Attachment 3

Integrated Reclamation Plan

MOHAVE COUNTY WIND FARM PROJECT

Integrated Reclamation Plan

Reclamation, Native Plant Management and Noxious and Invasive Weed Management

URS

May 2013

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List of Acronyms and Abbreviations

ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
AOSCA	Association of Official Seed Certifying Agencies
AZPDES	Arizona Pollutant Discharge Elimination System
BP Wind Energy	BP Wind Energy North America Inc.
BLM	Bureau of Land Management
BMP	Best Management Practice
ECCMP	Environmental and Construction Compliance Monitoring Plan
FEIS	Final Environmental Impact Statement
GIS	Geographic Information System
GPS	Global Positioning System
LLC	Limited Liability Company
NRA	National Recreation Area
NPS	National Park Service
Plan	Integrated Reclamation Plan
POD	Plan of Development
Project	Mohave County Wind Farm Project
R	Range
Reclamation	Bureau of Reclamation
ROW	right-of-way
SWPPP	Stormwater Pollution Prevention Plan
T	Township
US 93	U.S. Highway 93
USGS	U.S. Geological Survey
W	West

1.0 INTRODUCTION

BP Wind Energy North America Inc. (BP Wind Energy) is proposing to construct, operate and maintain, and eventually decommission a wind-powered electrical generation facility in Mohave County, Arizona. The Mohave County Wind Farm Project (Project) would be built in the White Hills of Mohave County about 40 miles northwest of Kingman, Arizona, and would include public land managed by the Bureau of Land Management (BLM) and Bureau of Reclamation (Reclamation). The Project includes ground-disturbing activities associated with construction of wind energy turbines, access roads, staging areas, substations and switchyard, operation and maintenance building, electrical supply distribution lines, and other ground disturbing project components.

1.1 RECLAMATION PLAN PURPOSE

This Integrated Reclamation Plan (Plan) describes the framework for reclamation, revegetation, native plant management, and noxious and invasive weed control. The focus of this framework is to restore areas that have been impacted by construction, operation and maintenance, and decommissioning. The reclamation procedures in this document describe the methodologies, monitoring, and reporting requirements for reclaiming disturbances associated with the Project. The terms of this Plan will be applied to the project facilities located on BLM and Reclamation administered lands should the Project be approved, and will be overseen by the BLM and Reclamation Authorized Officers (Authorized Officers).

This Plan also incorporates by reference the Storm Water Pollution Prevention Plan (SWPPP) that will be developed to comply with Clean Water Act requirements. The SWPPP will include measures to address erosion and sedimentation that could result from ground disturbing activities. The Environmental and Construction Compliance Monitoring Plan (ECCMP) ensures compliance with the Project mitigation measures, including measures identified in this Plan.

1.2 PLAN VARIANCES

The Plan is intended to be dynamic and adaptive to changing conditions and technologies. Changes to this Plan will be handled according to the Variance Process described in the ECCMP, Record of Decision (ROD), grants, and Plan of Development (POD). If BP Wind Energy constructs or decommissions the Project in intervals, these plans would be coordinated with the Authorized Officers to address the treatment of temporary facilities and the reclamation schedule. Adaptive management based on the results of monitoring reclaimed areas during operation and maintenance activities will be handled consistent with the Variance Process. However, in all cases, these adaptive management changes will be documented and approved by the Authorized Officers or their designees.

1.3 PROJECT LOCATION

The Project consists of construction, operations and maintenance, and decommissioning of an up to 500-megawatt wind energy facility in the White Hills of Mohave County, about 40 miles northwest of Kingman, Arizona, and just south of the National Park Service (NPS) Lake Mead National Recreation Area (NRA). The Project Area encompasses approximately 47,059 acres of undeveloped land in all or portions of:

- Township (T) 28 North (N), Range (R) 19 West (W), Sections 6 and 7
- T29N, R19W, Sections 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 30, 31, and 32
- T28N, R20W, Sections 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 35, and 36
- T29N, R20W, Sections 1, 2, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 28, 29, 32, 33, 34, 35, and 36
- T28N, R21W, Sections 1, 12, 13, 14, 23, 24, 26, and 27

These sections are found on the Senator Mountain (1989), Senator Mountain NE (1989), Senator Mountain NW (1989), and Senator Mountain SW (1989), Arizona, U.S. Geological Survey (USGS) 7.5-minute topographic series maps.

1.4 STATEMENT OF RESPONSIBILITY

BP Wind Energy or an assigned Limited Liability Company (LLC) (e.g. BP Wind Energy LLC) or affiliate will have the overall responsibility for implementing, directing, and monitoring reclamation measures, revegetation, native plant management, noxious and invasive weed management, and all other mitigation identified in this plan. BP Wind Energy will communicate reclamation related activities through the Project's Compliance Manager as described in the ECCMP.

BP Wind Energy will provide a performance bond or other similar security to ensure compliance with the terms and conditions of the right-of-way (ROW) authorizations and requirements of applicable regulatory requirements, including reclamation and administrative costs to BLM and Reclamation. The amount of the required bond will be determined during the ROW authorization process based on site-specific and project-specific factors, including measures identified in this Plan. Financial bonds may also be required for site monitoring and testing authorizations. Financial bonds are implemented in accordance with BLM Wind Energy Development Policy (BLM IM 2009-043), and Reclamation's authority for requiring a bond or other security as defined in Title 43 CFR Part 429 and Reclamation's Directive and Standard LND 08-01.

As described in the ECCMP, during project construction the Agency Environmental Monitors will observe all aspects of construction and environmental compliance, including interim reclamation efforts. The Agency Environmental Monitors have oversight and comment privileges and the mandate to inspect/monitor the reclamation efforts and construction areas. As they provide oversight and review, the Agency Environmental Monitors will inspect and monitor the reclamation process and construction areas to ensure conformity with construction plans and environmental compliance. Should there be deviations from the construction plans or environmental compliance requirements, the Agency Environmental Monitor will be able to offer comments, provide suggestions for corrective actions, or process variance requests (but will not direct construction activities). Once construction is completed, monitoring of reclaimed areas would be conducted as described in Section 2.8 Monitoring and Contingency Measures.

1.5 REGULATORY AUTHORITY

Federal Land Policy and Management Act Title V requires an applicant for a ROW on BLM-administered lands to submit a plan including "rehabilitation for such right-of-way" and further requires the holder of

the ROW grant "to furnish a bond, or other security" to secure all of the obligations, including reclamation, under the terms and conditions of the ROW grant. Regulations at Title 43 Code of Federal Regulations § 2805.12 detail the terms and conditions for reclamation and the bond securing that obligation on BLM administered lands. A similar bond or other security is required for Reclamation administered lands. Reclamation's authority for requiring a bond or other security is defined in Title 43 CFR Part 429 and Reclamation's Directive and Standard LND 08-01.

2.0 IMPLEMENTATION

2.1 RECLAMATION GOALS AND OBJECTIVES

The goal of reclamation is to restore disturbed areas to a condition approximating or equal to those that existed prior to the disturbance from construction, operations and maintenance or decommissioning activities. Reclamation objectives emphasize the restoration of the natural vegetation, hydrology, and wildlife habitats. Habitat restoration is incorporated into this Plan. The Plan identifies revegetation standards, erosion and soil stabilization measures, and noxious and invasive plant controls that will be implemented to ensure habitat is restored in disturbed areas. The Plan requires that restoration occur as soon as practicable after completion of activities to reduce the amount of habitat loss at any one time and to speed up the recovery to natural habitats. Reclaimed vegetation will be designed to discourage perching or nesting by reclaiming disturbed areas using the plant species listed in Table 2.

To meet reclamation goals and objectives, the restoration of disturbed areas emphasizes the following reclamation processes:

- Native plant revegetation
- Erosion control and soil stabilization
- Native plant management
- Noxious and invasive weed control

Reclamation goals and objectives can be achieved through implementation of both Interim Reclamation and Final Reclamation.

Interim Reclamation is implemented to reclaim areas disturbed during construction or operations and maintenance throughout the life of the Project. Areas disturbed that are not needed for operation and maintenance will be contoured to blend with the surrounding topography as much as practicable. Existing topsoil in place at the site will be spread over areas not needed for operations and revegetated with native seeds (see Table 1). In order to operate and maintain the Project facilities, it may be necessary to drive, park, and re-disturb vegetation within areas where interim reclamation has been completed. Should this occur the disturbed area will be reclaimed following use.

Final Reclamation begins upon decommissioning of the facility. All created infrastructure and structures will be removed in accordance with the decommissioning plan. Areas disturbed during final reclamation will be reshaped as closely as practicable to the original contour, covered with topsoil, and reseeded. In accordance with the Decommissioning Plan, all created infrastructure and structures will be removed, although turbine foundations would be removed only to a depth of 36 inches because the excavation

required to remove the full foundation would result in greater environmental damage than retaining the deep, non-leaching foundation material. All excavations to remove facilities must be closed by backfilling when they are dry and free of waste and graded to conform to the surrounding terrain as closely as practicable. Roads must be reclaimed and collector lines removed unless BLM or Reclamation requests that roads be retained for other purposes and collector lines remain buried to minimize the disturbance associated with their removal.

Table 1 Reclamation Objectives, Timing, and Activities by Sequence

Reclamation Sequence	Objectives	Timing	Activities
Interim Reclamation	Minimize disturbance by reclaiming areas not needed during operation and maintenance activities. Establish a healthy native plant community and restore wildlife habitat. Establish native vegetation cover in disturbed areas not needed during operation and maintenance that is self-sustaining, and where practicable, resistant to the introduction or spread of noxious and invasive weed species.	As soon as practicable after construction activities have been completed.	Stabilize disturbed soil surface areas to reduce erosion and runoff to or below naturally occurring levels. Re-grade disturbed areas to approximate pre-disturbance topography to the extent practicable. Reclaim disturbed areas with native vegetation species. Control noxious and invasive weeds on the disturbed areas and control the expansion of these species onto adjacent uninfected areas.
Final Reclamation	Establish a healthy native plant community and restore wildlife habitat. Establish native vegetation cover that is self-sustaining, and where practicable, resistant to the introduction or spread of noxious and invasive weed species.	As soon as practicable after initial reclamation of areas where further disturbance is unlikely during operation and maintenance or decommissioning activities. During decommissioning as soon as practicable after removal of Project facilities.	Same as Interim Reclamation.

2.2 AREAS OF DISTURBANCE

Construction activities required for the Project include, but are not limited to, road construction, wind turbine assembly and construction, electrical collection system construction, construction of an operation and maintenance building, electrical substation, transmission line, switchyard, and the materials source (Detrial Wash mineral materials pit).

The reclamation procedures will depend on the extent of alteration of the soils, vegetation, and topography caused by each construction activity. Final design and construction plans for the Project will

be used to determine the disturbance limits. All areas to be disturbed will have boundaries marked using stakes delineating the area (refer to POD Attachment 8 – Flagging Plan).

2.3 INVENTORIES AND SURVEYS

Pre-disturbance survey provides the baseline information needed to assess and monitor rangeland conditions. By establishing pre-disturbance conditions of the surrounding landscape, reclamation goals and success standards can be actively assessed through reclamation monitoring as described in Section 2.8 Monitoring and Contingency Measures.

Prior to ground disturbance, a 100 percent pedestrian visual survey of the limits of disturbance using transects will be completed to assess plant community characterizations, list of key plant species, soil surface indicators and general soil types, and areas where noxious and invasive weed species are present (BLM 1999). During this site assessment, survey general attributes will be confirmed through a qualitative assessment of topography and soil. Steep slopes (greater than 25 percent), aspect, and unique topographic features (i.e., rock outcrops, unique boulders, natural rock piles, etc.) will be identified.

The pre-construction site assessment survey using transects will include an approximate number of individual plants for the salvage restricted species identified in Table 3. The pre-construction site assessment surveys will identify and flag/mark/or identify by global positioning system (GPS) the individual salvage restricted plants that could be salvaged or transplanted. Photo reference points (photo points) will be established through coordination with the Authorized Officers to provide a qualitative standard for pre-existing conditions and used for comparison purposes during post-construction monitoring.

Inventories of noxious and invasive weeds will be in accordance with protocols contained in the North American Invasive Plant Mapping Standards (North American Weed Management Association 2002) for minimum inventory standards and forms. Noxious weed infestations will be flagged (per the POD, Attachment 8 – Flagging Plan) in the field to alert construction personnel to the extent of the infestation and prevent ground disturbance until noxious weed preventative measures have been implemented.

The location of special status plants, species that are listed by the Arizona Department of Agriculture as salvage restricted, and noxious and invasive weed species will be mapped using GPS and Geographic Information System (GIS). The files with the species locations will be provided to the BLM Kingman Field Office (KFO) and Reclamation.

The presence of noxious weeds and invasive plant species and their relative distribution and abundance in an area will be mapped and noted using the following system:

1. A few (<1% cover), scattered populations containing few individuals
2. A few (1-10% cover), scattered populations containing a large number of individuals
3. Moderate number (10-25% cover) of populations containing few individuals
4. Common (25-50% cover) but few individuals at any one location
5. Numerous (>50% cover), dense populations

This system will be modified, as needed, based on observed species distributions and densities.

2.4 REVEGETATION

The Interim and Final reclamation revegetation standard is for all areas disturbed during project construction, operations and maintenance or decommissioning to have a uniform (e.g., evenly distributed, without large bare areas) native vegetation cover. The reclaimed native vegetation cover will be 70 percent of the native background (pre-disturbance) vegetation cover for the area. This revegetation standard for Interim and Final reclamation is applicable to all disturbed areas and is consistent with the site-specific SWPPP.

2.4.1 Success Criteria

The revegetation standard for vegetation cover in reclaimed areas of 70 percent of background native vegetation cover applies on both BLM and Reclamation-administered lands. This reclamation success standard will be used to assess whether the reclamation requirements are being met. This plan is consistent with the Project SWPPP, which includes criteria for final stabilization requirements per Arizona Department of Environmental Quality (ADEQ) Arizona Pollutant Discharge Elimination System (AZPDES) requirements (ADEQ 2013). In accordance with these requirements, reclaimed vegetation should have a uniform vegetation cover with a density of 70 percent of the native background vegetation cover on all disturbed areas not covered by structures. When background native vegetation cover is less than 100 percent of the ground (e.g., arid areas), the 70 percent coverage success criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, 70 percent of 50 percent (.70 x .50 = .35) requires 35 percent total cover for final stabilization.

The vegetation community established on the reclaimed areas must be capable of persisting without continued intervention, excluding noxious weed or invasive species management. Persistence of reclaimed vegetation will be determined through monitoring of reclamation areas as identified in Section 2.8 Monitoring and Contingency Measures. If monitoring identifies reclaimed areas that may not meet reclamation success criteria, (e.g., seed germination or vegetation cover is lower than expected), the Authorized Officers and BP Wind Energy will discuss the use of adaptive management procedures to address issues. The anticipated timeframe for achieving the success criteria is three years after initial seeding.

2.4.2 Seed Mixture

Seed mixtures will be used to establish species diversity, composition, and ground cover appropriate for each desired plant community. Only approved, certified weed-free, tested pure live seeds will be used. The seed mixture selection will consider commercial availability and price, growth form, seasonal variety, and prevailing dominant and locally adapted species. While additional seed mixes may be identified, Table 2 identifies the BLM and Reclamation's preferred seed mix for areas disturbed by the Project.

Table 2 Representative Seed Mix by Growth Habit

Species Name	Common Name	Life Form	Percent Seed Mix Composition
Forb			
Baileya spp	Desert Marigold species	Annual, Biennial or Perennial Forb	5
Bebbia juncea	Sweetbush	Perennial Forb	5
Eriogonum inflatum	Desert trumpet	Annual Forb	5
Sphaeralcea ambigua	Desert globemallow	Perennial Forb	5
		Total Forbs	**20**
Grass			
Hilaria rigida	Big galleta	Grass	5
Muhlenbergia porteri	Bush muhly	Grass	5
		Total Grass	**10**
Shrub			
Ambrosia dumosa	White bursage	Shrub	10
Atriplex polycarpa	Allscale	Shrub	15
Encelia farinosa	Brittlebush	Shrub	5
Ephedra nevadensis	Nevada Mormon tea	Shrub	5
Eriogonum fasciculatum	Flat-top buckwheat	Shrub	5
Hymenoclea salsola	White burrobrush	Shrub	5
Krascheninnikovia lanata	Winterfat	Shrub	5
Larrea tridentata	Creosote bush	Shrub	5
Salazaria mexicana	Mexican bladdersage	Shrub	5
Viguieria deltoidea	Goldeneye	Shrub	5
Xylorhiza tortifolia	Mojave woody aster	Shrub	5
		Total Shrub	**70**
		Total	***100***

SOURCE: Bureau of Land Management 2013

2.5 BEST MANAGEMENT PRACTICES

Best Management Practices (BMPs) and other strategies will be implemented on a site-specific basis to mitigate effects and/or to increase reclamation success. BMPs included in the FEIS, ADEQ's AZPDES Construction General Permit, and as detailed on the Project SWPPP address the site-specific requirements of the Project and local environment. The following list of BMPs present BLM and Reclamation's required minimum BMPs; however, BP Wind Energy is not limited to this list and is encouraged to propose alternative approaches and BMPs to help meet or exceed the reclamation standards. Proposed alternative approaches will be via the Variance Process described in Section 1.2 Plan Variances.

- Potential mitigation measures for Section 404 of the Clean Water Act permitting may require additional site-specific reclamation procedures as identified in the Section 404 permit.
- Slope stability will be controlled by implementing erosion control measures included in the construction permit and the site specific SWPPP to minimize sheet and rill erosion. Rill erosion is an erosion process in which numerous small channels, only several inches deep, occur mainly on recently disturbed and exposed soils. Sheet erosion is the more or less uniform removal of soil from an area without the development of conspicuous water channels (NRCS 1993).
- Once the road cross-section is constructed and all construction uses of that road that may require redisturbance is completed, revegetate all disturbed areas to reduce the visual size (width) of the

road. Initiate "Interim Reclamation" of roads as soon as practicable after construction by re-contouring cuts, fills, and borrow ditches, spreading existing topsoil and reseeding.

- Plowing and pulling pipes and lines into the ground where practicable and feasible to reduce disturbance to soil and vegetation.
- Spreading topsoil and seeding allows it to maintain its long-term viability for future use. The rapid reapplication of topsoil that has only been stored a short period encourages the re-establishment of native plants from viable seed in the soil.
- Weed control for all noxious and invasive weeds identified in surveys as described in Section 2.3 Inventories and Surveys will be conducted prior to the start of construction or decommissioning. In addition to areas that are disturbed, weed control could be conducted within the limits of disturbance where vegetation is crushed or mowed rather than removed to assist with meeting reclamation success criteria.
- Accidental introduction of invasive/noxious weeds will be reduced by only using materials (e.g., straw wattles, mulch, gravel, fill, etc.) that are certified weed free and by securely covering all loads of material with a potential to contain seed (e.g., soil, fill, vegetation) during transport. This is most likely to occur when (1) the above materials or construction equipment that have potential to transport seed are brought into a site, and (2) existing soils are disturbed, enabling fast-germinating, fast-growing, disturbance adapted species to proliferate.
- Vehicles, machinery, and equipment traveling off maintained roads, off project created roads as per final construction plans, or from an area of known-infestation to a weed-free area will be inspected for soil and debris capable of transporting weed propagules and the soil or debris will be removed in a self-contained area prior to entering the Project Area. The cleaning activities will concentrate on tracks, feet, tires and on the undercarriage, with special emphasis on axles, frame, cross members, motor mounts, and on underneath steps, running boards, and front bumper/brush guard assemblies. Construction cabs will be kept free of soil and debris capable of transporting weed propagules. Should cabs need to be cleaned out while on the project area, the debris collected during cleaning will be bagged and removed to an approved landfill. To help prevent the introduction or spread of non-native plants, all vehicles, equipment, and tools will be stored on site at weed-free areas where non-native vegetation is removed on a regular basis. The location of vehicle cleaning stations will be identified by BP Wind Energy and reviewed by the Authorized Officers for approval.
- Use certified weed-free fill, gravel, mulch, seed mix, and other certified weed-free restoration and erosion control materials.

2.6 RECLAMATION PROCEDURES

The following reclamation procedures are BLM and Reclamation's recommended minimum requirements to ensure that impacts are minimized and all disturbed areas are stabilized and revegetated. BP Wind Energy is not limited to this list and is encouraged to propose alternative approaches to meet stabilization and revegetation requirements that require documentation through the Variance Process referred to in Section 1.2. Monitoring and adaptive management practices will be used to refine and clarify needed actions consistent with the reclamation goals and objectives as described in Section 2.1 Reclamation

Goals and Objectives. Section 1.2 provides information on approval of adaptive management changes in this plan resulting from monitoring during the operation and maintenance activities for this Project.

- BLM and Reclamation's preference is for topsoil to be stored at the edge of the disturbance area where practicable and feasible. Removed topsoil will be stored either in windrows along the edge of disturbance or in stockpiles. While soil is stored in windrows and stockpiles, water will be added to the surface to control dust or add a tackifier to form a crust. The watering should penetrate deep enough to stimulate germination, but not exhaust the nutrients in the soil. Flagging and staking should be used to prevent the soil stockpiles from being run over by equipment and to help maintain soil quality until it is used and distributed. Soil windrows and stockpiles should be stored for less than 6 months before being reapplied to disturbed areas. If soil must be stored in windrows and stockpiles for more than 6 months, seeding and germination will help maintain soil qualities.
- During decommissioning compacted areas such as roads and wind turbine pads will be ripped to depth below the root zone, which is usually a minimum depth of approximately 12 to 24 inches with a minimum space of 12 to 24 inches between ripper points to improve soil aeration, water infiltration, and root penetration. Ripping and disking will follow the landscape contours where practicable. Recontouring of disturbed areas will be accomplished through backfilling, grading, and soil stabilization to the extent practicable.
- Seedbed preparation could include tilling, topsoil replacement, and the application of compost, fertilizer, and minerals if necessary based on the results of pre-disturbance surveys. Where practicable, within 24 hours and no more than 72 hours of seedbed preparation, mulch will be applied to reduce erosion. Prior to mulching, the seed mix will be applied using hydro-seeding with a tackifier.
- Hydro-seeding where practicable and feasible is the preferred method for seeding to meet reclamation goals and objectives. Seed will be applied to sideslopes, stockpiles, and areas not needed for construction as soon as practicable after completion of the areas grading or use. Broadcast seeding by hand will be used in areas that are not accessible by hydro-seeding equipment. In areas where broadcast seeding occurs, a drag or harrow will be used to cover the seed, where practicable and feasible. The amount of seed applied in broadcast seeded areas will be twice the rate that is determined to be required for hydro-seeding.
- If seed is collected and used in revegetating disturbed areas, it should be collected from approved sources within 10 miles of the Project Area if available. BLM requires that seeds used on public lands be certified by an Association of Official Seed Certifying Agencies (AOSCA) member agency. Collected seed will be labeled with collection location, date, and species, and stored in a cool, dry location until it is used during reclamation of disturbed areas. Seed can be collected from on-site permanent and temporary disturbance areas.
- Seeding will be done after ground-disturbing activities are complete and at the appropriate time of year (preferably in the fall or, if fall is not an option, winter). If there is lag time between the end of ground-disturbing activities and seeding, the site specific SWPPP BMPs that are implemented when construction commences would apply.

2.7 PROJECT ACTIVITIES

2.7.1 Pre-construction/Construction

The pre-disturbance survey provides the baseline information to assess and monitor rangeland conditions and trends. This baseline information will include topographic, hydrologic, vegetation, and soil parameters and will be used to define site-specific reclamation guidelines discussed during an on-site meeting.

Prior to the initiation of any ground surface disturbance, an on-site meeting will be held with the BP Wind Energy, BLM, and Reclamation to discuss the approach to the reclamation program, native plant salvage, noxious and invasive weed management, mulch and topsoil salvage, overall project schedule, and areas to be avoided during the surface disturbing activity. Modifications to existing processes/documents/BMPs relating to these items will be documented in Variance Requests presented in the ECCMP. This meeting will be consistent with the ECCMP and BP Wind Energy will prepare and submit a memo to the Authorized Officers summarizing the items discussed at the meeting.

2.7.1.1 Clearing and Grading

Clearing is required to allow for operation of construction machinery, placement of excavated materials, preparing ground for construction trailers, and movement of construction traffic along the travel corridors during construction. Clearing, grading, and other disturbance of soil and vegetation will be limited to the authorized area required for construction, delineated per the POD, Attachment 8 – Flagging Plan, as identified in the ECCMP (see POD for complete information) and construction drawings. Grading will require that topsoil, vegetation debris and other natural material be stockpiled for later use in reclamation. Soil stockpiles will be located within the surveyed limits of disturbance. Topsoil stockpiles will be segregated from other stockpiles.

BLM and Reclamation's preferred methods of ground clearing is described in the following list:

- Drive equipment over vegetation in place wherever feasible.
- In areas requiring blading or grading, topsoil will be moved to the edges of the disturbed areas to be used later for reclamation.
- Special status species and salvage restricted plants identified for transplanting will be free from insect infestations or apparent diseases and representative of its species. These plants will be replanted in disturbed areas during reclamation or moved to a nursery for holding for later use. Vegetation salvage is discussed in Section 3.0, Native Plant Management.
- Where practical, backfilled material will be recontoured and compacted to match surrounding area and grades.

2.7.1.2 Soil Handling

Topsoil will be salvaged during construction to use for site preparation and support future reclamation efforts. Components of soil management will include soil handling, landscape reconstruction, and surface runoff and erosion control.

For each surface-disturbing activity, topsoil will be salvaged and stockpiled within the limits of disturbed areas. Proper salvaging techniques involve delineating soil type and determining soil depth. Components of soil handling will include the identification, erosion protection, placement, and incorporation of salvaged soil stockpiles. All topsoil and appropriate subsoil will be properly maintained through clearly identifying, delineating, and segregating all salvaged topsoil and subsoil based on a site-specific soil evaluation, including depth, chemical, and physical properties.

Placement of stockpiles will be planned to minimize disturbance during interim and final reclamation. Topsoil stockpiles for linear features (e.g., roads, collector lines) will be stored adjacent to the disturbed area on native soil and seeded with the approved seed mixture if not re-spread within 6 months of construction. Soil and vegetation stockpiles will be stored within the limits of the staked disturbance area. Stored soil material will be protected from erosion, degradation, and contamination. Soil stabilization will be implemented as soon as practicable on all topsoil and/or spoil windrows and stockpiles. Vegetation removed during construction can be stockpiled along with topsoil to provide erosion protection, maintain natural inocula, and incorporate native seeds and organic matter. The following list contains soil management procedures preferred by BLM and Reclamation for the Project:

- Topsoil windrows and/or stockpiles and spoil stockpiles will be designed to minimize the surface area occupied and will be constructed to maintain slope stability until they are used for reclamation.
- Additional mulching and tackifiers may be used to protect exposed stockpile surfaces.
- Stockpiles will not be stored for longer than 6 months without being seeded using the approved seed mix to provide temporary native vegetation cover to help maintain soil viability.
- For stockpiles stored longer than 6 months, temporary native vegetation cover will use the seed mix shown in Table 2 for stabilization and erosion control, as needed. Temporary seeding of topsoil stockpiles should be immediately watered to achieve quick germination, and maintained or watered for at least 8 weeks (depending on the season).

2.7.2 Operations and Maintenance

During the operation and maintenance activities of the wind farm, the focus will be on monitoring areas that have been recontoured and reseeded during Interim Reclamation or areas that were disturbed during maintenance. After construction of the Project is completed, BP Wind Energy will be responsible for monitoring reclaimed areas until the reclamation success criteria is met. Operation and maintenance monitoring for the Project will include both qualitative and quantitative analysis.

The goals and objectives of monitoring are:

- Evaluate if reclamation success criteria are being met in areas disturbed by the Project.
- Assess the effectiveness of temporary and permanent erosion-control structures (e.g., water bars) to ensure the stability of the ROW and to ensure that runoff is naturally controlled in place, with no accelerated erosion or wash-outs.

- Monitor and assess targeted noxious weeds and invasive plants in accordance with Section 4.0 Noxious and Invasive Weed Management Plan.
- Monitor and identify other disturbances that may hinder reclamation success.

BLM and Reclamation will require restoration of areas disturbed during operation and maintenance. Areas disturbed during operation and maintenance will require implementation of BMPs (see Section 2.5) and the monitoring and contingency measures as described in Section 2.8. Prior to any surface disturbance during operation and maintenance additional inventories and surveys may need to be completed (see Section 2.3).

In the event actions are needed to address emergency situations crews will be dispatched to deal with the emergency. Emergency response procedures will be implemented for the following potential or similar events:

- Downed transmission lines, structures, or equipment failure causing immediate environmental or health and safety threats
- Fires
- Sudden loss of power
- Natural disasters
- Serious personal injury

Every attempt will be made to contact the authorized officers via phone and email prior to initiating any actions to address emergency response that could result in surface disturbance. In the event immediate notification cannot be made, emergency actions will proceed. Work at the project facilities will make reasonable efforts to protect plants, wildlife and other resources. Restoration and reclamation procedures following completion of repair work will be similar to those prescribed during construction (see Section 2.7.1) and must meet the success criteria standards. The agencies will be notified in writing within 24 hours of the emergency and provided a description of the actions taken to respond to the emergency.

2.7.3 Decommissioning

The following provides an overview of decommissioning and reclamation activities. Refinement of these activities will be required to reflect the best practices as improvements are discovered by the agencies and industry during the term of authorizations/life of the Project. Revision to the decommissioning reclamation plan should be initiated when known and preferably at least 2 years prior to the anticipated end of commercial operation, and be in consultation with the BLM and/or other applicable agencies. Overall decommissioning of the Project will be addressed in the Project Decommissioning Plan as described in the POD.

The Project is anticipated to have a lifetime of up to 30 years. At that time, the Decommissioning Plan will be updated, finalized, and provided to the Authorized Officers for review and approval. A Decommissioning Plan is included in the POD.

Within the Wind Farm Site, BLM and Reclamation may choose to retain access roads constructed for the Project. If the access roads were retained, maintenance and reclamation of these roads would become the

responsibility of BLM and/or Reclamation, however BP Wind Energy would reclaim the roads to pre-construction widths.

Improvements to the access road that extends into the U.S. Highway 93 (US 93) ROW will be coordinated with the Arizona Department of Transportation (ADOT) to determine if the intersection improvements should be retained or reclaimed. When the necessary equipment and materials have been removed from an area and the access road from US 93 to the former Wind Farm Site is no longer needed, this access road will be reclaimed unless BLM wants to retain the road to the Detrital Wash materials pit or beyond. If so, BLM would assume maintenance responsibilities. Areas where equipment or materials are removed will be re-graded back to pre-construction contours (if practicable).

2.8 MONITORING AND CONTINGENCY MEASURES

Successful reclamation and revegetation requires performance monitoring. Performance monitoring evaluates the temporal condition of the effort, to determine the potential for success, and to determine if remediation is required. The purpose of monitoring is to evaluate the long-term soil stability, vegetative cover and density, habitat quality, and levels of noxious and invasive weeds in the areas disturbed during construction, operation and maintenance, or decommissioning activities.

2.8.1 Reclaimed Area Monitoring

BP Wind Energy will annually inspect and review the condition of disturbed areas associated with the Project. BP Wind Energy or their representative will assess the success and effectiveness of reclamation efforts, noxious and invasive weed control, and based on discussion with the Authorized Officers recommend adaptive management measures, if necessary. However, prior to implementation of adaptive management measures, the Authorized Officers, or their designee would provide written approval.

Any area disturbed by construction, operations and maintenance, or decommissioning activities will be monitored in the fall (September) until the area has met reclamation success criteria. Monitoring reclaimed areas would begin during the first growing season following the end of ground disturbing activities. The growing season will be defined by documented growth cycle species planted during reclamation. Monitoring times and conditions may vary from year-to year if there is a change in the noxious weed or invasive species established within the Project Area.

Monitoring of both qualitative and quantitative analyses will be included in a protocol provided by BP Wind Energy and approved by the Authorized Officers. The monitoring of reclaimed areas will include:

- Spatial Data
- Photo Points
- Frequency
    - Frequency – Plant Species Diversity data
    - Ecological site/Vegetation type sample sizes

- Cover (Foliar and Ground[1])/Species Composition/Production
    - Line-point intercept data
- Plant Species Diversity
    - Qualitative Data

Post-ground disturbance monitoring will be conducted in reclaimed areas until success criteria are met. Post-ground disturbance monitoring inspections will be conducted annually and success will be based on the revegetation to 70 percent of the native background vegetation cover (refer to Section 2.4.1 Success Criteria). If, after the third-growing season monitoring event, a reclaimed area meets the success criteria, no additional reclamation monitoring will be conducted for that area unless it were to be re-disturbed by wind farm operations. Post-disturbance reclamation monitoring may be conducted concurrently with the fall weed management surveys outlined in Section 4.1.2 of this Plan.

2.8.2 Adaptive Management

If based on the Authorized Officer and BP Wind Energy's evaluation of monitoring results indicates that sites disturbed by project activities are not meeting reclamation success criteria, adaptive management measures will be implemented as soon as practicable. Adaptive management measures will be selected based on discussions with the Authorized Officers and BP Wind Energy and documented in a memorandum that describes the rationale, area, and specific adaptive management measure implemented. Adaptive management implemented based on the results from monitoring reclaimed areas will be handled according to the Variance Process described in the ECCMP.

Adaptive management measures will be selected based on discussions with the Authorized Officer, BP Wind Energy and may include measures such as, reapplying seed mixture, modifying the seed mixture, mulching, additional weed control measures, use of matting, or other erosion control measures, or supplemental watering. Supplemental watering as an adaptive management measure would be applied to areas that had not reached reclamation success as described in Section 2.8.1. The application of supplemental watering will vary based on weather conditions, extent of area not meeting reclamation success, season for implementing supplemental watering, monitoring results for the area not meeting reclamation success, and soil type. The application of supplemental watering if used as an adaptive management measure will be applied so that the monthly precipitation and supplemental watering amounts are equivalent to the average monthly precipitation between 1967 and 2012 that vary from 1.36 inches in March to 0.26 inches in June (Western Regional Climate Center 2012 and Western Regional Climate Center 2013).

Supplemental watering is most effective when applied in manner that simulates low intensity winter rainfall (Hall and Anderson 1998). As described in Section 2.6, adaptive management measures will be subject to approval by the Authorized Officers.

[1] Foliar cover is the area of ground covered by the vertical projection of the aerial portions of the plants. Small openings in the canopy and intraspecific overlap are excluded. Ground cover is the cover of plants, litter, rocks, and gravel on a site.

3.0 NATIVE PLANT MANAGEMENT

BLM guidance regarding native plant management is contained in the KFO Proposed Resource Management Plan and Final Environmental Impact Statement (BLM 1993). The RMP management objectives allow for the salvage of vegetation where vegetation will be destined for destruction because of surface disturbance, provided salvage does not disturb special status species. BLM and Reclamation prefer the species, as identified in Table 3, be stockpiled and replanted as part of reclamation activities. If the reclaimed areas do not contain microsite characteristics that are suitable for the species, salvaged plants could be transplanted outside of the disturbed area within the turbine corridor. The number of individual plants identified for transplanting will be based on the results of pre-disturbance surveys. BP Wind Energy will coordinate with the KFO and Reclamation, or their authorized designee, to identify procedures for native plant salvage and other mitigation measures depending on the results of the pre-construction survey.

Prior to the start of construction, a site assessment to survey the final project design disturbance area will be completed to assess the occurrence of protected native plant species, as described in Section 2.3 Inventories and Surveys. In addition to pre-construction surveys, additional surveys may be needed prior to ground disturbance during the operation and maintenance activities. The location of protected native plant species will be mapped using GPS and the GIS files of species locations will be provided to the KFO and Reclamation. The extent of native plant salvage will depend, in part, on the local relative abundance of native plants species in the Project Area.

Temporary stockpiling is recommended if plants identified for salvage are not immediately transplanted. An open-air nursery area to be used for salvage plant stockpiling as approved by BLM and/or Reclamation may be separately designated and fenced. For long-term stockpiling, the preferred method for salvage plants is to plant them in windrows to allow mechanical recovery of the salvaged plant with no injury to adjacent plants. Long-term salvage plant stockpiling is less preferred by BLM and Reclamation to immediate transplanting or temporary stockpiling of salvage plants.

3.1 BLM SENSITIVE PLANTS

The silverleaf sunray (*Enceliopsis argophylla*) is the only BLM sensitive plant species potentially occurring in the project vicinity (BLM 2013). The silverleaf sunray has been documented about 1 mile west of the Project Area (BLM 2013) where it is known to occur on gypsum soils in Township 29N; Range 21W.

3.2 PROTECTED ARIZONA NATIVE PLANTS

Sixteen salvage restricted species have been documented in or near the Project Area. The species are shown in Table 3. Other salvage restricted cactus and succulents not listed in Table 3, but potentially occurring in the Project Area, will be identified during pre-disturbance site characterization and will be protected as highly safeguarded, salvage restricted, or harvest restricted species. A complete list of protected Arizona native plant species is maintained by the Arizona Department of Agriculture and is available on their website (Arizona Department of Agriculture 2012).

Table 3 Salvage Restricted Plants Found within or near the Project Area

Common Name	Scientific Name
clustered barrel cactus	*Echinocactus polycephalus var. polycephalus**
Engelmann's hedgehog cactus	*Echinocereus engelmannii var. nicholii*
Johnson's fishhook cactus	*Echinomastus johnsonii*
desert barrel cactus	*Ferocactus cylandraceus var. lecontei*
common fishhook cactus	*Mammillaria tetrancistra*
buckhorn cholla	*Opuntia acanthocarpa*
beavertail cactus	*Opuntia basiliaris var. basilaris*
teddy-bear cholla	*Opuntia bigelovii*
Mojave prickly pear	*Opuntia erinacea var. erinacea*
pencil cactus	*Opuntia ramosissima*
Joshua tree	*Yucca brevifolia*
Mohave yucca	*Yucca schidigera*
Las Vegas bearpoppy	*Arctomecon californica*
straw-top cholla	*Cylindropuntia echinocarpa*
Navajo Bridge cactus	*Opuntia nicholii*
ocotillo	*Fouquieria splendens*

SOURCE: Bureau of Land Management 2013 and Arizona Department of Agriculture 2012

4.0 NOXIOUS AND INVASIVE WEED MANAGEMENT PLAN

"Noxious weed" is a legal term, meaning any plant officially designated by a federal, state, or local agency as injurious to public health, agriculture, recreation, wildlife, or property. The more general term "invasive species" refers to species that are non-native to the ecosystem under consideration and whose introduction causes, or is likely to cause economic or environmental harm or harm to human health. Invasive plant species include those that are legally designated as noxious, as well as additional species that may be considered noxious in some areas but not others, and other non-native species that are already widespread.

Noxious and invasive species observations during baseline biological surveys indicated infestations of non-native plant species that included Sahara mustard (*Brassica tournefortii*), red brome (*Bromus rubens*), and cheat grass (*Bromus tectorum*) within the Project Area. Records of invasive plants available from the Southwest Exotic Plant Information Clearinghouse (USGS 2007) indicate that these three species along with Mediterranean grass (*Schismus barbatus*), Russian thistle (*Salsola tragus*), and red-stem filaree (*Erodium cicutarium*) are common, with numerous records in the valleys surrounding the Project Area. Salt cedar (*Tamarix sp.*), Malta star thistle (*Centaurea melitensis*), and Bermuda grass (*Cynodon dactylon)* have been recorded along or near the southern shore of Lake Mead NRA (NPS 2010). Malta star thistle and puncturevine (*Tribulus terrestris*) may also occur within the ROW along US 93 in vicinity of the Project Area and have the potential to be spread to and within the Project Area. None of these species are listed as noxious weeds by the State of Arizona or the federal government.

Table 4 Presence and Rating of Non-native Plant Species Observed within the Project Area and Project Region

Scientific Name	Common Name	Present in Project Area	Arizona Wildlands Invasive Plant Working Group Rating
Brassica tourneforti	Sahara mustard	Yes	Medium
Bromus tectorum	Cheat grass	Yes	High
Bromus madritensis ssp. rubens	Red brome	Yes	High
Cynodon dactylon	Bermuda grass	No	Medium
Salsola tragus	Russian thistle	No	Medium
Schismus barbatus	Mediterranean schismus	No	Medium
Centauria melitensis	Malta starthistle	No	Medium
Tamarix spp.	Tamarisk	No	High
Erodium cicutarium	Red-stem fillaree	No	Medium
Tribulus terrestris	Puncture vine	No	Evaluated but not listed

Source: Arizona Department of Agriculture, 2012 and Northam 2005

The ratings by the Arizona Wildlands Plant Working Group are advisory and intended to be a tool for land managers to assist in developing management strategies. Regardless of the rating, any plant on this list is considered to have some degree of negative ecological impact (Northam 2005).

4.1.1 Project Risk Determination and Rating

BLM Manual Section 9015 (BLM 1992) risk assessment is used to determine the risk rating of introducing noxious weeds in the area. The risk assessment and rating describe the relative risk of the potential for noxious weed establishment in the Project Area, guide monitoring, and weed management measures. The rating of risk is based on two independently rated factors: (1) likelihood, and (2) consequences as described in Appendix 1 of Manual Section 9015. The values for the likelihood and consequences of noxious weeds and invasive plant species range from a value of 0 (none) to 10 (high). Tables 5 and 6 provide the values for the likelihood and consequences respectively, and Table 7 provides the risk rating values.

As described in BLM's Manual Section 9015, the risk rating is calculated as follows:

Risk Rating = Likelihood x Consequence

Likelihood = the likelihood that noxious weed species will become established in the project area.
Consequence = the consequence of noxious weed species will become established in the project area.

Table 5 Likelihood of Noxious or Invasive Weeds Spreading to the Project Area

Factor 1:	Value	Likelihood of Noxious Weed Species Spreading to Project Area
None	0	Noxious weed species not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
Low	1-3	Noxious weed species present in areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious Weeds into the project area.
Moderate	4-7	Noxious weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious weeds within the project area.
High	8-10	Heavy infestations of noxious weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions are likely to results in the establishment and spread of noxious weeds on disturbed sites throughout much of the project area.

Source: BLM 1992

For this project the likelihood of noxious weeds or invasive species becoming established is high (8) due to the presence of red brome, cheat grass and Sahara mustard in the Project Area. Ground disturbance from the construction, operation and maintenance or decommissioning activities could result in the germination of noxious weed or invasive plants species seeds in the existing seedbed and provide additional areas where these species could become established.

Table 6 Consequences of Noxious Weed or Invasive Species Establishment in the Project Area

Factor 2	Value	Consequence of Noxious Weed Establishment in Project Area
Low to Nonexistent	1-3	None, no cumulative effects expected.
Moderate	4-7	Possible adverse effects on site and possible expansion of infestation within project area. Cumulative effects on native plant community are likely but limited.
High	8-10	Obvious adverse effects within the project area and probable expansion of noxious weed infestations to areas outside the project area. Adverse cumulative effects on native plant community are probable.

Source: BLM 1992

This project has a moderate (7) value for consequences due to the species present within the Project Area (see Table 4). The consequences of the existing presence of these noxious weed or invasive plant species could be reduced by success of seed mix species or native seed within the existing soil bank.

Table 7 Risk Rating Obtained by Multiplying Results of Factor 1 and Factor 2

Risk Rating	Value	Action
None	0	Proceed as planned.
Low	1-10	Proceed as planned. Initiate control treatment on noxious weed populations that are established in the area.
Moderate	25	Develop preventative management measures for the proposed project to reduce the risk of introduction or spread of noxious weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor area for at least 3 consecutive years and provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.
High	50-100	Project must be modified to reduce risk level through preventative management measures including seeding with desirable species to occupy disturbed sites and controlling existing infestations of noxious weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.

Source: BLM 1992

The risk rating for the Project is high (56), indicating that implementing the measures identified in Sections 2.5, 2.6, 2.8, and 4.3 will help control the potential establishment of noxious weeds and invasive plant species. BLM Manual Section 9015 Section 8 states that projects with a high-risk rating should be monitored for at least 5 consecutive years (BLM 1992).

4.1.2 Weed Management

Soil disturbances, such as those caused by construction of the Project could result in the establishment of new populations and spread of existing populations of noxious and invasive weeds. The focus of noxious and invasive weed control efforts will be to reduce/eliminate existing infestations in the Project Area and prevent the spread of new infestations resulting from project activities.

Weed management for this project will be conducted using an Integrated Pest Management approach, balancing cost, effectiveness, and environmental risk in selecting the best treatment(s) to use for any given target species at any given location. BLM Manual Section 9015 Integrated Weed Management (BLM 1992) will be used as a reference. Methods that may be implemented as part of the weed management effort include (1) prevention (including revegetation of disturbed areas), (2) manual control, and (3) chemical control. For optimum results, multiple methods will likely need to be implemented either in concert, or over time.

4.1.3 Noxious Weed and Invasive Plant Species Monitoring

The purpose of monitoring during operation and maintenance and decommissioning activities will be to determine if noxious weed or invasive plant species populations identified during pre-disturbance surveys have increased in density or spread as a result of the Project activities or if new noxious weed or invasive plant species that were not previously detected are present. Monitoring would begin during the first growing season following disturbance which will be defined by the growth cycle of the noxious weed or invasive plant species that are documented during pre-construction surveys or other surveys. Monitoring duration, season, and conditions may vary from year-to year depending upon species present in within the area disturbed by the Project. For example, if Malta starthistle and or puncture vine did become

established in the area, it could require a change in when surveys for noxious weeds or invasive species surveys were conducted.

Monitoring will apply to all areas disturbed or used by the Project activities during construction, operations and maintenance, and decommissioning. Semi-annual weed monitoring will be conducted for the duration of the Project's operation and maintenance and decommissioning activities in accordance with the KFO recommendations to detect the presence of species and conduct effective treatment to control species. A memorandum summarizing observations and recommendations will be provided to the Authorized Officers following each semi-annual monitoring event (refer to Section 4.3 Weed Management Measures). Based on monitoring and pre-construction survey results, the frequency of noxious weed and invasive plant species monitoring may be modified to the following:

Years 1-5 semi-annual monitoring
Years 6-10 annual monitoring
Years 11-30 monitoring every other year

Monitoring in the Project Area will focus on (1) areas where weed species have previously been observed and/or treated; (2) reclaimed areas, and (3) along roadways and access routes (refer to Section 4.0 Noxious and Invasive Weed Management Plan for additional details). Any areas where a spread of noxious or invasive weeds is noted will be further evaluated for the need for remedial action and additional treatment. The Authorized Officers will be notified and GPS points and photos will be taken of infested areas (refer to Section 4.3 Weed Management Measures). All non-native species and their relative distribution and percent cover will be noted using the following system:

1 A few (<1% cover), scattered populations containing few individuals
2 A few (1-10% cover), scattered populations containing a large number of individuals
3 Moderate (10-25% cover) number of populations containing few individuals
4 Common (25-50% cover), but few individuals at any one location
5 Numerous (>50% cover), dense populations

This system will be modified, as needed, based on observed species distributions and densities.

4.2 WEED IDENTIFICATION

Monitoring and removal of weeds requires skill and training in plant identification. Training in plant identification and field manuals with photographs of native desert plants and of common weeds will be provided by BP Wind Energy to field staff including biological monitors, weed abatement contractors, plant operators and staff, and construction workers.

4.3 WEED MANAGEMENT MEASURES

BLM and Reclamation's preferred practice of invasive plant and noxious weed management is to prevent infestation or to treat small infestations prior to their spread throughout a larger area (BLM 1992). BLM uses an integrated approach to manage infestations, with methods that include combinations of biological, mechanical, and chemical control. Chemical pesticides are used if they are the most effective control and after considering other control methods (BLM 2007a). To ensure protecting this Project from spread of weeds during operation and maintenance and decommissioning activities, following completion of construction, monitoring for noxious and invasive species surveys will be conducted as described in

Section 4.1.3. The location of noxious and invasive weed species will be mapped using GPS and GIS, and the files with the species location and information will be provided to the KFO and Reclamation. BP Wind Energy will map noxious and invasive weed populations that are adjacent to Project components, disturbed areas within the Project Area or for components and disturbance that continue outside of the project boundary that result from BP Wind Energy actions. This would include along the existing facility access corridor up to the junction with ADOT's ROW at the intersection with US 93. BP Wind Energy will treat and/or eradicate infestations of weeds for these areas as required by the weed plan. Depending upon the species identified, weed management methods may include:

- Manual removal such as hand dethatching, pulling, excavating, or cutting can be used for small areas of infestation or in areas where non-native plants occur within sensitive habitats. Where manual methods are used, removed plant material will be properly disposed of off-site.
- Mechanical methods also may include but not be limited to use of equipment to disc weed populations. Equipment with a scarifer may be utilized to rip weed populations. Farm tillage equipment may be used to "till" weed populations as necessary for control and eradication. All equipment used in removing weeds must be cleaned of weed seeds, rhizomes, and other plant parts prior to, and after use, before being transported across the Project Area. Mechanical control methods will be used prior to or during flowering to prevent seed production.
- Chemical methods will only use BLM- and Reclamation-approved herbicides and will only be applied by a licensed applicator holding a BLM Pesticide Use Permit. Any chemical treatment will be consistent with BLM Manual Section 9011 (BLM 2007b) and BLM's Programmatic Environmental Impact Statement for Vegetation Treatments Using Herbicides (BLM 2007a). Herbicides will be applied consistent with BLM's Manual 9011, permits issued by the US Army Corps of Engineers, and any Pesticide Use Permits issued by BLM. Herbicide-free buffer zones will be established for habitats, and species/populations of interest to ensure that drift will not affect these areas, nearby residences and/or landowners, and other sensitive areas. Width of the herbicide-free buffer zone depends on the pesticide used, method of application, climatic conditions, and form applied

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