

##### ***Summary of Public Participation***

##### **5.1.1 Outline the EA comment process**

Public involvement entails “The opportunity for participation by affected citizens in rule making, decision making, and planning with respect to the public lands, including public meetings or hearings . . . or advisory mechanisms, or other such procedures as may be necessary to provide public comment in a particular instance” (FLPMA, Section 103(d)). As required, a 30-day public comment period was provided from October 12-November 11, 2015.

##### *Comment Analysis*

*To be developed.*

##### *List of Commenters*

*To be developed.*

##### *Response to Comments*

*To be developed.*

##### **5.1.2 Describe any changes made to EA as a result of public participation**

*To be summarized, if necessary.*

#### **6 FINDING OF NO SIGNIFICANT IMPACT**

The Las Vegas Field Office interdisciplinary review and analysis of EA# DOI-BLM-NV-S000-2015-0002 determined the Proposed Action would not result in any significant impacts to the

quality of the human environment based on criteria established by regulations, policy and analysis.

Based on the findings discussed herein, I conclude the proposed action is not a major Federal action and will result in no significant impacts to the environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity and do not exceed those effects described in applicable land use plans. Therefore, preparation of an environmental impact statement (EIS) to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

The Finding of no Significant Impact determination is based on the rationale that the significance criteria, as defined by the Council on Environmental Quality (CEQ) (40 CFR 1508.27), have not been met. “Significantly” as used in NEPA requires considerations of both context and intensity.

**Context:**

Under NEPA’s implementing regulations, “context” means that consideration of “the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality” [40 CFR 1508.27(a)]. Significance varies with the setting of the proposed action. For instance, in the case of a small, site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant.

The project is a site-specific action directly involving 172 acres of BLM managed public land in Clark and Nye Counties, Nevada, that does not, in and of itself, have international, national, regional, or state-wide importance. Environmental impacts associated with the proposed action and alternatives have been assessed by an interdisciplinary team and described in EA # DOI-BLM-NV-S000-2015-002-EA. The effects of the action are relatively local, and are not applicable on a national scale since no nationally significant resources or values are present or involved in the project.

**Intensity:**

The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1) and supplemental Instruction Memorandum, Acts, regulations and Executive Orders. The following have been considered in evaluating intensity for this proposal:

*1) Impacts can be both beneficial and adverse and a significant effect may exist regardless of the perceived balance of effects.*

The proposed action would affect resources as described in detail in the EA. Included here is a summary of the understood beneficial and adverse effects.

*Beneficial Effects:*

Beneficial effects of the project would include improving the consistency of the existing transmission infrastructure; contribute to the stability and reliability of the supply of clean energy within the existing electrical grid; a potential reduction in the need for additional resource consuming energy storage facilities (pumped-hydro or large scale battery developments) in the future; and minor economic benefits in the local community from employment during construction and operation of the facility.

*Adverse Effects:*

Adverse effects of the Proposed Action include:

- Temporary increases in particulate matter during construction.
- Long-term loss of 72 acres of habitat.
- Removal of cactus and yucca species from within the project area.
- The short-term need for handling and removal of desert tortoises from the area.
- Visual contrast with the existing landscape.

Long-term effects would be limited in scope, primarily resulting from the loss of habitat. Mitigating measures to reduce impacts to the extent possible were incorporated in the design of the proposed action.

There may also be some short-term disturbance and displacement of other wildlife in the immediate project vicinity as the result of noise and human activity associated with construction (98 acres) and routine project maintenance. Displacement and disturbance impacts will be short-term and no measureable long-term detrimental effects are expected.

Overall, the magnitude of the predicted adverse effects is minimal and restricted to the local scale.

*2) The degree to which the selected alternative will affect public health or safety.*

The environmental analysis documented no significant effects on public health and safety from any of the actions described in the proposed action. Mitigation measures to control particulate matter during construction will minimize potential public health effects.

*3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.*

The EA evaluated the area of the proposed action and determined no unique geographic characteristics such as Wild and Scenic Rivers, Prime or Unique Farmlands, Areas of Critical Environmental Concern, designated Wilderness areas, or Wilderness Study Areas were present or within the immediate vicinity. Implementation of the proposed action will have no effect on such resources.

*4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

Under (40 CFR 1508.27(b) (4)), “You must consider the degree to which the effects are likely to be highly controversial. Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the proposed action or preference among the alternatives. There would always be some disagreement about the nature of the effects for land management actions, and the decision-maker must exercise some judgment in evaluating the degree to which the effects are likely to be highly controversial. Substantial dispute within the scientific community about the effects of the proposed action would indicate that the effects are likely to be highly controversial.”

Effects on the quality of the human environment from authorizing the Proposed Action are not likely to be highly controversial from a scientific perspective. The action of granting a right-of-way, for any purpose, is one which may evoke strong emotional responses in some people. However, granting of a right-of-way for development of an energy storage process with a

conservative environmental footprint is both a permissible use of public land and not likely to evoke significant negative responses.

*5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

The proposed action is not unique or unusual, and understanding of the resources in the area is thorough. The effects of rail, road, and transmission line construction and maintenance activities are well understood and the BLM has extensive experience evaluating the environmental effects associated with these right-of-way authorizations. The environmental analysis did not identify any highly uncertain, unique, or unknown risk effects on the human environment which would result from authorizing the project.

*6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

Any similar action must be evaluated through an appropriate site-specific environmental review and decision making process consistent with applicable law, regulation, policy, and land use plan guidance. This project neither establishes a precedent nor represents a decision in principle about future actions. The granting of rights-of-way on federal lands for use by private entities is a long standing process. A decision to grant would not limit later resource management decisions for areas open to development proposals.

*7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership.*

The Proposed Action, as described above and within the EA, is a stand-alone project with no additional related or connected actions. The Proposed Action was evaluated for potential cumulative impacts in the context of past, present, and reasonably foreseeable actions. No individually significant or cumulatively significant effects are identified in the EA. None of the alternatives analyzed in the EA were predicted to contribute to significant cumulative effects on the human environment at either the local, regional, state-wide, national, or international scale.

*8) The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*

A Class III cultural resource inventory of the area of potential effect for the proposed project was completed and no districts, sites, highways, structures, or other objects currently listed in or eligible for listing in the National Register of Historic Places were identified. The proposed undertaking will have no effect on historic properties. Any future development of the surrounding land will be subject to additional Section 106 compliance, including identification, effects assessment, and, if necessary, resolution of adverse effects.

Area tribes were also invited to review the project for potential effects; no comments were received.

*9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, or the degree to which the action may adversely affect: 1) a proposed to be listed endangered or threatened species or its habitat, or 2) a species on BLM's sensitive species list.*

