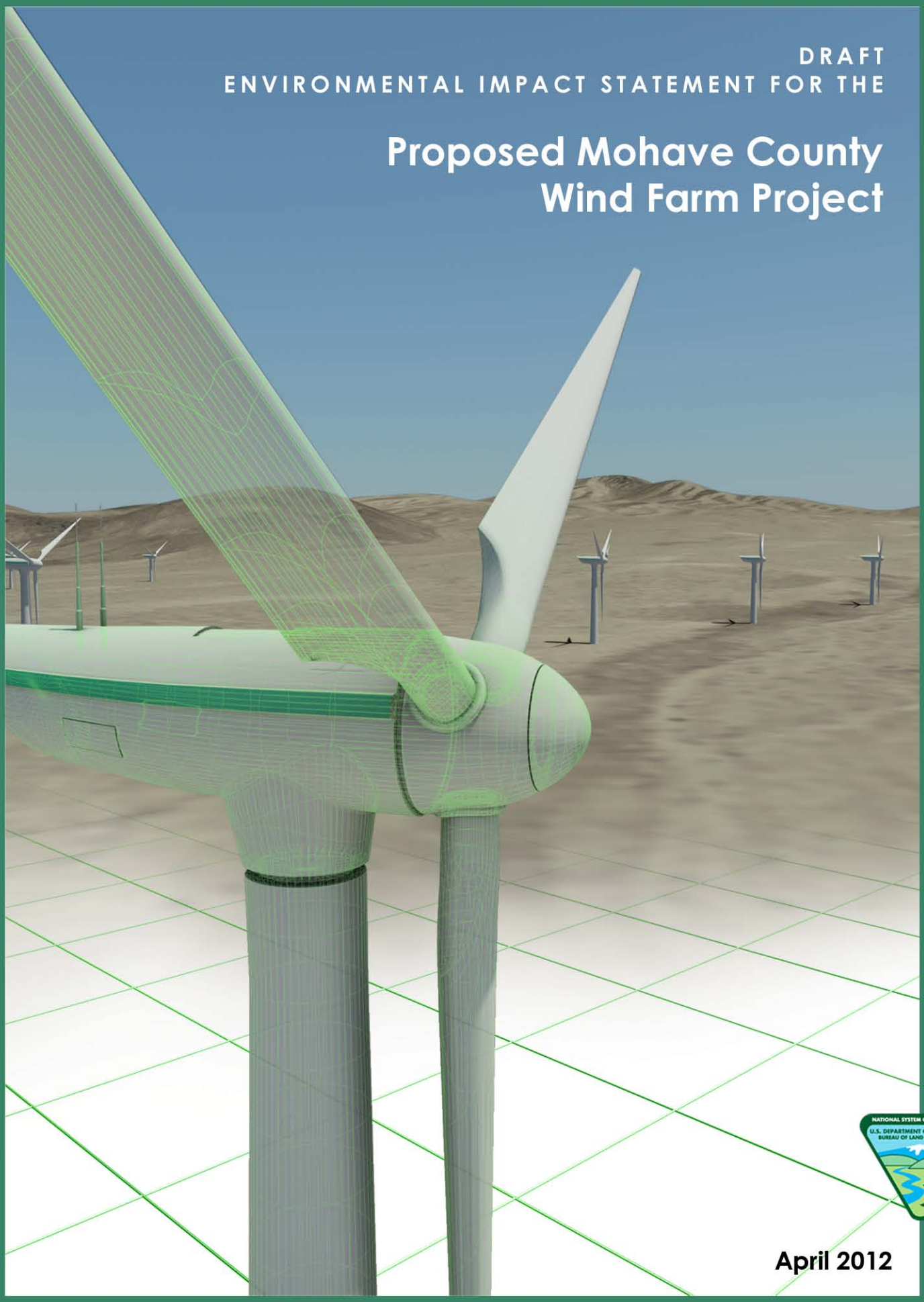
BLM

DRAFT
ENVIRONMENTAL IMPACT STATEMENT FOR THE

Proposed Mohave County Wind Farm Project



Kingman Field Office / Arizona

April 2012

BLM/AZ/PL-12/006

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado River District
Kingman Field Office
2755 Mission Boulevard
Kingman, Arizona 86401
www.az.blm.gov

April 6, 2012

Reply Refer To:
2800 (C010)
AZA- 32315AA

Dear Reader:

Attached for your review and comment is the Draft Environmental Impact Statement (EIS) for the Mohave County Wind Farm Project (Project). BP Wind Energy North America Inc., submitted a right-of-way application to construct, operate, maintain, and decommission a wind energy facility and associated infrastructure in the White Hills area of northwestern Mohave County, Arizona. The proposed wind energy facility would occupy 38,099 acres of public land managed by the Bureau of Land Management (BLM), Kingman Field Office and 8,960 acres of Federal land managed by the Bureau of Reclamation.

This document was prepared by the BLM in consultation and cooperation with cooperating agencies and in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; the Council on Environmental Quality and the Department of the Interior (DOI) regulations implementing NEPA (40 CFR Parts 1500-1508, 43 CFR Part 46), and the Federal Land Policy and Management Act of 1976, as amended.

Your timely review and comments will be critical to the success of this effort and in preparing the Final EIS. Comments will be accepted for 45 calendar days following the date the Environmental Protection Agency publishes the Notice of Availability in the *Federal Register*. We request that your comments be as specific as possible. Comments are more helpful if they reference a section or page number and include suggested changes, additional information sources, or alternative methods. Comments may address the adequacy of specific analysis in the Draft EIS and merits of the alternatives formulated and discussed in the document. Comments that contain only opinion or preferences will be considered and included as part of the decision making process, although they will not receive a formal response from the BLM.

You may submit comments by any of the following methods:

KFO_WindEnergy@blm.gov
Fax: (602) 417-9490
Mail: Bureau of Land Management, Renewable Energy Coordination Office,

Arizona State Office, One North Central Avenue, Suite 800
Phoenix, Arizona 85004-4427

Please identify on the envelopes and the subject line of the email and facsimiles "Mohave County Wind Farm Draft EIS".

Before including your address, phone number, email address, or other personal identifying information in your comment, be advised your entire comment - including your personal identifying information – may be made publicly available at any time. Comments submitted anonymously will be accepted and considered. Anonymous comments do not create standing or a record of participation. All submissions from organizations and businesses, and from individuals identifying themselves as representatives, or officials of organizations or business, will be available for public inspection in their entirety.

The BLM will host public meetings to provide further information on the Draft EIS and to solicit written comments. The meeting dates and locations will be announced at least 15 days in advance through local media, newspapers, and the BLM project Web site.

Copies of the Draft EIS have been sent to affected federal, state, and local government agencies and applicable tribal governments. Printed copies of the Draft EIS are available for public review at the BLM Kingman Field Office and the Arizona State Office. The document may also be viewed at the following public libraries in Mohave County, Arizona:

- Boulder City Library
- Dolan Springs Community Library
- Kingman Mohave County Library
- Kingman Valle Vista Community Library
- Peach Springs The Edward McElwain Memorial Library

You may also access the document on the project website at:
http://www.blm.gov/az/st/en/prog/energy/wind/mohave.html.

Thank you for your interest in the Project. We appreciate your contribution to the NEPA process.

Sincerely,

Ruben A. Sánchez
Field Manager

MOHAVE COUNTY WIND FARM PROJECT
MOHAVE COUNTY, ARIZONA
DRAFT ENVIRONMENTAL IMPACT STATEMENT

Lead Agency:	U.S. Department of the Interior, Bureau of Land Management
Jurisdiction:	Colorado River District, Kingman Field Office, Arizona
Cooperating Agencies:	Bureau of Reclamation – Lower Colorado Region Western Area Power Administration – Desert Southwest Customer Service Region National Park Service – Lake Mead National Recreation Area Arizona Game and Fish Commission Hualapai Tribe – Department of Cultural Resources Mohave County Arizona – Board of Supervisors
Type of Action:	Draft (X) Final ( ) Administrative (X) Legislative ( )
For More Information:	Jerry Crockford, BLM Contracted Project Manager Mohave County Wind Farm DEIS Telephone (505) 360-0473

ABSTRACT: BP Wind Energy North America Inc. submitted a right-of-way application to construct, operate, maintain and decommission a wind energy facility and associated infrastructure in the White Hills area of northwestern Mohave County, Arizona. The proposed wind energy facility would occupy 38,099 acres of public land managed by the Bureau of Land Management (BLM), Kingman Field Office and 8,960 acres of Federal land managed by the Bureau of Reclamation (Reclamation). The proposed project would produce up to 500 MW of power. This Draft Environmental Impact Statement (EIS) analyzes in detail the environmental effects of four alternatives:

- Alternative A – proponent's proposed action
- Alternative B – a reduced wind farm site footprint that encompasses approximately 30,872 acres of BLM-managed land and 3,848 acres of land managed by Reclamation
- Alternative C – a reduced wind farm site footprint that encompasses approximately 30,172 acres of BLM-managed land and 5,124 acres of land managed by Reclamation
- Alternative D – No Action, in which BLM would not authorize construction and operation of the wind energy facility

Public comments on the draft EIS will be accepted for use in development of the final EIS for 45 calendar days following the date the U.S. Environmental Protection Agency publishes its Notice of Availability in the *Federal Register*.

You may submit written comments by any of the following methods: KFO_WindEnergy@blm.gov, by fax (602) 417-9490, or by mail: Bureau of Land Management, Renewable Energy Coordination Office, Arizona State Office, One North Central Avenue, Suite 800, Phoenix, Arizona 85004-4427. Please identify on the envelopes and the subject line of the e-mail and facsimiles "Mohave County Wind Farm Draft EIS." For information about the project or to view the draft EIS, visit http://www.blm.gov/az/st/en/prog/energy/wind/mohave.html.

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LIST OF ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
$\mu g/m^3$	micrograms per cubic meter
µPa	microPascal
A.A.C.	Arizona Administrative Code
AADT	Annual Average Daily Traffic
ACC	Arizona Corporation Commission
ACEC	Area of Critical Environmental Concern
ACS	Avian Conservation Strategy
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
AGFD	Arizona Game and Fish Department
AIAN	American Indian-Alaskan Native
ANSI	American National Standards Institute
AP	Airport
APE	area of potential effect
APLIC	Aviation Power Line Interaction Committee
APS	Arizona Public Service Company
AQRV	Air Quality Related Value
AR4	Fourth Assessment Report
ARS	Arizona Revised Statute
ASM	Arizona State Museum
ATV	all-terrain vehicle
AUM	animal unit month
AWLW	Arizona Wildlife Linkages Workgroup
AZ	Arizona
AZGS	Arizona Geological Survey
AzMNH	Arizona Museum of Natural History
AZPDES	Arizona Pollutant Discharge Elimination System
BACT	Best Available Control Technology
BEA	U.S. Bureau of Economic Analysis
BGA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BLS	U.S. Bureau of Labor Statistics
BMP	Best Management Practice
BP Wind Energy	BP Wind Energy North America Inc.
Btu	British thermal unit
CAA	Clean Air Act
CAD	computer-aided design
CDP	Census Designated Place
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CF	capacity factor

CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CSWP	crushing, screening and wash plant
dB	decibel
dBA	A-weighted sound level
DEM	Digital Elevation Model
DEUR	Declaration of Use Restriction
DNL	day-night average sound level
DOD	Department of Defense
DOE	Department of Energy
DTI	Department of Trade and Industry
du/ac	dwelling units per acre
ECP	Eagle Conservation Plan
EIS	Environmental Impact Statement
EMF	electromagnetic
EMI	electric and magnetic interference
EO	Executive Order
EPAct	National Energy Policy Act of 2005
ESA	Endangered Species Act of 1973 (as amended)
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy Management Act
FPA	Federal Power Act
FTA	Federal Transit Administration
gC_{eq}/kWh	grams of carbon-equivalent per kilowatt-hour of electricity generated
GCNP	Grand Canyon National Park
GHG	greenhouse gases
GIS	geographic information system
gpm	gallons per minute
GPS	global positioning systems
HAP	hazardous air pollutant
HDMS	Heritage Database Management System
HMA	Herd Management Area
HSSE	Health, Safety, Security and Environment
Hz	Hertz
I-40	Interstate 40
IAEA	International Atomic Energy Agency
IEC	International Electrotechnical Commission
IM	Instruction Memorandum

IMPLAN	IMpact analysis for PLANning
IPCC	Intergovernmental Panel on Climate Change
ips	inches per second
ISO	International Organization for Standardization
JEDI	Job and Economic Development Impact
KFO	Kingman Field Office
KOP	key observation points
kV	kilovolt
L/D	Larson-Davis
LAER	Lowest Achievable Emission Rate
L_{dn}	day-night average sound level
L_{eq}	equivalent sound level
LGIA	Large Generator Interconnection Agreement
LGIP	Large Generator Interconnection Procedures
L_{max}	maximum L_{eq}
L_{min}	minimum L_{eq}
LORS	laws, ordinances, regulations and standards
LRR	long-range radar
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
met tower	meteorological tower
MilOps	military operations
mph	miles per hour
mps	meters per second
MRDS	Mineral Resource Data System
MSL	mean sea level
MW	megawatt
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NEXRAD	Doppler radar
NHD	National Hydrography Dataset
NHOPI	Native Hawaiian or Other Pacific Islander
NO	nitrous oxide
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOI	Notice of Intent
NOx	nitrogen oxide
NPS	National Park Service
NRA	National Recreation Area
NRCS	Natural Resources Conservation Service
NSPS	New Source Performance Standards
NSR	New Source Review
NTIA	National Telecommunications and Information Administration
NV	Nevada
NVS	Noise and Vibration Study

O&M	Operations and Maintenance
O_3	ozone
OHV	off-highway vehicle
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinate biphenyl
PEIS	Programmatic Environmental Impact Statement
PFC	perfluorocarbon
PFYC	Potential Fossil Yield Classification
PISA	Preliminary Initial Site Assessment
PM_{10}	particulate matter equal to or less than 10 microns in diameter
$PM_{2.5}$	particulate matter equal to or less than 2.5 microns in diameter
PPE	personal protective equipment
ppm	parts per million
PPV	peak particle velocity
PSD	Prevention of Significant Deterioration
PWL	sound power level
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
Reclamation	Bureau of Reclamation
RMP	Resource Management Plan
RMS	root-mean-square
ROD	Record of Decision
ROW	right-of-way
S	sensitive
SARA 1986	Superfund Amendments and Re-authorization Act of 1986
SARA	Special Activities and Recreation Area
SC	species of concern
SCADA	Supervisory Control and Data Acquisition
SF6	sulfur hexafluoride
SGCN	species of special concern
SGIA	Small Generator Interconnection Agreement
SGIP	Small Generator Interconnection Procedures
SHPO	State Historic Preservation Office
SO_2	sulfur dioxide
SODAR	sonic detection and ranging system
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SR	salvage restricted
SRMA	Special Recreation Management Areas
SRP	Special Recreation Permit
SRREN	Special Report on Renewable Energy Sources and Climate Change Mitigation
SWPPP	Storm Water Pollution Prevention Plan
Tariff	Open Access Transmission Service Tariff
Tool	Preliminary Screening Tool
TPT	transaction privilege tax

TSCA	Toxic Substances Control Act
TSD	Treatment, Storage, Disposal
U.S.C.	United States Code
URS	URS Corporation
US 93	U.S. Highway 93
USACE	U.S. Army Corps of Engineers
USBR	Bureau of Reclamation
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USDL	U.S. Department of Labor
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
UST	underground storage tank
VEMUR	Voluntary Environmental Mitigation Use Restriction
VOC	volatile organic compound
VRM	Visual Resource Management
Western	Western Area Power Administration
WFRHBA	Wild and Free-Roaming Horse and Burro Act
WHO	World Health Organization
WQARF	Water Quality Assurance Revolving Fund
WRCC	Western Regional Climate Center
WSCA	wildlife of special concern in Arizona
WTG	wind turbine generator
yd^3	cubic yards