

RESOLUTION OF THE  
RESOURCES AND DEVELOPMENT COMMITTEE  
Of the 23rd Navajo Nation Council---Second Year 2016

AN ACTION RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE GRANT OF RIGHT-OF-WAY TO JEMEZ MOUNTAIN ELECTRIC COOPERATIVE, INC. TO CONSTRUCT, OPERATE AND MAINTAIN ELECTRICAL DISTRIBUTION LINE OWL SPRINGS 1/RAMONA BEGAY 14.4 KV SINGLE PHASE POWERLINE PROJECT LOCATED ON NAVAJO NATION TRUST LANDS IN WHITE ROCK CHAPTER, SAN JUAN COUNTY, NEW MEXICO

BE IT ENACTED:

**SECTION ONE. AUTHORITY**

Pursuant to 2 N.N.C. Section 502(B)(2), the Resources and Development Committee of the Navajo Nation Council has authority to give final approval of all land withdrawal, non-mineral leases, permits, licenses, rights-of way, surface easements and bonding requirements on Navajo Nation land and unrestricted (fee) land. This authority shall include subleases, modifications, assignments, leasehold encumbrances, transfers, renewals, and termination.

**SECTION TWO. FINDINGS**

A. The Jemez Mountain Electric Cooperative, Inc., P.O. Box 10, Cuba, New Mexico 87013, has submitted a Right-of-Way application to construct, operate and maintain 14.4 kV electric powerline Owl Springs 1/Ramona Begay Project on, over and across Navajo Nation Trust Lands in White Rock, San Juan County, New Mexico attached hereto and incorporated herein as Exhibit "A"; and

B. The proposed right-of-way is 528.07 feet long, 20 feet wide, consisting of 0.25 acre, more or less, located in the Southwest Quarter (NE¼) of Section 31, T. 22 North, Range 10 and Section 35, T. 22 North, Range 11 West, NMPM, San Juan County, New Mexico attached hereto and incorporated herein as Exhibit "B"; and

C. The Project Review Section with the Navajo Land Department had already obtained the consent of the affected land users (i.e. Grazing Permittees) as noted in Exhibit "C"; and

D. The environmental and archaeological studies have been completed and are approved hereto and incorporated herein by this reference.

### SECTION THREE. APPROVAL

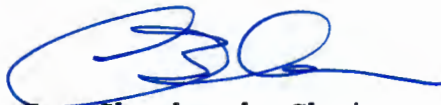
A. The Resources and Development Committee of the Navajo Nation Council hereby approves the Grant of Right-of-Way to Jemez Mountain Electric Cooperative, Inc. to construct, operate and maintain 14.4 kV single phase electric powerline Owl Springs 1/Ramona Begay Project in White Rock, San Juan County, New Mexico. The location is more particularly described on the survey map attached hereto as Exhibit "B."

B. The Resources and Development Committee of the Navajo Nation Council hereby approves the right-of-way subject to, but not limited to, the following terms and conditions attached hereto and incorporated herein as Exhibit "D."

C. The Resources and Development Committee of the Navajo Nation Council hereby authorizes the President of the Navajo Nation to execute any and all documents necessary to affect the intent and purpose of this resolution.

### CERTIFICATION

I, hereby, certify that the foregoing resolution was duly considered by the Resources and Development Committee of the 23<sup>rd</sup> Navajo Nation Council at a duly called meeting at Navajo Department of Transportation, (Navajo Nation) Tse Bonito, New Mexico, at which quorum was present and that same was passed by a vote of 5 in favor, 0 opposed, 1 abstained this 26<sup>th</sup> day of July, 2016.



Alton Joe Shepherd, Chairperson  
Resources and Development Committee  
Of the 23<sup>rd</sup> Navajo Nation Council

Motion: Honorable Benjamin Bennett  
Second: Honorable Leonard Pete

Document No. 005634Date Issued: 03/11/2016**EXECUTIVE OFFICIAL REVIEW**Title of Document: JMEC ROW for Owl Springs I, Ramona Begay Contact Name: DRAPER, HOWARDProgram/Division: DIVISION OF NATURAL RESOURCESEmail: howarddraper@frontiernet.net Phone Number: 928/871-6447

<input type="checkbox"/>	<b>Business Site Lease</b>			<b>Sufficient</b>	<b>Insufficient</b>
	1. Division:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Office of the Controller:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	(only if Procurement Clearance is not issued within 30 days of the initiation of the E.O. review)				
	3. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Business and Industrial Development Financing, Veteran Loans, (i.e. Loan, Loan Guarantee and Investment) or Delegation of Approving and/or Management Authority of Leasing transactions</b>				
	1. Division:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Fund Management Plan, Expenditure Plans, Carry Over Requests, Budget Modifications</b>				
	1. Office of Management and Budget:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Office of the Controller:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	3. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Navajo Housing Authority Request for Release of Funds</b>				
	1. NNEPA:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Lease Purchase Agreements</b>				
	1. Office of the Controller:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	(recommendation only)				
	2. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Grant Applications</b>				
	1. Office of Management and Budget:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Office of the Controller:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	3. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Five Management Plan of the Local Governance Act, Delegation of an Approving Authority from a Standing Committee, Local Ordinances (Local Government Units), or Plans of Operation/Division Policies Requiring Committee Approval</b>				
	1. Division:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
 	<b>Relinquishment of Navajo Membership</b>				
	1. Land Department:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	2. Elections:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
	3. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>

☐ Land Withdrawal or Relinquishment for Commercial Purposes

Sufficient    Insufficient

1. Division: \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
2. Office of the Attorney General: \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ Land Withdrawals for Non-Commercial Purposes, General Land Leases and Resource Leases

1. NLD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
2. F&W \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
3. HPD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
4. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
5. NNEPA \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
6. DNR \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
7. DOJ \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☒ Rights of Way

1. NLD \_\_\_\_\_ Date: 16 March 16 ☒ ☐
2. F&W \_\_\_\_\_ Date: 21 March 16 ☒ ☐
3. HPD \_\_\_\_\_ Date: 23 March 16 ☒ ☐
4. Minerals \_\_\_\_\_ Date: 3/23/16 ☒ ☐
5. NNEPA \_\_\_\_\_ Date: 4-4-2016 ☒ ☐
6. Office of the Attorney General: (ic) \_\_\_\_\_ Date: 4-6-16 ☒ ☐
7. OPVP \_\_\_\_\_ Date: 4-11-16 ☐ ☐

☐ Oil and Gas Prospecting Permits, Drilling and Exploration Permits, Mining Permit, Mining Lease

1. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
2. OPVP \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
3. NLD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ Assignment of Mineral Lease

1. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
2. DNR \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
3. DOJ \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ ROW (where there has been no delegation of authority to the Navajo Land Department to grant the Nation's consent to a ROW)

1. NLD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
2. F&W \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
3. HPD \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
4. Minerals \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
5. NNEPA \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
6. DNR \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
7. DOJ \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
8. OPVP \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐

☐ OTHER:

1. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
2. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
3. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
4. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐
5. \_\_\_\_\_ Date: \_\_\_\_\_ ☐ ☐



# NAVAJO NATION DEPARTMENT OF JUSTICE

## DOCUMENT REVIEW REQUEST FORM



DOJ	
04-05-16 @ 1:20pm	
DATE / TIME	
<input type="checkbox"/> 7 Day Deadline	
DOC #:	005634
SAS #:	
UNIT:	NM

☐ RESUBMITTAL

\*\*\* FOR NNDJ USE ONLY - DO NOT CHANGE OR REVISE FORM. VARIATIONS OF THIS FORM WILL NOT BE ACCEPTED. \*\*\*

### CLIENT TO COMPLETE

DATE OF REQUEST:	3/15/2016	DIVISION:	Natural Resources (DNR)
CONTACT NAME:	Howard P Draper, Kayla Bia, Vera	DEPARTMENT:	Navajo Land Dept. (NLD)
PHONE NUMBER:	X-6447, 6401, 6490,	E-MAIL:	howarddraper@frontiernet.net; klbia@frontier.com; verashurley@frontiernet.net
TITLE OF DOCUMENT: Approving the Grant of Right-of-Way to Jemez Mountain Electric Cooperative, Inc to construct, operate and maintain electrical distribution line Owl Springs 1/Ramona Begay 14.4 kV single phase powerline on NNTL in White Rock, San Juan County, NM			

### DOJ SECRETARY TO COMPLETE

DATE / TIME IN UNIT:	04/05/16 10:40 AM	REVIEWING ATTORNEY/ADVOCATE:	Travis P.
DATE TIME OUT OF UNIT:	04/06/16 2:10 PM		SB

### DOJ ATTORNEY / ADVOCATE COMMENTS

Document is legally sufficient.

REVIEWED BY: (Print)	Date / Time	SURNAMED BY: (Print)	Date / Time
Travis Case	4/6/16	Veronica Blackhat	4/6/16 11:55 AM
DOJ Secretary Called: Michelle Wood for Document Pick Up on 04/06/16 at 1:46 PM By: SB			
PICKED UP BY: (Print)	DATE / TIME:		

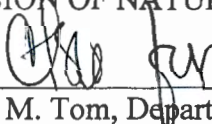
# THE NAVAJO NATION



RUSSELL BEGAYE P. S. D. 271  
JONATHAN NEZ P. S. D. 271

## MEMORANDUM

TO : David Mikesic, Zoologist  
Department of Fish and Wildlife  
DIVISION OF NATURAL RESOURCES

FROM :   
Gloria M. Tom, Department Manager II  
Department of Fish and Wildlife  
DIVISION OF NATURAL RESOURCES

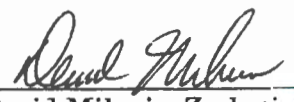
DATE : March 21, 2016

SUBJECT : DELEGATION OF AUTHORITY

I will be on Leave March 21-23, 2016. Therefore, I am hereby delegating you to act in the capacity of the Director, Department of Fish and Wildlife, effective 8:00 am on, Monday, March 21, 2016. This delegation shall end at 5:00 p.m. on Wednesday, March 23, 2016.

Your authority will cover the review and signing off of all routine documents pertaining to the Department of Fish and Wildlife, except for issues that you feel should have the attention of the Director.

## ACKNOWLEDGEMENT:

 3/21/16  
David Mikesic, Zoologist  
Department of Fish & Wildlife

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**THE  
NAVAJO  
NATION**

**THE DIVISION OF NATURAL RESOURCES**

*Land, Water, Power, and Quality of Life*


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**Russell Begaye**  
*President*

**Johnathan Nez**  
*Vice-President*

**M E M O R A N D U M**

**TO: ALL Department Managers  
Division of Natural Resources**

**FROM:**   
Bidtah Becker, Division Director  
Division of Natural Resources

**SUBJECT:** Delegation of Authority

**DATE:** January 12, 2016

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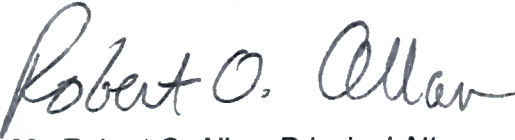
Please be advised that in the event that either I, Division Director of the Division of Natural Resources, or Ms. Evangeline Curley-Thomas, Deputy Director, Division of Natural Resources, are not in the office or otherwise unavailable, Mr. Robert O. Allan, Principal Attorney, Division of Natural Resources, shall be delegated authority as the Acting Division Director of the Division of Natural Resources. This is a standing delegation of authority until further notice.

Please cooperate with Mr. Allan in this standing delegation of authority. Should you have any questions, please contact me.

**ACKNOWLEDGED:**

  
Evangeline Curley-Thomas, Deputy Director  
Division of Natural Resources

**ACKNOWLEDGED:**

  
Mr. Robert O. Allan, Principal Attorney  
Division of Natural Resources



## UNITED STATES DEPARTMENT OF THE INTERIOR

### BUREAU OF INDIAN AFFAIRS

### RIGHT-OF-WAY APPLICATION

COMES NOW THE APPLICANT JEMEZ MOUNTAINS ELECTRIC COOPERATIVE, INC. of P.O. Box 128, ESPANOLA, NM 87532 this 14th day of September, 2015, who hereby petition(s) the Bureau of Indian Affairs and respectfully files under the terms and provisions of the Act of February 5, 1948 (62 Stat. L 17-25 USC 323) and Departmental Regulations 25 CFR 169, an application of a 20 (twenty) years right-of-way for the following purposes and reasons:

Construction, operation and maintenance of an electrical distribution line, Owl Springs I-Ramona Begay, Project #411081.

Across the following described **Navajo Tribal Trust Lands** (easement description):

SW/4 NW/4 Section 31, T. 22 N., R. 10 W.; NMPM, San Juan County, NM  
NE/4 SE/4 Section 35, T. 22 N., R. 11 W.; NMPM, San Juan County, NM

Said right-of-way across Tribal Trust Lands to be 528.07 feet in length, including guys and anchors, 20 feet in width, and .25 acre in size, as shown on attached map and plats of definite location, attached hereto, and made a part hereof.

SAID APPLICANT UNDERSTANDS AND EXPRESSLY AGREES TO THE FOLLOWING STIPULATIONS:

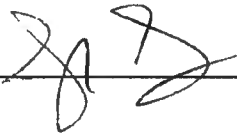
1. To construct and maintain the right-of-way in a workmanlike manner.
2. To pay all damages and compensation, in addition to the deposit made pursuant to 169.4, determined by the Secretary to be due the landowners and authorized users and occupants of the land due to the survey, granting, construction and maintenance of the right-of-way.
3. To indemnify the landowners and authorized users and occupants against any liability for loss of life, personal injury and property damage arising from the construction, maintenance, occupancy or use of the lands by the applicant, his employees, contractors and their employees, or subcontractors and their employees.
4. To restore the lands as nearly as may be possible to their original condition upon the completion of construction, to the extent compatible with the purpose for which the right-of-way was granted.
5. To clear and keep clear the lands within the right-of-way to the extent compatible with the purpose of the right-of-way; and dispose of all vegetative and other material cut, uprooted or otherwise accumulated during construction and maintenance of the project.
6. To take soil and resources conservation protection measures, including weed control, on the land covered by the right-of-way.
7. To do everything reasonable within its power to prevent and suppress fires on or near the lands to be occupied under the right-of-way.
8. To build and repair such roads, fences and trails as may be destroyed or injured by construction work and to build and maintain necessary and suitable crossings for all roads and trails that intersect the works constructed, maintained, or operated under the right-of-way.

9. That upon revocation or termination of the right-of-way, the applicant shall, so far as in reasonably possible, restore the land to its original condition. The determination of "reasonably possible" is subject to Secretary's approval.
10. To at all times keep the Secretary informed of its address, and in case of corporations, of the address of its principal place of business and the names and addresses of its principal officers.
11. That the applicant will not interfere with the use of the lands by or under the authority of the landowners for any purpose not inconsistent with the primary purpose for which the right-of-way is granted.
12. During the term of this Grant of Easement, if any previously unidentified cultural resources are discovered within the easement area, work should be halted immediately and the BIA and/or Tribal Contractor should be contacted immediately.

THE APPLICANT FURTHER STIPULATES AND EXPRESSLY AGREES AS FOLLOWS:

To conform and to abide by all applicable requirements with respect to the right-of-way herein applied for. The applicant agrees to conform to and abide by the rules, regulations, and requirements contained in the *Code of Federal Regulations*, Title 25 Indians, Part 169, as amended, and by reference includes such rules, regulations and requirements as a part of this application to the same effect as if the same were herein set out in full.

DATE: September 14, 2015 APPLICANT \_\_\_\_\_



REQUIRED SUPPORTING DOCUMENTS:

1. ( ) Written consent of landowner (ROW Form 94-7).
2. ( ) Map (plats) of definite location (2 original mylars & 2 copies, See 25 CFR 169.6, 169.7, 169.8, 169.9, 169.10 and 169.11).
3. ( ) Deposit of estimated damages or compensation (See 169.4 and 169.14).
4. ( ) Evidence of Authority of Officers to Execute Papers (ROW Form 94-4)-submitted with application of same date entitled "Franciscan Lake Power line project".

**PERMITS WEST, INC.**  
**PROVIDING PERMITS for LAND USERS**  
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120



September 16, 2016

Howard Draper  
Project Review Office  
Navajo Nation  
P.O. Box 9000  
Window Rock, AZ 86515

Dear Howard:

Enclosed is a Right of Way application for the Owl Springs I, Ramona Begay 14.4 KV Single Phase power line for Jemez Mountains Electric Cooperative (JMEC), Project #411081 on Navajo Nation Tribal Trust land. The application packet includes:

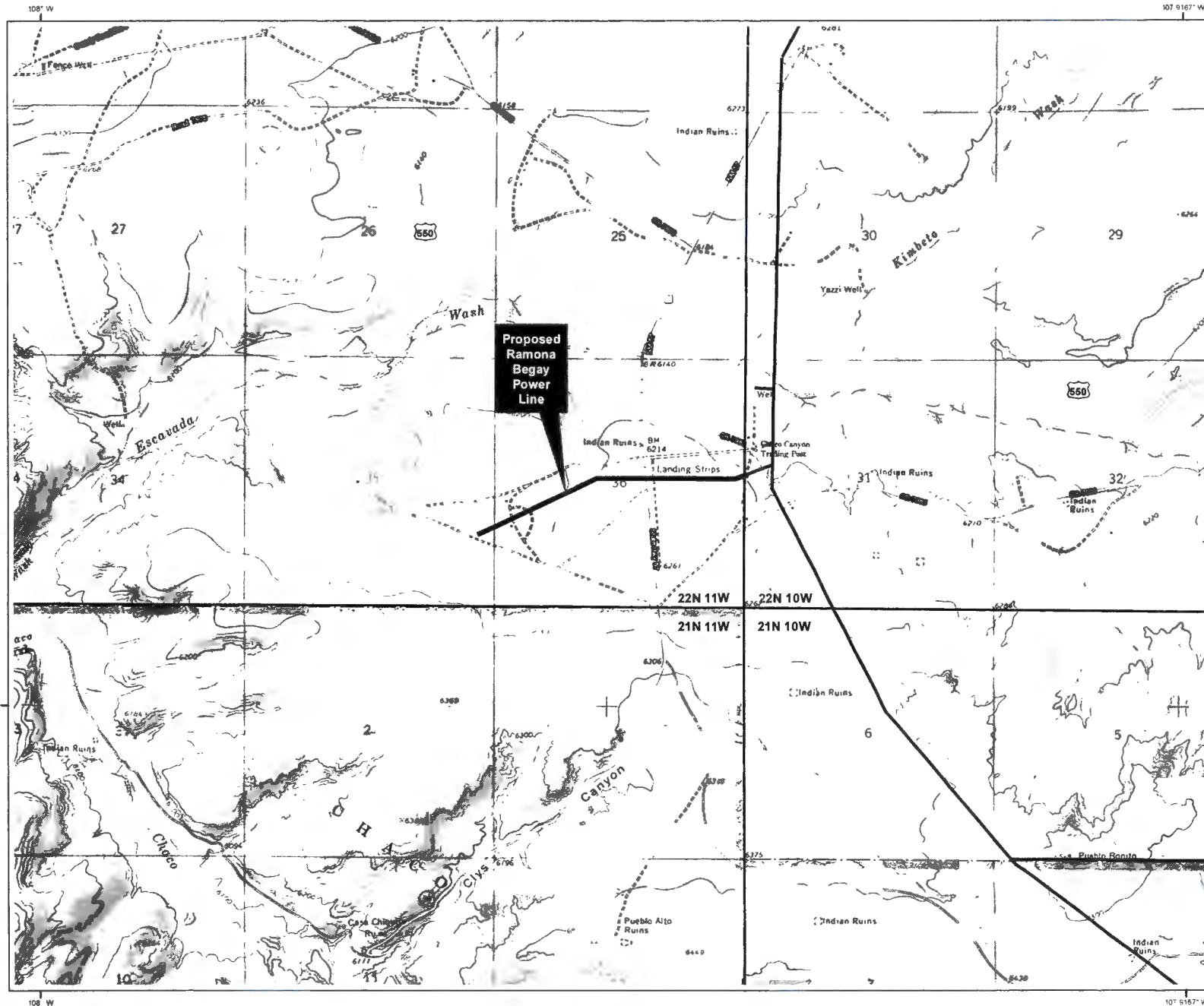
Right of Way Application  
Project Description  
Project Map/Survey  
Copy of Field Clearance Request – originally submitted in 2012  
Environmental Assessment  
Archeological Report/Clearance  
Application Fee

Please let me know if you have any questions.

Sincerely,

Jeanette Reisenburg  
Consultant





**Jemez Mountains**  
Electric Cooperative, Inc.

## Proposed Ramona Begay Power Line

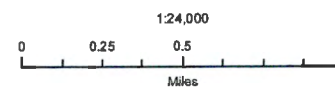
White Rock, San Juan County,  
New Mexico

USGS Pueblo Bonita Quad

Work Order #: 411081

### Existing and Proposed JMEC Facilities

- Existing 3 Phase Distribution Line
- - - Existing 1 Phase Distribution Line
- Proposed 1 Phase Distribution Line

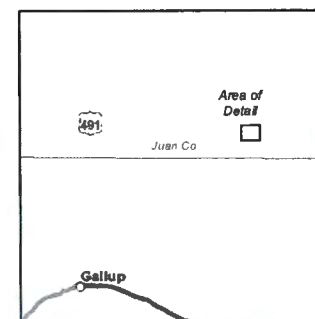


NAD 1983 New Mexico State Plane West  
FIPS 3003 Feet



**PERMITS WEST**  
PROVIDING PERMITS AND LAND USES

Prepared by Permits West, Inc., February 10, 2015  
for Jemez Mountains Electric Cooperative, Inc.





THE NAVAJO NATION  
**Navajo Land Department**

P.O. Box # 2249 · Window Rock, Arizona 86515 · (928) 871-6401 · FAX: (928) 871-7039



MEMORANDUM

TO : Howard P. Draper, Supervisor  
Project Review Section, NLD

FROM : *Esther Kee*  
Esther Kee, R.W Agent  
Project Review Section, NLD

DATE : January 21, 2016

SUBJECT: JMEC Owl Springs I-RBegay Power Line Extension Project

Jemez Mountain Electric Cooperative, Inc., Post Office Box 128, Espanola, New Mexico 87532, submitted a right of way application to construct, operate and maintain a single phase power line extension across Navajo Trust lands to serve Ramona Begay residence near the vicinity of White Rock Chapter, New Mexico.

The power line will be 528.07 feet in length, 20 feet wide, and 0.25 acres, in Section 31, T22N, R10W,; Section 35, T22N., R11W, NMPM, San Juan County, New Mexico.

The proposed project is located in District 19, Chaco Range Unit, permitted to Ramona Begay for grazing. I informed the affected grazing permittee on the proposed request and she had no objection. I obtained the land users consent along with the concurrence of the District 19 Land Board member, Carlos Arviso.

Field clearance completed, land users consent, map and supporting documents are all attached for your information and reference.

cc: Project file

## **Project Fact Sheet**

Company: Jemez Mountains Electric Cooperative, Inc.  
P.O. Box 128  
Espanola, NM 87532

Project: **Owl Springs I-Ramona Begay 14.4 kV Single Phase Power Line**

Purpose: To serve the Ramona Begay residence

Surface: Navajo Tribal Trust

Tribal Location: Section 31, T. 22 N, R. 10 W.; Section 35, T. 22 N., R. 11 W.; all NMPM,  
San Juan County, NM

Line Length: 528.07 feet

Right-of-Way Width: 20 feet

Total acreage .25 acres

Agent : Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87508  
505/466-8120  
Fax: 505/466-9682

**CONSENT 3**

(Waiver of compensation for damages)

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN:**

I, Ramona Begay, hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit **Jemez Mountain Electric Cooperative, Inc. of Post Office Box 128 Espanola, New Mexico 87532**, to use a portion of my land use area for the following purpose(s): **Right of way to construct, operate & maintain a single phase overhead electrical power line extension to serve Ramona Begay residence in Sec 35, T22N, R11W & Sec 31, T22N, R10W, San Juan County, New Mexico, as shown on the map showing the location of the proposed project on the back of this consent form.**

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:**


12-3-13  
Date

  
Land User Signature (or Thumbprint)

404297 300033A#0601  
Census No. Permit No.

WITNESS: \_\_\_\_\_

12/5/13  
Date

  
Grazing Committee or Land Board Member

19  
District No.

**Acknowledgement of Field Agent**

I acknowledge that the contents of this consent form was read// or fully explained// to the land user in Navajo// or English// (check where applicable)

  
Field Agent Signature

# UNITED STATES DEPARTMENT OF THE INTERIOR

## BUREAU OF INDIAN AFFAIRS

### RIGHT-OF-WAY APPLICATION

COMES NOW THE APPLICANT JEMEZ MOUNTAINS ELECTRIC COOPERATIVE, INC. of P.O. Box 128, ESPANOLA, NM 87532 this 14th day of September, 2015, who hereby petition(s) the Bureau of Indian Affairs and respectfully files under the terms and provisions of the Act of February 5, 1948 (62 Stat. L 17-25 USC 323) and Departmental Regulations 25 CFR 169, an application of a 20 (twenty) years right-of-way for the following purposes and reasons:

Construction, operation and maintenance of an electrical distribution line, Owl Springs I-Ramona Begay, Project #411081.

Across the following described **Navajo Tribal Trust Lands** (easement description):

SW/4 NW/4 Section 31, T. 22 N., R. 10 W.; NMPM, San Juan County, NM  
NE/4 SE/4 Section 35, T. 22 N., R. 11 W.; NMPM, San Juan County, NM

Said right-of-way across Tribal Trust Lands to be 528.07 feet in length, including guys and anchors, 20 feet in width, and .25 acre in size, as shown on attached map and plats of definite location, attached hereto, and made a part hereof.

SAID APPLICANT UNDERSTANDS AND EXPRESSLY AGREES TO THE FOLLOWING STIPULATIONS:

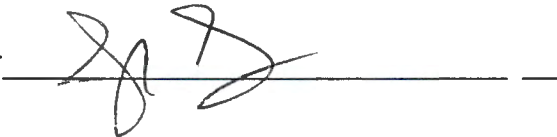
1. To construct and maintain the right-of-way in a workmanlike manner.
2. To pay all damages and compensation, in addition to the deposit made pursuant to 169.4, determined by the Secretary to be due the landowners and authorized users and occupants of the land due to the survey, granting, construction and maintenance of the right-of-way.
3. To indemnify the landowners and authorized users and occupants against any liability for loss of life, personal injury and property damage arising from the construction, maintenance, occupancy or use of the lands by the applicant, his employees, contractors and their employees, or subcontractors and their employees.
4. To restore the lands as nearly as may be possible to their original condition upon the completion of construction, to the extent compatible with the purpose for which the right-of-way was granted.
5. To clear and keep clear the lands within the right-of-way to the extent compatible with the purpose of the right-of-way; and dispose of all vegetative and other material cut, uprooted or otherwise accumulated during construction and maintenance of the project.
6. To take soil and resources conservation protection measures, including weed control, on the land covered by the right-of-way.
7. To do everything reasonable within its power to prevent and suppress fires on or near the lands to be occupied under the right-of-way.
8. To build and repair such roads, fences and trails as may be destroyed or injured by construction work and to build and maintain necessary and suitable crossings for all roads and trails that intersect the works constructed, maintained, or operated under the right-of-way.

9. That upon revocation or termination of the right-of-way, the applicant shall, so far as in reasonably possible, restore the land to its original condition. The determination of "reasonably possible" is subject to Secretary's approval.
10. To at all times keep the Secretary informed of its address, and in case of corporations, of the address of its principal place of business and the names and addresses of its principal officers.
11. That the applicant will not interfere with the use of the lands by or under the authority of the landowners for any purpose not inconsistent with the primary purpose for which the right-of-way is granted.
12. During the term of this Grant of Easement, if any previously unidentified cultural resources are discovered within the easement area, work should be halted immediately and the BIA and/or Tribal Contractor should be contacted immediately.

THE APPLICANT FURTHER STIPULATES AND EXPRESSLY AGREES AS FOLLOWS:

To conform and to abide by all applicable requirements with respect to the right-of-way herein applied for. The applicant agrees to conform to and abide by the rules, regulations, and requirements contained in the *Code of Federal Regulations*, Title 25 Indians, Part 169, as amended, and by reference includes such rules, regulations and requirements as a part of this application to the same effect as if the same were herein set out in full.

DATE: September 14, 2015 APPLICANT



REQUIRED SUPPORTING DOCUMENTS:

1. ( ) Written consent of landowner (ROW Form 94-7).
2. ( ) Map (plats) of definite location (2 original mylars & 2 copies, See 25 CFR 169.6, 169.7, 169.8, 169.9, 169.10 and 169.11).
3. ( ) Deposit of estimated damages or compensation (See 169.4 and 169.14).
4. ( ) Evidence of Authority of Officers to Execute Papers (ROW Form 94-4)-submitted with application of same date entitled "Franciscan Lake Power line project".

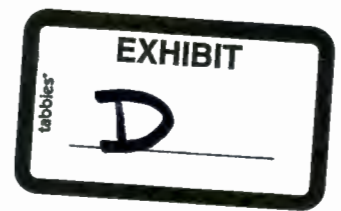


EXHIBIT " D "

NAVAJO NATION RIGHT-OF-WAY TERMS AND CONDITIONS

Jemez Mountain Electric Cooperative, Inc. (GRANTEE)  
[Owl Springs 1/Ramona Begay at White Rock Chapter, New Mexico]

1. The term of the right-of-way shall be for twenty (20) years, beginning on the date the right-of-way is granted by the Secretary of Interior.
2. Consideration for the right-of-way is assessed at \$ 3,600.00. The Navajo Nation contributes this amount to the project because the project provides electricity to a Navajo resident. Commercial use of the right-of-way shall require the approval of the Navajo Nation.  
↑ written
3. The Grantee may develop, use and occupy the right-of-way for the purpose(s) of constructing, operating and maintaining a 14.4 kV single phase electrical distribution power line. The Grantee may not develop, use or occupy the right-of-way for any other purpose without the prior written approval of the Navajo Nation and the Secretary of the Interior. The approval of the Navajo Nation may be granted, granted upon conditions or withheld in the sole discretion of the Navajo Nation. The Grantee may not develop, use or occupy the right-of-way for any unlawful purpose.
4. In all activities conducted by the Grantee within the Navajo Nation, the Grantee shall abide by all laws and regulations of the Navajo Nation and of the United States, now in force and effect or as hereafter may come into force and effect, including but not limited to the following:
  - a. Title 25, Code of Federal Regulations, Part 169; subject to the terms of this right-of-way.
  - b. All applicable federal and Navajo Nation antiquities laws and regulations, with the following additional condition: In the event of a discovery all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified immediately. As used herein, "discovery" means any previously unidentified or incorrectly identified cultural resources, including but not limited to archaeological deposits, human remains, or location reportedly associated with Native American religious/traditional beliefs or practices;
  - c. The Navajo Preference in Employment Act, 15 N.N.C. §§ 601 et seq., and the Navajo Nation Business Opportunity Act, 5 N.N.C. §§ 201 et seq.; and
  - d. The Navajo Nation Water Code, 22 N.N.C. § 1101 et seq.. Grantee shall apply for and submit all applicable permits and information to the Navajo Nation Water Resources Department, or its successor.
5. The Grantee shall ensure that the air quality of the Navajo Nation is not jeopardized due to violation of applicable laws and regulations by its operations pursuant to the right-of-way.
6. The Grantee shall clear and keep clear the lands within the right-of-way to the extent compatible with the purpose of the right-of-way, and shall dispose of all vegetation and other materials cut, uprooted or otherwise accumulated during any surface disturbance activities.
7. The Grantee shall reclaim all surface lands disturbed related to the right-of-way, as outlined in a restoration and revegetation plan, which shall be approved by the Navajo Nation Environmental Protection Agency (NNEPA) prior to any surface disturbance. The Grantee shall comply with all

provisions of such restoration and revegetation plan and shall notify the Director of the NNEPA immediately upon completion of the surface disturbance activities so that a site inspection can be made.

8. The Grantee shall at all times during the term of the right-of-way and at the Grantee's sole cost and expense, maintain the land subject to the right-of-way and all improvements located thereon and make all necessary and reasonable repairs.
9. The Grantee shall obtain prior written permission to cross existing rights-of-way, if any, from the appropriate parties.
10. The Grantee shall be responsible for and promptly pay all damages when they are sustained.
11. The Grantee shall indemnify and hold harmless the Navajo Nation and the Secretary of the Interior and their respective authorized agents, employees, landusers and occupants, against any liability for loss of life, personal injury and property damages arising from the development, use or occupancy or use of right-of-way by the Grantee.
12. The Grantee shall not assign, convey, transfer or sublet, in any manner whatsoever, the right-of-way or any interest therein, or in or to any of the improvements on the land subject to the right-of-way, without the prior written consent of the Navajo Nation and the Secretary of the Interior. Any such attempted assignment, conveyance or transfer without such prior written consent shall be void and of no effect. The consent of the Navajo Nation may be granted, granted upon conditions or withheld in the sole discretion of the Navajo Nation.
13. The Navajo Nation may terminate the right-of-way for violation of any of the terms and conditions stated herein. In addition, the right-of-way shall be terminable in whole or part by the Navajo Nation for any of the following causes:
  - a. Failure to comply with any term or condition of the grant or of applicable laws or regulations;
  - b. A non-use of the right-of-way for the purpose for which it is granted for a consecutive two year period; and
  - c. The use of the land subject to the right-of-way for any purpose inconsistent with the purpose for which the right-of-way is granted.
  - d. An abandonment of the right-of-way.
14. At the termination of this right-of-way, the Grantee shall peaceably and without legal process deliver up the possession of the premises, in good condition, usual wear and tear excepted. Upon the written request of the Navajo Nation, the Grantee shall provide the Navajo Nation, at the Grantee's sole cost and expense, with a phase 1 environmental site assessment of the premises at least sixty (60) days prior to delivery of said premises.
15. Holding over by the Grantee after the termination of the right-of-way shall not constitute a renewal or extension thereof or give the Grantee any rights hereunder or in or to the land subject to the right-of-way or to any improvements located thereon.
16. The Navajo Nation and the Secretary of the Interior shall have the right, at any reasonable time during the term of the right-of-way, to enter upon the premises, or any part thereof, to inspect the same and any improvements located thereon.
17. By acceptance of the grant of right-of-way, the Grantee consents to the full territorial legislative, executive and judicial jurisdiction of the Navajo Nation, including but not limited to the jurisdiction of the Navajo Nation, including but not limited to the jurisdiction to levy fines and to enter judgments for

compensatory and punitive damages and injunctive relief, in connection with all activities conducted by the Grantee within the Navajo Nation or which have a proximate (legal) effect on persons or property within the Navajo Nation.

18. By acceptance of the grant of right-of-way, the Grantee covenants and agrees never to contest or challenge the legislative, executive or judicial jurisdiction of the Navajo Nation on the basis that such jurisdiction is inconsistent with the status of the Navajo Nation as an Indian nation, or that the Navajo Nation government is not a government of general jurisdiction, or that the Navajo Nation government does not possess full police power (i.e., the power to legislate and regulate for the general health and welfare) over all lands, persons and activities within its territorial boundaries, or on any other basis not generally applicable to a similar challenge to the jurisdiction of a state government. Nothing contained in this provision shall be construed to negate or impair federal responsibilities with respect to the land subject to the right-of-way or to the Navajo Nation.
19. Any action or proceeding brought by the Grantee against the Navajo Nation in connection with or arising out of the terms and conditions of the right-of-way shall be brought only in the Courts of the Navajo Nation, and no such action or proceeding shall be brought by the Grantee against the Navajo Nation in any court of any state.
20. Nothing contained herein shall be interpreted as constituting a waiver, express or implied, of the sovereign immunity of the Navajo Nation.
21. Except as prohibited by applicable federal law, the law of the Navajo Nation shall govern the construction, performance and enforcement of the terms and conditions contained herein.
22. The terms and conditions contained herein shall extend to and be binding upon the successors, heirs, assigns, executors, administrators, employees and agents, including all contractors and subcontractors, of the Grantee, and the term "Grantee," whenever used herein, shall be deemed to include all such successors, heirs, assigns, executors, administrators, employees and agents.
23. There is expressly reserved to the Navajo Nation full territorial legislative, executive and judicial jurisdiction over the right-of-way and all lands burdened by the right-of-way, including without limitation over all persons, including the public, and all activities conducted or otherwise occurring within the right-of-way; and the right-of-way and all lands burdened by the right-of-way shall be and forever remain Navajo Indian Country for purposes of Navajo Nation jurisdiction.
24. The Navajo Nation reserves the right to grant rights-of-way within the right-of-way referenced herein for utilities, provided that such rights-of-ways do not unreasonably interfere with the Grantee's use of the right-of-way.



# THE NAVAJO NATION

RUSSELL BEGAYE **P**RESIDENT  
JONATHAN NEZ **V**ICE PRESIDENT



## ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF EXECUTIVE DIRECTOR/ADMINISTRATION

OFFICE OF ENVIRONMENTAL REVIEW

PO BOX 339 WINDOW ROCK ARIZONA 86515 Office: 928/871-7188 Fax: 928/871-7996

Website: [www.navajonationepa.org](http://www.navajonationepa.org)

## M E M O R A N D U M

**TO:** Howard Draper, Program & Project Specialist  
Project Review Office  
Navajo Land Department  
Division of Natural Resources

**FROM:**

Rita Whitehorse-Larsen, Senior Environmental Specialist  
Office of Executive Director/Administration  
Office of Environmental Review  
NNEPA

**DATE:** April 4, 2016

**SUBJECT:** 164 EOR 005634 JMEC Owl Springs I Ramona Begay White Rock New Mexico

The Navajo Nation Environmental Protection Agency (NNEPA) reviewed<sup>1</sup> and recommends **approval** for the proposed 14.4 kV single phase distribution power line for Ramona Begay project within the vicinity of White Rock Chapter, McKinley County, New Mexico. Jemez Mountain Electric Cooperative, Inc., PO Box 128, Espanola, New Mexico, 87532, submitted a right-of-way (ROW) application to construct, operate and maintain the proposed powerline. The proposed powerline is 528.07 feet long in length, 20 feet wide and disturbing 0.25 total acres on Navajo Trust Lands.

If the following recommendations from NNEPA are adhered to, the proposed project will not have a significant effect (direct, indirect, or cumulative) on the quality of the human environment considering the context and intensity of impacts.

**1. Navajo Nation Clean Water Act:**

- a. §Section 401 is required if any drainage with discernable ordinary high water mark will be crossed and/or disturbed.

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<sup>1</sup> Permits West Inc. Environmental Assessment for Jemez Mountains Electric Cooperatives Inc Ramona Begay Power Line Project. December 2014.

- 164 EOR 005634 JMEC Ramona Begay ROW Powerline White Rock NM  
Page 2 of 3  
04/04/2016

- a. JEMEZ MOUNTAIN ELECTRIC COOPERATIVE INC., will comply with the vegetative reclamation per Navajo Agriculture Department's recommended seed mix within the disturbed areas of the ROW corridors. Ms. Judy Willetto is the contact person for the vegetation seeding reclamation activities. She can be reached at 928/871-6592/6593.
- b. NNEPA recommends JEMEZ MOUNTAIN ELECTRIC COOPERATIVE INC., to backfill and re-contour the soil material as naturally as possible to lessen the impact to the natural drainages (i.e. redirecting the natural direction of the watershed, creating standing water, creating flooding to the existing roads, etc.) of the land.
- c. Avoid unnecessary ground disturbance and removal of vegetation within and adjacent to the ROW corridors.

If there are any questions, you may contact me at 928/871-7188. Thank you.

Cc: JEMEZ MOUNTAIN ELECTRIC COOPERATIVE INC., PO Box 128, Espanola, New Mexico,  
87532  
NNEPA Water Quality; Operating Permit Program; STP; Administration chrono file  
*Contact Person: Permits West Inc., Jeanette Reisenburg, 505-466-8120*

**ENVIRONMENTAL ASSESSMENT (EA) FOR**

**JEMEZ MOUNTAINS ELECTRIC COOPERATIVE, INC.  
P.O. BOX 128  
ESPAÑOLA, NM 87532  
(505) 753-2105**

**RAMONA BEGAY POWER LINE RIGHT-OF-WAY**

**ON NAVAJO TRIBAL TRUST LAND  
IN THE  
NW/4 SECTION 31, T. 22 N., R. 10 W., AND  
THE SE/4 SECTION 35, T. 22 N., R. 11 W.**

**WHITE ROCK CHAPTER  
SAN JUAN COUNTY, NEW MEXICO**

**MAY 27, 2012  
REVISED (DECEMBER 18, 2014)**



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## **1. Introduction**

Jemez Mountains Electric Cooperative, Inc. (JMEC) proposes to construct a power line from an existing power pole to the residence of Ramona Begay. The proposed power line begins and ends on Navajo Tribal Trust land, while crossing NM State land for the middle portion. The total power line length, including guy and anchors is 6,259.45 feet and the total area is 2.895 acres.

This Environmental Assessment (EA) covers, and from here forward will only discuss, the portion of the project on Navajo Tribal Trust land. This portion measures 528.07 feet in length, including guy and anchor footage, and is within a 20-foot wide corridor. The total land use for the Navajo Tribal Trust portion of the proposed project is 0.25 acres. The project area is located approximately 16.3 to 17.4 miles southwest of Nageezi, San Juan County, New Mexico. The location of the Proposed Action is shown on the 7.5-Minute Pueblo Bonito Quadrangle topographic map attached as Appendix 1 and the power line plat attached as Appendix 2.

### **1.1 Purpose and Need**

The purpose of the Proposed Action is to construct a single-phase power line from an existing single-phase power line to provide electricity to the residence of Ramona Begay. JMEC will file a Right-of-Way Application with the BIA.

The Proposed Action is necessary to provide power to a home on the Navajo Nation.

### **1.2 Conformance with Applicable Land Use Plan and Other Environmental Assessments**

This EA addresses the resources and impacts on a site-specific basis as required by the National Environmental Policy Act (NEPA) of 1969, as amended (Public Law 91-90, 42 USC 4321 et seq.). The proposed project would not be in conflict with any local, county, or state plans.

### **1.3 Federal, State or Local Permits, Licenses or Other Consultation Requirements**

The Navajo Nation Department of Fish & Wildlife (NFWD)-Natural Heritage Program has been consulted within the last two years with respect to species of concern that are known to occur or that have the potential to occur within the area of the Proposed Action. Species of concern listed in Appendix 3, NFWD correspondence, will be evaluated in Section 3.0 of this document and in the wildlife and plant survey reports attached as Appendix 4 and 5, respectively.

Cibola Research Consultants performed a Class III Cultural Resources Inventory of the Proposed Action. Cibola prepared a report entitled "A Cultural Resources Survey for Proposed Jemez Mountain Electric CO-OP Ramona Begay Power Line Project in San Juan County, NM." The Cultural Resources Survey has been filed with the Navajo Nation HPD and is made a part of this Environmental Assessment by reference. An HPD clearance form is included in Appendix 6.

Additionally, the Operator is required to:

- Comply with all applicable Federal, State and Local laws and regulations.
- Obtain the necessary permits for the construction of the power line.

## 2. Alternatives Including the Proposed Action

### 2.1 Alternative A - No Action

The No Action Alternative generally means that the proposed activity will not take place. This option is provided in 43 CFR 3162.3-2 (h) (2). This alternative would deny the approval of the proposed application, the residence of Ramona Begay would not get electricity and the current land and resource uses would continue to occur in the proposed project area. The current land use in the area of the proposed action is grazing.

The No Action Alternative is presented for baseline analysis of resource impacts.

### 2.2 Alternative B - Proposed Action

JMEC proposes to construct a power line from an existing power pole to the residence of Ramona Begay. The proposed power line begins at existing power pole #38223 on Navajo Tribal Trust land in the NW/4 of Section 31, T. 22 N., R. 10 W. It heads west across NM State land, crossing a gravel road, and then turns west-southwest. The line crosses several fence lines, then a cleared area to end at a residence on Navajo Tribal Trust land in the SE/4 of Section 35, T. 22 N., R. 11 W. The portion of the line on Navajo Tribal Trust land measures 528.07 feet in length, including guy and anchor footage, and is within a 20-foot wide corridor. The total land use for this portion is 0.25 acres. The project area is located approximately 16.3 to 17.4 miles southwest of Nageezi, San Juan County, New Mexico. The location of the Proposed Action is shown on the 7.5-Minute Pueblo Bonito Quadrangle topographic map attached as Appendix 1 and the power line plat attached as Appendix 2.

**Table 2.1. Project Land Use Summary (Tribal Lands)**

<i>Land Ownership</i>	<i>Location</i>	<i>Centerline Length (feet)</i>	<i>Guy Wire Length (feet)</i>	<i>Total Length incl. guys (feet)</i>	<i>Total Area incl. guys (acres)</i>
Tribal Trust	Section 31, T22N, R10W	52.09	0	52.09	0.024
Tribal Trust	Section 35, T22N, R11W	425.98	50	475.98	0.226
<b>TOTAL</b>		478.07	50	528.07	0.25

The power line has been re-routed to avoid cultural resources, but continues to cross adjacent to a Navajo Nation Historic Preservation Department (NNHPD)-eligible site identified in the Cultural Resource Survey and a segment of the Chaco North Road. No poles would be set in these areas and the power line would span the site. Site boundaries will be flagged by a qualified archaeologist prior to ground disturbing activities to assist workers in avoiding the site. Equipment and traffic would also avoid crossing the Chaco North Road in the site area. Vehicles and equipment may cross the Chaco North Road approximately 200 meters north of the proposed

power line where the North Road is covered by alluvial deposits. The approach to Pole Two (Station No. 6+00) should be from the west. No vehicles should be used east of Pole Two in the North Road site area. The line should be hand carried across the Chaco North Road to Pole Two.

### **2.2.1 Reclamation**

Disturbed areas would be restored to their original condition upon the completion of construction to the extent compatible with the power line construction and to allow for maintenance and repairs within the Right-of-Way. Where needed for soil and resource conservation and protection measures, including control of invasive species, disturbed areas would be ripped at least twelve inches deep with the contour, seeded, and mulched with straw. A native seed mix prescribed by the BIA or Navajo Nation will be used. Weeds will be controlled in accordance with Navajo Nation EPA requirements.

### **2.3 Alternatives Considered But Not Analyzed In Detail**

On-site diesel or gas engines are alternatives. However, electricity is quieter, cheaper, and more maintenance free. Engine fuel may be unavailable if muddy roads cut off access. Diesel or gas powered engines are noisy and need more maintenance than power lines.

Photovoltaic (PV) cells have been tried on an experimental basis, but are too costly and inconvenient for intensive or widespread use. PV cell electricity typically costs 800% more than that from a power line. A typical battery can store at most 72 hours of electricity. None of the homes to be served by the power line has installed PV cells, which indicates they felt they are an unaffordable or impractical alternative. Furthermore, appliances which have surging demand such as hair dryers or washing machines can exceed typical residential PV cell array supply.

Wind generators create noise and kill birds. Mortality can be reduced, but only by making the windmill blades more visible, more noisy and reducing forage opportunities.

The “No Action Alternative” would keep the families living in an inconvenient time and labor consumptive lifestyle.

No significant issues were identified for the present location of the Proposed Action during the following activities:

1. On-site inspections;
2. Review of Navajo Nation Department of Fish and Wildlife species of concern known to occur or with the potential to occur on the 7.5-Minute Pueblo Bonito, NM Quadrangle (Appendix 3).
3. Threatened, Endangered and Special Status Species Surveys of the location of the Proposed Action (Appendices 4 and 5 for wildlife and plants, respectively); and
4. Cultural Resources Inventory.

No additional alternatives for the Proposed Action have been considered.

### **3. Description of Affected Environment**

This section describes the environment that would be affected by implementation of the alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues.

#### **3.1 General Topography/Surface Geology**

The line begins in the Badland-Monierco-Rock outcrop complex, moderately steep soil type (BB) and quickly enters the Doak-Avalon association, gently sloping (DN), which continues to the end of the line. The BB type consists of aeolian deposits over slope alluvium derived from shale, or bedrock. When soils are present, they are a fine sandy loam to a clay loam. The DN type consists of alluvium derived from sandstone and shale, with or without aeolian deposits over it. The soil texture is loam to clay loam (NRCS, 2012). The underlying bedrock is the Cliffhouse Sandstone Formation (NMBMGR, 2003). The elevation of the project area is approximately 6185 to 6260 feet.

##### **3.1.1 Direct and Indirect Effects**

1. A direct effect to the natural topography would result from excavating and pole and anchor setting.
2. An indirect effect to natural drainage patterns would result from excavating and pole and anchor setting.
3. An indirect effect to soil and seed bank disturbance/loss would result from result from excavating and pole and anchor setting.

##### **3.1.2 Mitigation**

1. Surface disturbance and vehicular traffic would be limited to approved locations to reduce the area of disturbance.
2. Disturbed areas would be reclaimed pursuant to Section 2.2.1. Reseeding would help prevent soil loss and seed bank disturbance/loss. Successful reclamation will take two to three years.
3. Use of Best Management Practices listed in Section 2.2.

#### **3.2 Soils**

The line begins in Section 31 in the Badland-Monierco-Rock outcrop complex, moderately steep soil type (BB) and quickly enters the Doak-Avalon association, gently sloping (DN) in Section 35, which continues to the end of the line in Section 36. The BB type consists of aeolian deposits over slope alluvium derived from shale, or bedrock. When soils are present, they are a fine sandy loam to a clay loam. The DN type consists of alluvium derived from sandstone and shale, with or without aeolian deposits over it. The soil texture is loam to clay loam (NRCS, 2012).

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### **3.2.1 Direct and Indirect Effects**

1. Soils would be structurally reduced and mixed, exposed to the elements of wind and water erosion, and compacted.
2. Due to wind and water, the soils would be subject to an undetermined amount of erosion until vegetation is established.
3. Natural drainage patterns would be disrupted for construction of the Proposed Action.

### **3.2.2 Mitigation**

1. Successful reclamation of the Proposed Action outlined in Section 2.2.1 will reduce long-term negative impacts to soils, watershed and hydrology. Re-seeding will reduce sediment loading by stabilizing the soil. Successful reclamation is expected to take two to three years.
2. Use of Best Management Practices would reduce impacts to soils, watershed and hydrology.

## **3.3 Water Quality: Surface and Groundwater**

The hydrologic setting of the area is characterized by several ephemeral drainages filled with alluvium which is the principle source of ground water recharge. Surface flows are associated with small ephemeral drainage from snow melt, and summer thunderstorms. These small drainages are categorized as sandy, silty, clayey or gravelly sediment on the floodplain or streambeds. The alluvial cover usually conceals evidence of discharge, and white salt or alkali deposits associated with small field springs are often the only surface expression of ground water discharge near the area. Most discharge to the alluvial channels is lost by evapotranspiration. However, some water also moves as subsurface flow. The flows associated with ephemeral drainage are classified as calcium sulfate and sodium sulfate water. Predominate ions are sodium (Na) and sulfates (SO<sub>4</sub>) with increasing concentrations as the flow moves downstream. Salinity (salt) concentrations also increase in the water as it flows downstream. This is a result of porous sandstone, inter-bedded shale and dissolved solids which are inorganic ions of sodium, potassium, calcium, magnesium, bicarbonate, chloride and sulfates.

The Proposed Action south of Escavada Wash as shown in Appendix 1. Local drainage in the area of the Proposed Action is north through ephemeral washes to Escavada Wash which flows west to its confluence with the Chaco River. The Chaco River flows north to the San Juan River. Ephemeral flows are limited to snow melt and rainfall. Average annual precipitation in the project area is 8.78 inches [WRCC 2012].

### **3.3.1 Direct and Indirect Effects**

Increased sediment loading to the adjacent surface drainages through runoff of disturbed soils is possible.

---

### **3.3.2 Mitigation**

The following actions will be taken to protect surface and groundwater resources:

1. Any spilled contaminants will be cleaned up as soon as possible to prevent run-off of contaminants into surface hydrology or infiltration into groundwater.
2. The Proposed Action will be reclaimed as outlined in Section 2.2.1. Re-seeding will reduce sediment loading by stabilizing the soil. Successful reclamation is expected to take two to three years.

### **3.4 Air Quality**

USEPA, Region IX, and the Navajo Nation EPA Air Quality Control program are responsible for administering air quality regulations on Navajo Tribal Trust and Allotted Lands in New Mexico. Navajo Nation Air Quality Control program (NNAQCP) is responsible for the implementation and enforcement of the Navajo Air Pollution Prevention and Control Act (NAPPCA), as described in Title 4, Chapter 11, Sec. 1101-1162 of the NAPPCA and encompassing the area defined in 7 NN Sec. 254.

The project area lies within the Four Corners Interstate Air Quality Control Region. There is no indication at this time that the approval of the proposed action would result in a violation of ambient air quality standards.

#### **3.4.1 Direct and Indirect Effects**

1. There would be a short-term increase in dust during construction of the Proposed Action. This impact would subside as disturbed areas are reclaimed.
2. The Proposed Action would lead to a local increase in combustive emissions from operating vehicles and earth moving equipment.

#### **3.2.2 Mitigation**

1. JMEC would apply water for dust control if necessary.
2. Surface disturbance and vehicular traffic would be limited to the approved locations to reduce combustive emissions and dust.
3. JMEC would comply with the Environmental Protection Agency's Clean Air Act and all applicable state and local regulations.

### **3.5 Land Use**

The Proposed Action will be located on Navajo Tribal Trust land. Current land use in the area is livestock grazing.

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### **3.5.1 Direct and Indirect Effects**

1. The Proposed Action will disturb 0.25 acres on Navajo Tribal Trust land.
2. The Proposed Action would not interfere with any existing or planned development.
3. Clearing of vegetation would be minimal for pole and guy wire placement.

### **3.5.2 Mitigation**

1. Reclamation of the Proposed Action as stated in Section 2 would replace and even enhance vegetative cover removed for construction by replacing shrubs with grass. Successful reclamation is expected to take two to three years.
2. Field Clearance has been requested for the Proposed Action.

## **3.6 Vegetation, Forestry**

The landscape in the area is a gently rolling plain. The project area is predominantly within a desert grassland community that is dominated by galleta (*Pleuraphis jamesii*) with Western tansy-mustard (*Descurainia pinnata*) and annual Townsend-daisy (*Townsendia annua*), and occasional areas of blue grama (*Bouteloua gracilis*). Within the desert grassland are areas of desert shrub dominated by Greene's rabbitbrush (*Chrysothamnus Greenei*), Bigelow's rabbitbrush (*Ericameria nauseosa* var. *bigelovii*), and winterfat (*Krascheninnikovia lanata*) with galleta and hairy goldenaster (*Heterotheca villosa*). A complete inventory of the plants found in the area of the Proposed Action is attached in Appendix 5.

### **3.6.1 Direct and Indirect Effects**

The Proposed Action will disturb 0.25 acres on Navajo Tribal Trust land.

### **3.6.2 Mitigation**

Reclamation of the Proposed Action as outlined in Section 2 would mitigate impacts to vegetation and forestry from the construction of the Proposed Action. Reseeding would replace vegetation removed during construction. Successful reclamation is expected to take two to three years.

## **3.7 Invasive, Non-native Species**

The Bureau of Indian Affairs lists three species of noxious weeds as potential invaders and fourteen species as new invaders on the Navajo Reservation. There were no noxious weeds present in the area of the Proposed Action.

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### **3.7.1 Direct and Indirect Effects**

Noxious weeds may become established in disturbed areas within the Proposed Action.

### **3.7.2 Mitigation**

JMEC will make every effort to ensure that noxious weeds do not spread over disturbed areas. If noxious weeds become established within the Proposed Action, JMEC would contact the Navajo Nation EPA Pesticides Program, Glenna Lee, Program Manager (928) 871-7815 for list of approved herbicides and applicators.

## **3.8 Wildlife**

Wildlife occurring in the area is typical of arid grasslands of the Great Basin desert. This includes passerines such as horned larks (*Eremophila alpestris*), jackrabbits (*Lepus spp.*), and whiptail lizards (*Cnemidophorus spp.*). A complete inventory of the wildlife found in the area of the Proposed Action is attached in Appendix 4.

### **3.8.1 Direct and Indirect Effects**

The wildlife that uses the site may be displaced during construction. Removal of vegetation for construction of the Proposed Action would reduce wildlife forage in the area.

### **3.8.2 Mitigation**

1. Reclamation of the Proposed Action as outline in Section 2 would reduce the long-term impacts to wildlife that use the area. Reseeding disturbed areas would replace vegetation removed during construction. In some instances, there is a benefit from successful reclamation due to an increase in vegetative cover and wildlife forage. Successful reclamation is expected to take two to three years.
2. The power line should be raptor proof as planned.

## **3.9 Threatened, Endangered and Special Status Species**

No federally or Navajo listed threatened, endangered, or special status species were observed during the 8/10/2011 wildlife survey.

### **3.9.1 Direct and Indirect Effects**

Overhead power lines have a direct effect on raptors.

### **3.9.2 Mitigation**

The power line will be raptor safe.

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### **3.10 Hazardous or Solid Waste Materials**

As a result of the construction of the Proposed Action, solid waste materials would be generated. These materials would include typical field waste associated with the construction of an overhead power line, human waste and water. Generation of hazardous waste would not be expected. If hazardous waste is inadvertently generated, the proper authorities would be consulted regarding the disposal of such waste.

#### **3.10.1 Direct and Indirect Effects**

Trash and unwanted materials would be generated by construction.

#### **3.10.2 Mitigation**

All trash would be placed in a portable trash cage and hauled to an approved landfill. There would be no burial or burning of trash. Human waste would be disposed of in chemical toilets and hauled to an approved dump station off the reservation.

### **3.11 Visual Resources**

The area is outside of the BLM VRM classification. The Proposed Action will be constructed in a manner that will minimize its impact on the visual quality of the area.

#### **3.11.1 Direct and Indirect Effects**

In the general vicinity of the proposed route, the natural and undisturbed visual environment is dominant, but utility lines, fence lines, and dirt roads are also highly visible elements of the landscape.

Permanent impacts to visual quality would come from the overhead power line.

#### **3.11.2 Mitigation**

1. Reclaiming the Proposed Action as outlined in Section 2 will reduce impacts to visual resources.
2. Reseeding will stabilize the soil and reduce blowing dust. JMEC will apply water for dust control if necessary until vegetation is re-established.
3. The overhead power line is not expected to dominate the visual landscape of the casual observer. These impacts would be minimized through design features.

### **3.12 Cultural or Historical Values**

A Class III archaeological survey was performed by Cibola Research Consultants. The survey results concluded that one cultural resource has a possibility of being affected by the Proposed Action. The Proposed Action also crosses a segment of the Chaco North Road, where the site is located. A Cultural Resources Compliance Form is included in Appendix 6.

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### **3.12.1 Direct and Indirect Effects**

1. Impact to identified resource is possible.
2. Potential exists for the Proposed Action to impact undiscovered or improperly inventoried cultural resources that may be discovered during construction of the Proposed Action.

### **3.12.2 Mitigation**

1. The mitigation listed in Section 2 “Proposed Action” would lessen or eliminate the impacts to the site and the Chaco North Road. In summary:
  - a. No poles would be set in the vicinity of the site or Chaco North Road
  - b. Equipment and traffic would not cross the Chaco North Road in the vicinity of the area. The lines would be hand-carried across this area.
  - c. The site boundaries will be marked by a qualified archaeologist prior to construction.
2. Any cultural and/or paleontology resource (historic or prehistoric site or object) discovered by JMEC during the Proposed Action, or any person working on their behalf, would be immediately reported to the NNHPD at (928) 871-7148. JMEC would suspend all operations in the immediate area of such discovery until approval to proceed is issued by NNHPD. An evaluation of the discovery would be made by the NNHPD archaeologist to determine appropriate action to prevent the loss of significant cultural or scientific values.

## **3.13 Environmental Justice**

Executive Order 12898 requires federal agencies to assess projects to ensure there is no disproportionately high or adverse environmental, health, or safety effects on minority and low-income populations. Minorities comprise a large proportion of the population residing inside the boundaries of the Farmington Field Office (see pages 3-106 to 3-107 of the PRMP/FEIS for more details on ethnicity and poverty rates).

### **3.13.1 Direct and Indirect Effects**

The purpose of the Proposed Action is to provide power to a home located on the Navajo Nation; therefore houses are located in the area of the proposed power line. The area is not used for hunting. Grazing and wood gathering has historically occurred in the area. It is not expected that minority or low income populations would be directly affected in the vicinity of the Proposed Action only benefited by the Proposed Action. Negative effects could include a small increase in activity and noise disturbance in areas used for grazing and wood gathering.

### 3.14 Public Health and Safety

#### 3.14.1 Direct and Indirect Effects

Short-term risks to the public associated with the construction of the power line would come from increased traffic on public roads.

#### 3.14.2 Mitigation

Vehicle traffic would be restricted to approved areas.

### 3.15 Cumulative Effects

#### 4.2.1.1 Past and Present Actions

The area in which the proposed power line would be constructed is used from grazing and wood gathering.

#### 4.2.1.2 Reasonably Foreseeable Actions

Additional houses may be constructed in the area in the future, which will add to the cumulative disturbance in the area.

### 4. Consultation/Coordination

This section includes individuals or organizations from the public, public land users, the interdisciplinary team, and permittees that were contacted during the development of this document.

**Table 4.1. Government On-site Inspection and Interdisciplinary Team**

Interdisciplinary Team				
ID Team Member	Title	Organization	Performed Onsite Inspection?	Date of Onsite Inspection
Cynthia A. Dean	Consultant, Author	Permits West, Inc.	NO	
Liz Berdugo	Consultant, Revisions	Permits West, Inc.	NO	
Mike Deutsch	Project Manager	Permits West, Inc.	YES	4/21/2012
Charles Black	Wildlife Biologist	Permits West, Inc.	YES	08/10/2011
Marian J. Rohman	Botanist	Permits West, Inc.	YES	04/23/2012

## **5. Contact Information**

Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87508  
505-466-8120  
FAX: 505-466-9682

Elmer Morales  
Jemez Mountains Electric Cooperative, Inc.  
P.O. Box 128  
Española, NM 87532  
(505) 753-2105

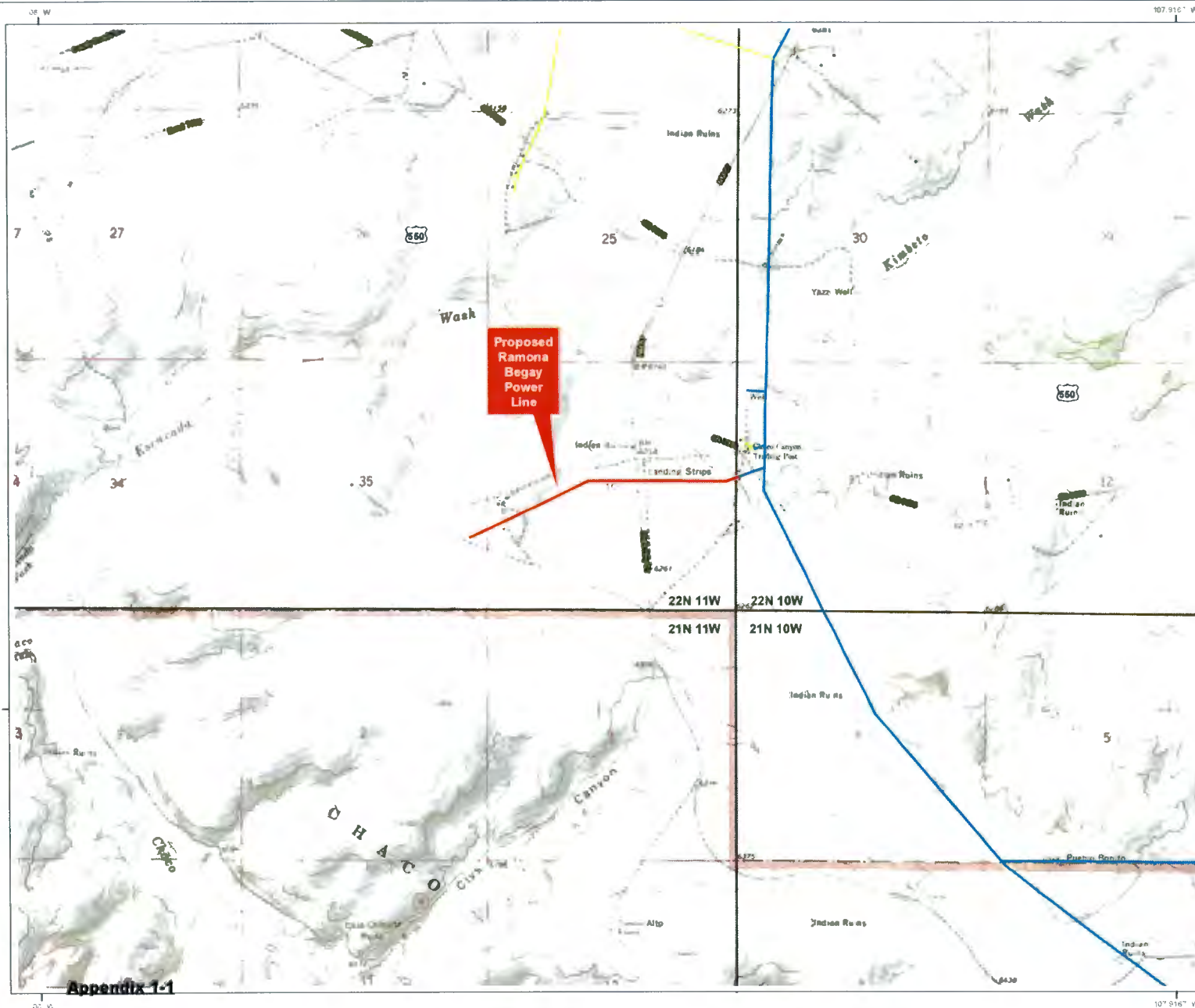
## **6. References**

Web Soil Survey, 2012. National Cooperative Soil Survey, *Soil Survey of San Juan County New Mexico, Eastern Part*. USDA 1980, United States Department of Agriculture, Soil Conservation Service, Soil Survey of San Juan county New Mexico Eastern Part. Accessed 02/25/2011 via the internet at: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

WRCC 2012 (Western Regional Climate Center) CHACO CANYON NATL MON, NEW MEXICO (291647) Period of Record Monthly Climate Summary Period of Record : 12/1/1909 to 3/31/2011  
<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?nm1647>

## **7. List of Appendices**

Appendix 1: Topographic Location Map  
Appendix 2: Navajo Fish & Wildlife Correspondence Letter  
Appendix 3: Wildlife Survey Report  
Appendix 4: Plant Survey Report  
Appendix 5: Cultural Resources Compliance Form (CRCF)  
Appendix 6: Biological Resources Compliance Form (BRCF)



Appendix 1-1



## Proposed Ramona Begay Power Line

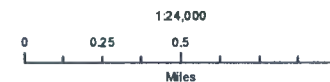
White Rock, San Juan County,  
New Mexico

USGS Pueblo Bonita Quad

Work Order #: 411081

### Existing and Proposed JMEC Facilities

- Existing 3 Phase Distribution Line
- Existing 1 Phase Distribution Line
- Proposed 1 Phase Distribution Line



NAD 1983 New Mexico State Plane West  
FIPS 3003 Feet



Prepared by Permits West, Inc., February 10, 2015  
for Jemez Mountains Electric Cooperative, Inc.



# THE NAVAJO NATION



BEN SHELLY PRESIDENT  
REX LEE JIM VICE PRESIDENT

21 September 2011

File#IIPERMIS

Brian Wood  
Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87508

SUBJECT: JEMEZ MOUNTAINS ELECTRIC COOPERATIVE  
LAKE VALLEY POWER LINES

Mr. Wood:

The following information on species of concern<sup>1</sup> is provided in response to your 25 July 2011 request concerning the subject project, which consists of the Jemez Mountains Electric Cooperative, Inc., Lake Valley power lines located in south San Juan County, NM.

Each 7.5-minute quadrangle containing project boundaries is addressed separately below. For potentially occurring species these species lists are quadrangle-specific rather than project-specific. Potential for species has been determined primarily on quadrangle-wide coarse habitat characteristics and species range information. Your project biologist should determine habitat suitability at the project site(s).

A total of nine (09) species both known and/or potential are included in this response. They are:

1. Antilocapra americana (Pronghorn); NESL group 3.
2. Aquila chrysaetos (Golden Eagle); NESL group 3; MBTA; EPA.
3. Buteo regalis (Ferruginous Hawk); NESL group 3; MBTA.
4. Charadrius montanus (Mountain Plover); NESL group 4; ESA proposed threatened; MBTA.
5. Empidonax traillii extimus (Southwestern Willow Flycatcher); NESL group 2; ESA endangered; MBTA.
6. Falco peregrinus (Peregrine Falcon); NESL group 4; MBTA.
7. Mustela nigripes (Black-footed Ferret); NESL group 2; ESA endangered.
8. Vulpes macrotis (Kit Fox); NESL group 4.
9. Asclepias sanjuanensis (San Juan Milkweed); NESL group 4.

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<sup>1</sup>"Species of concern" include protected, candidate, and other rare or otherwise sensitive species, including certain native species and species of economic or cultural significance. For each species, the following tribal and federal statuses are indicated: Navajo Endangered Species List (NESL), federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Eagle Protection Act (EPA). No legal protection is afforded species with only ESA candidate or NESL group 4 status; please be aware of these species during surveys and inform the NFWD of observations. Documentation that these species are more numerous or widespread than currently known, and addressing these species in project planning and management is important for conservation and may contribute to ensuring they will not be uplisted in the future. Species without ESA or NESL legal protection (e.g., NESL group 4 species) are only included in responses on a regular basis and may not be included in this response. Please refer to the NESL for a list of group 4 species; contact me if you need a copy.

#### LA VIDA MISSION, NM 7.5-MINUTE QUADRANGLE

Project Location: Nathaniel Johnson P/L

Known to occur within one mile of the project site:

1. Buteo regalis

**\*\*All or parts of this project currently are within areas protected by the Raptor Electrocution Prevention Regulations; consult with the NNDFW zoologist or EA Reviewer for more information and recommendations. Be sure to examine Navajo Nation's "Raptor Electrocution Prevention Regulations" available at: [http://nnhp.navajofishandwildlife.org/docs\\_reps.htm](http://nnhp.navajofishandwildlife.org/docs_reps.htm)\*\***

Species of concern with potential to occur on the 7.5-minute quadrangle(s) containing the project boundaries include the following:

1. Aquila chrysaetos
2. Antilocapra americana
3. Charadrius montanus
4. Empidonax traillii extimus
5. Falco peregrinus
6. Mustela nigripes
7. Vulpes macrotis

#### AREA 2: MODERATELY SENSITIVE WILDLIFE RESOURCES

#### PUEBLO BONITO, NM 7.5-MINUTE QUADRANGLE

Project Location: Ramona Begay P/L

Known to occur within one mile of the project site:

1. Mustela nigripes

Species of concern with potential to occur on the 7.5-minute quadrangle(s) containing the project boundaries include the following:

1. Aquila chrysaetos
2. Antilocapra americana
3. Buteo regalis
4. Charadrius montanus
5. Empidonax traillii extimus
6. Falco peregrinus
7. Mustela nigripes
8. Vulpes macrotis

#### AREA 3: LOW SENSITIVITY WILDLIFE RESOURCES

#### TANNER LAKE, NM 7.5-MINUTE QUADRANGLE

Project Location: Tommie Pierce P/L Project

Jesse Valdez P/L Project

Known to occur within three miles of the Jesse Valdez project site:

1. Mustela nigripes

Species of concern with potential to occur on the 7.5-minute quadrangle(s) containing the project boundaries include the following:

1. Aquila chrysaetos

2. Antilocapra americana
3. Buteo regalis
4. Charadrius montanus
5. Empidonax traillii extimus
6. Mustela nigripes
7. Vulpes macrotis
8. Asclepias sanjuanensis

T. Pierce Site located in AREA 2: MODERATELY SENSITIVE WILDLIFE RESOURCES  
 J. Valdez Site located in AREA 3: LOW SENSITIVITY WILDLIFE RESOURCES

Potential for the black-footed ferret should be evaluated if prairie-dog towns of sufficient size (per NFWD guidelines) occur in the project area.

Potential for Puccinellia parishii should be evaluated if wetland conditions exist that contain white alkaline crusts.

Biological surveys need to be conducted during the appropriate season to ensure they are complete and accurate please refer to NN Species Accounts.<sup>4</sup> Further questions pertaining to surveys should be referred to Species Account. Surveyors on the Navajo Nation must be permitted by the Director, NFWD. Contact Jeff Cole at (928) 871-7068 for permitting procedures. Questions pertaining to surveys should be directed to the NFWD Zoologist (Chad Smith) for animals at 871-7070 and Botanist (Andrea Hazelton) for plants at (928) 523-3221. Questions regarding biological evaluations should be directed to Pamela Kyselka (Acting Environmental Reviewer) at 871-7065.

Potential impacts to wetlands should also be evaluated. The U.S. Fish & Wildlife Service's National Wetlands Inventory (NWI) maps should be examined to determine whether areas classified as wetlands are located close enough to the project site(s) to be impacted. In cases where the maps are inconclusive (e.g., due to their small scale), field surveys must be completed. For field surveys, wetlands identification and delineation methodology contained in the 'Corps of Engineers Wetlands Delineation Manual' (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. NWI maps are available for examination at the NFWD's Natural Heritage Program (NHP) office, or may be purchased through the U.S. Geological Survey (order forms are available through the NHP). The NHP has complete coverage of the Navajo Nation, excluding Utah, at 1:100,000 scale; and coverage at 1:24,000 scale in the southwestern portion of the Navajo Nation.

The information in this report was identified by the NFWD's biologists and computerized database, and is based on data available at the time of this response. If project planning takes more than two (02) years from the date of this response, verification of the information provided herein is strongly recommended. It should not be regarded as the final statement on the occurrence of any species, nor should it substitute for on-site surveys. Also, because the NFWD's information is continually updated, any given information response is only wholly appropriate for its respective request.

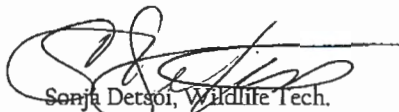
For a list of sensitive species on the Navajo Nation in addition to the species listed on the Navajo Endangered Species List (NESL) please refer to our website at [www.nndfw.org](http://www.nndfw.org).

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<sup>4</sup> Available free of charge on our website at <http://nnhp.navajofishandwildlife.org/>

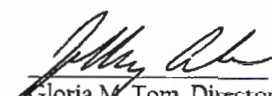
An invoice for this information is attached.

If you have any questions I may be reached at (928) 871-6472.



Sonja Detsol, Wildlife Tech.  
Natural Heritage Program  
Department of Fish and Wildlife

CONCURRENCE



Gloria M. Tom, Director  
Department of Fish & Wildlife  
Division of Natural Resources

xc: file/chrono

THREATENED, ENDANGERED, AND SPECIAL STATUS  
WILDLIFE SPECIES REPORT  
FOR JEMEZ MOUNTAINS ELECTRICAL COOPERATIVE INC.'S PROPOSED OWL  
SPRINGS RAMONA BEGAY POWER LINE  
SANDOVAL COUNTY, NEW MEXICO

### **1.0 Introduction**

Threatened, endangered and special status wildlife species surveys were conducted at the proposed Ramona Begay Power Line project. The project area is located approximately 5 miles north of Chaco Canyon National Historic Park, Sandoval County, New Mexico. The project area is located in Sections 35 and 36, T 21 N, R 11 W, and Section 31, T 21 N, R 10 W. The project is located on Navajo Nation Tribal Trust Lands.

### **2.0 Methods**

On August 10, 2011 Wildlife Biologist Charles Black conducted pedestrian surveys of the project area to inspect for the potential presence of threatened, endangered, or special status species. The survey area consisted of the proposed Ramona Begay Power Line route and a 25-foot buffer either side of the power line route. Habitat and existing conditions were evaluated. A 0.5-mile radius around the project area was surveyed for raptor nests. An additional 1.0-mile line-of-site survey was conducted from the project area for raptor nests. The surveyor used 10 X 40 binoculars.

### **3.0 Description of Existing Habitat**

The proposed power line is approximately 1.3 miles in length and runs westward from an existing power pole to the Ramona Begay residence. Topography in the project is fairly flat. The proposed route crosses a broad, small intermittent drainage which flows northward. Elevation along the route ranges from 6200 feet to 6260 feet in elevation.

Vegetation throughout the project area is dominated by arid grassland with scattered small shrubs. In general, the project area is moderately disturbed from historic overgrazing. There are no perennial streams or wetlands in the project area.

Wildlife occurring in the area is typical of arid grasslands and shrublands of the Great Basin desert. This includes passerines such as horned larks (*Eremophila alpestris*), black-throated sparrows (*Ampisiza bilineata*), as well as jackrabbits (*Lepus spp.*), kangaroo rats (*Dipodomys spp.*) and whiptail lizards (*Cnemidophorus spp.*).

### **4.0 Threatened, Endangered, and Special Status Wildlife Species**

According to the September 21, 2011 correspondence from the Navajo Natural Heritage Program, the following species have the potential to occur on the land covered by the Pueblo Bonito, 7.5-minute Quadrangle.

Species	Status	Habitat	Habitat Suitability Within the Project Area
Golden eagle ( <i>Aquila chrysaetos</i> )	Navajo Endangered Species List (NESL) Group 3, MBTA, EPA	A wide variety of open habitats, typically nests in steep cliffs typically > 30 meters in height	See discussion below
Pronghorn ( <i>Antilocapra Americana</i> )	NESL Group	Grasslands, brushlands, bunch-grass and sagebrush areas of open plains and deserts	See discussion below
Ferruginous hawk ( <i>Buteo regalis</i> )	NESL Group 3, MBTA	Open grasslands and deserts, typically nests atop rocky pinnacles, small buttes and cliffs	NP
Mountain plover ( <i>Charadrius montanus</i> )	NESL Group 4	Seek dry, disturbed, or intensively grazed, open, flat tablelands. Bare ground, short vegetation, and flat topography are indicators of ideal habitat.	NP
Southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	NESL Group 2, MBTA, Federal-Endangered	Cottonwood-willow habitats within perennial riparian areas	NP
Peregrine falcon ( <i>Falco peregrinnus</i> )	NESL Group 4, MBTA	Nests in sheer cliff faces typically > 30 meters in height usually near water or mesic canyons. In migration, occurs in a variety of lowland, wetland habitats	NP
Black-footed ferret ( <i>Mustela nigripes</i> )	NESL Group 2, Federal-Endangered	Grassland or shrubby habitats where large, densely populated prairie dog towns are present	NP
Kit fox ( <i>Vulpes macrotis</i> )	NESL Group 4	Lowland deserts and open habitats	See discussion below

#### Status

E Endangered      T Threatened      C Candidate      NESL Navajo Endangered Species List      SC Species of Concern

#### Presence\*

K Known, documented observation within project area.

S Habitat suitable and species suspected to occur within the project area.

NS Habitat suitable but species is not suspected to occur within the project area.

NP Habitat not present and species unlikely to occur within the project area.

## 5.0 Results

No federally or Navajo listed threatened, endangered, or special status species were observed during the 8/10/2011 wildlife survey.

### Pronghorn

The project area is suitable habitat for pronghorn antelope, although they are generally considered to be very uncommon in the area (Mikesic, D. G., Personal Communication, March 2008). Pronghorns may occasionally pass through the project area. Given the relatively small scale of the proposed disturbance, this species should not be adversely impacted by the proposed project.

#### **Golden eagle**

The project area is suitable foraging habitat for golden eagles. No suitable eagle nest structures are present in the vicinity of the project area. Eagles may occasionally pass through the project area. Given the relatively small scale of the proposed disturbance, this species should not be adversely impacted by the proposed project.

#### **Ferruginous hawk**

Ferruginous hawks are known to nest in “hoodoo” formations in northwest New Mexico. No suitable nest structures for this raptor are located in the vicinity of the project area. Hawks may occasionally pass through the project area. Given the relatively small scale of the proposed disturbance, this species should not be adversely impacted by the proposed project.

#### **Migratory Birds**

Migratory birds are protected under the Migratory Bird Treaty Act. Birds protected under the Act include all common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows and others, including their body parts (feathers, plumes etc.), nests, and eggs. The Act protects migratory birds from a “take”. Take is defined as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities”. A “take” does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof.

Eight bird species observed during the wildlife surveys are protected under the Migratory Bird Treaty Act (see the species list in Section 6.0 below). Because there will be minimal ground disturbance in association with the proposed power line construction and given the sparsely vegetated nature of the project area, no take of nesting birds is anticipated from the project.

### **6.0 Species Observed During the Survey**

#### **Avian Species Observed:**

Red-tailed hawk (*Buteo jamaicensis*)  
American kestrel (*Falco sparverius*)  
Mourning dove (*Zenaidura macroura*)  
Horned lark (*Eremophila alpestris*)  
Common raven (*Corvus corax*)  
Lark sparrow (*Chondestes grammacus*)  
Brewer's sparrow (*Spizella brewerii*)  
House finch (*Carpodacus mexicanus*)

Mammalian species observed:

Desert cottontail (*Sylvilagus audubonii*)  
Black-tailed jackrabbit (*Lepus californicus*)  
Coyote (*Canis latrans*)

**7.0 RECOMENDATIONS**

There are no recommendations regarding wildlife for this project.

**8.0 REFERENCES**

- Mikesic, D. G. and J. R. Nystedt. 2001. Species Accounts for *Buteo regalis*. Updated 15 February 2005. Navajo Natural Heritage Program. P. O. Box 1480. Window Rock, Arizona 86515.
- Mikesic, D. G. and J. R. Nystedt. 2001. Species Accounts for *Aquila chryaetos*. Updated 15 February 2005. Navajo Natural Heritage Program. P. O. Box 1480. Window Rock, Arizona 86515.
- Mikesic, D. G. and J. R. Nystedt. 2001. Species Accounts for *Charadrius montanus*. Updated 15 February 2005. Navajo Natural Heritage Program. P. O. Box 1480. Window Rock, Arizona 86515.



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Charles Black, Wildlife Biologist

# **JEMEZ MTS. ELECTRIC COOPERATIVE, INC.**

## **PROPOSED RAMONA BEGAY POWER LINE**

**NW/4 Section 31, T. 22 N., R. 10 W. and  
N/2 and SW/4 Section 36 and SE/4 Section 35, T. 22 N., R. 11 W.**

**San Juan County, New Mexico**

### **PLANT SURVEY REPORT**

Prepared for Permits West, Inc., Santa Fe, New Mexico  
By Marian J. Rohman May 13, 2012

This report discusses the potential for disturbance to listed plant species identified by the Navajo Natural Heritage Program (NNHP) as having the potential to occur on the Pueblo Bonito, NM, 7.5-minute quadrangle, which contains the boundaries of the project area (Detsoi, 2011). There are no NNHP listed plant species in this quadrangle. Any wetland conditions need to be evaluated for the potential for Parish's alkali grass (*Puccinellia parishii*) (Detsoi, 2011). Parish's alkali grass is a Group 4 species on the Navajo Endangered Species List (NNHP, 2008), indicating that it does not have sufficient information to support its being listed as endangered, but there is reason to consider it (NNHP, 2008). In addition, the potential for disturbance to species listed by the United States Fish and Wildlife Service as Endangered, Threatened, Candidate, Proposed, or as a Species of Concern for San Juan County, New Mexico, (NMESFO, 2012) will be discussed.

Parish's alkali grass is a short-lived winter or spring annual whose growth habit is easily distinguished from its perennial relatives. It grows in alkaline springs, seeps, and seasonally wet areas, from elevations of 5000 to 7200 feet. The species requires continuously damp soils during its late winter to spring growing period (McDonald, 1999c). On Navajo lands, it flowers from late April to early June (Roth, 2001b). Sufficient alkalinity for the species is indicated by a white alkaline crust along the edges of its habitat when wet and covering the area when dry (personal observation).

### **PROJECT DESCRIPTION**

The proposed project consists of the construction of a power line from an existing power pole to the residence of Ramona Begay. The proposed power line measures 6109.45 feet in length within a 20-foot wide corridor. The total land use for the proposed project is 2.81 acres. The project area is located on Navajo Nation Tribal land approximately 16.3 to 17.4 miles southwest of Nageezi, San Juan County, New Mexico, in the NW/4 of Section 31 in T. 22 N., R. 10 W. and the N/2 and SW/4 of Section 36 and the SE/4 of Section 35 in T. 22 N., R. 11 W.

The proposed power line begins at an existing power pole in the NW/4 of Section 31, T. 22 N., R. 10

W. It heads west, crossing a gravel road, and then turns west-southwest. The line crosses several fence lines, then a cleared area to end at a residence in the SE/4 of Section 35, T. 22 N., R. 11 W.

The line begins in the Badland-Monierco-Rock outcrop complex, moderately steep soil type (BB) and quickly enters the Doak-Avalon association, gently sloping (DN), which continues to the end of the line. The BB type consists of aeolian deposits over slope alluvium derived from shale, or bedrock. When soils are present, they are a fine sandy loam to a clay loam. The DN type consists of alluvium derived from sandstone and shale, with or without aeolian deposits over it. The soil texture is loam to clay loam (NRCS, 2012). The underlying bedrock is the Cliffhouse Sandstone Formation (NMBMGR, 2003). The elevation of the project area is approximately 6185 to 6260 feet. Disturbances in the project area include fence lines, two-track and gravel roads, and grazing by cattle and horses.

## METHODOLOGY

The project area was surveyed on April 23, 2012, by botanist Marian Rohman. The survey of the proposed power line was accomplished by walking a zig zag transect along each side of the centerline, covering the 20-foot width of the corridor and a buffer zone of 25 feet on each side. The emphasis of the survey was to inspect for listed plant species; however, all plants were identified in order to provide a more complete description of the environment. A complete list of the plants observed is included at the end of this report.

## SURVEY RESULTS

**Species of Interest to the Navajo Natural Heritage Program and the United States Fish and Wildlife Service:** There are no plant species identified by the NNHP as species of concern with the potential to occur on the Pueblo Bonito, NM, 7.5-minute quadrangle, which contains the boundaries of the project area (Detsoi, 2011). Any wetlands conditions in the project area need to be evaluated for the potential for Parish's alkali grass (Detsoi, 2011). There are seven species of plants listed as Endangered, Threatened, or Species of Concern by the USFWS for San Juan County, New Mexico, where the project occurs (NMESFO, 2012). An eighth species, Zuni fleabane (*Erigeron rhizomatus*), is listed by the USFWS as a Species of Concern, but is not listed as being found in San Juan County. However, the New Mexico Rare Plant Technical Council (NMRPTC), does list this species as occurring in San Juan County (NMRPTC, 1999). Details of status, habitat, and the potential to occur in the project area for all of these species are listed in the following table. There are no USFWS Candidate or Proposed species in San Juan County.

SPECIES STATUS*	HABITAT	POTENTIAL TO OCCUR IN THE PROJECT AREA**
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<i>Aliciella formosa</i> Beautiful gilia USFWS Species of Concern NESL Group 4	Salt desert scrub communities in soils of the Nacimientto Formation. Elev. 5,000-6,400 ft. Blooms April and May (Heil and Herring, 1999).	<b>No appropriate habitat:</b> there are no salt desert scrub communities or Nacimientto Formation in the project area. (NP)
<i>Astragalus humillimus</i> Mancos milkvetch USFWS Endangered NESL Group 2	Cracks or eroded depressions on sandstone rimrock ledges and mesa tops in Point Lookout sandstone. Elev. 5,000-6,000 ft. Blooms late April to early May (McDonald, 1999a).	<b>No appropriate habitat:</b> there are no sandstone rimrock ledges or mesa tops and no Point Lookout sandstone in the project area. The project area is above the known elevation of the species. (NP)
<i>Erigeron bistiensis</i> Bisti fleabane USFWS Species of Concern	Ridge tops and slopes of white to tan-colored sand derived from the Ojo Alamo Sandstone Formation and Nacimientto Formation in desert shrub-grassland. Blooms May to June (NatureServe, 2009). The type location is at 6340 feet in elevation (NMRPTC, 1999).	<b>No appropriate habitat:</b> there is no Ojo Alamo Sandstone or Nacimientto Formation in the project area. The project area is below the known elevation of the species. (NP)
<i>Erigeron rhizomatus</i> Zuni fleabane USFWS Threatened NESL Group 2	Nearly barren detrital clay hillsides with soils derived from shales of the Chinle or Baca Formations; most often on north or east-facing slopes in open piñon-juniper woodlands. Elev. 7,300-8,000 ft. Blooms May and June (McDonald, 1999b).	<b>No appropriate habitat:</b> there are no barren clay hillsides and no Chinle or Baca Formations in the project area. The project area is well below the elevation range of the species. (NP)
<i>Pediocactus knowltonii</i> Knowlton cactus USFWS Endangered	On rolling, gravelly hills in a piñon-juniper-sagebrush community. The species is known only from the type locality near the Los Piños River. Elev. 6200-6300 ft. Blooms April and May (McDonald and Ferguson, 1999).	<b>No appropriate habitat:</b> there are no rolling gravelly hills or piñon-juniper-sagebrush community in the project area. (NP)
<i>Puccinellia parishii</i> Parish's alkali grass USFWS Species of Concern NESL Group 4	Alkaline springs, seeps, and seasonally wet areas that occur at the heads of drainages or on gentle slopes. 5000-7200 feet on Navajo lands. Blooms May to June (McDonald, 1999c; Roth, 2001b).	<b>No appropriate habitat:</b> there are no alkaline seasonally wet areas in the project area. (NP)

<i>Sclerocactus cloverae</i> ssp. <i>brackii</i> Brack hardwall cactus  USFWS Species of Concern NESL Group 4	In desert scrub and scattered juniper communities on sandy clay hills of the Nacimiento Formation at 5000 to 6000ft. The community is typically dominated by shadscale. Blooms in May (Roth, 2005; Ferguson, 1998).	<b>No appropriate habitat:</b> there are no desert scrub or juniper communities, no sandy clay hills, and no Nacimiento Formation in the project area. The project area is above the known elevation of the species. (NP)
<i>Sclerocactus mesae-verdae</i> Mesa Verde cactus  USFWS Threatened NESL Group 2	Sparsely vegetated low rolling clay hills formed from the Mancos or Fruitland shale formations at 4,900-5,500 ft. The soils are highly alkaline and gypsiferous. Salt desert scrub communities, usually with <i>Atriplex corrugata</i> (mat saltbush), and/or <i>A. confertifolia</i> (shadscale). Blooms late April to May (McDonald, 1999d, Roth, 2001c).	<b>No appropriate habitat:</b> there are no low rolling clay hills or salt desert scrub communities in the project area. The project area is well above the elevation range of the species. (NP)

Status\* USFWS – United States Fish and Wildlife Service (NMESFO, 2012)

Endangered - Any species which is in danger of extinction throughout all or a significant portion of its range.

Threatened - Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Species of Concern - Taxa for which further biological research and field study are needed to resolve their conservation status OR are considered sensitive, rare, or declining on lists maintained by Natural Heritage Programs, State wildlife agencies, other Federal agencies, or professional/academic scientific societies.

NESL – Navajo Endangered Species List (NNHP, 2008)

Group 2 – Endangered: A species or subspecies whose prospects of survival or recruitment are in jeopardy.

Group 4 – a species or subspecies where there is not currently sufficient information to support its being listed as endangered, but there is reason to consider it

Potential to Occur\*\*

K – Known, documented observation within project area.

S – Habitat suitable and species suspected to occur within the project area.

NS – Habitat suitable but species is not suspected to occur within the project area.

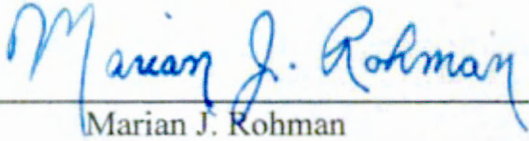
NP – Habitat not present and species unlikely to occur within the project area

**Noxious weeds:** The Bureau of Indian Affairs lists three species of noxious weeds as potential invaders and fourteen species as new invaders on the Navajo Reservation (OSM, 1999). None of these species are present in the project area.

## DISCUSSION

There is no potential habitat for plant species of concern to the Navajo Natural Heritage Program or the United States Fish and Wildlife Service. The proposed project will not impact any of these species of concern.

Signature of Author:

  
Marian J. Rohman

May 13, 2012

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**PLANTS OF THE PROPOSED JEMEZ MTS. ELECTRIC COOPERATIVE INC.  
RAMONA BEGAY POWER LINE**

Scientific and common names according to Allred, 2007

Identifications based on Ivey 2003 and Weber and Wittman 2001.

**Shrubs**

<i>Artemisia bigelovii</i>	Bigelow's sagebrush
<i>Atriplex canescens</i>	Four-wing saltbush
<i>Chrysothamnus Greenei</i>	Greene's rabbitbrush
<i>Ericameria nauseosa</i> var. <i>bigelovii</i>	Bigelow's rabbitbrush
<i>Gutierrezia sarothrae</i>	Broom snakeweed
<i>Krascheninnikovia lanata</i>	Winterfat

**Cacti**

<i>Cylindropuntia whipplei</i>	Whipple's cholla
<i>Opuntia polyacantha</i>	Plains pricklypear

**Grasses**

<i>Achnatherum hymenoides</i>	Indian ricegrass
<i>Aristida purpurea</i>	Purple threeawn
<i>Bouteloua gracilis</i>	Blue grama
<i>Muhlenbergia torreyi</i>	Ring muhly
<i>Pleuraphis jamesii</i>	Galleta
<i>Sporobolus airoides</i>	Alkali sacaton
<i>Vulpia octoflora</i>	Sixweeks-fescue

**Forbs**

<i>Astragalus fucatus</i>	Hopi milkvetch
<i>Astragalus mollisimus</i>	Woolly locoweed
<i>Chaetopappa ericoides</i>	Sand aster
<i>Cryptantha crassisepala</i> var. <i>crassisepala</i>	Thick-sepal cat's-eye
<i>Cymopterus</i> sp.	Spring-parsley
<i>Descurainia pinnata</i>	Western tansy-mustard

*Eriogonum wetherillii*  
*Heterotheca villosa*  
*Hymenopappus filifolius*  
*Ipmopsis pumila*  
*Lappula occidentalis*  
*Oenothera caespitosa*  
*Phacelia crenulata*  
*Physaria* poss. *fendleri*  
*Plantago patagonica*  
*Rumex hymenosepalus*  
*Salsola tragus*  
*Sphaeralcea coccinea*  
*Townsendia annua*

Wetherill's wild-buckwheat  
Hairy goldenaster  
Fine-leaf woollywhite  
Low skyrocket  
Spiny sheepbur  
Tufted evening-primrose  
Notched scorpion-weed  
Fendler's bladderpod  
Wooly plantain  
Canaigre  
Russian-thistle  
Scarlet globe-mallow  
Annual Townsend-daisy



THE NAVAJO NATION  
HISTORIC PRESERVATION DEPARTMENT  
PO Box 4950, Window Rock, Arizona 86515  
TEL: (928) 871-7198 FAX: (928) 871-7886

CULTURAL RESOURCES COMPLIANCE FORM

ROUTE COPIES TO: <input checked="" type="checkbox"/> CRC	NNHPD NO.: <b>HPD-12-114 - REVISED</b> OTHER PROJECT NO.: <b>CRC 526</b>
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PROJECT TITLE: A Cultural Resource Survey for the Proposed Jemez Mountain Electric Co-op Ramona Begay Power Line Project, San Juan County, New Mexico Cibola Research Consultants No. 526

LEAD AGENCY: BIA/NR

SPONSOR: Jemez Mountain Electrical Cooperative, Contact: Carmen Campbell, PO Box 10, Cuba, New Mexico 87013

PROJECT DESCRIPTION: The proposed undertaking will involve the installation of a 6,259.45-ft. single-phase power line to serve the Ramona Begay home. The proposed line will span across Navajo Nation Tribal Trust Lands, as well as NM State Land; 528.07-ft of powerline is on Navajo Nation Land. The area of effect is 0.25-acre. Ground disturbance will be intensive and extensive with the use of heavy equipment.

LAND STATUS: Navajo Tribal Trust & NM State Land

CHAPTER: Nageezi

LOCATION: T.22N, R.10W - Sec. 31; T.22N, R.11W - Sec. 35; Pueblo Bonito Quadrangle, San Juan County, New Mexico NMPM

PROJECT ARCHAEOLOGIST: Michael P. Marshall

NAVAJO ANTIQUITIES PERMIT NO.: B12061

DATE INSPECTED: 01/17/12

DATE OF REPORT: 02/017/12

TOTAL ACREAGE INSPECTED: 17.24-acres total (1.45-ac Navajo Nation Tribal Trust; 15.79-ac on State Land)

METHOD OF INVESTIGATION: Class III pedestrian inventory with transects spaced 5 m apart.

LIST OF CULTURAL RESOURCES FOUND:	(1) Site (NM-G-64-12)
LIST OF ELIGIBLE PROPERTIES:	(1) Site (NM-G-64-12)
LIST OF NON-ELIGIBLE PROPERTIES:	None
LIST OF ARCHAEOLOGICAL RESOURCES:	None

EFFECT/CONDITIONS OF COMPLIANCE: No historic properties will be affected with the following conditions:

Site NM-G-64-12:

1. Site boundary will be flagged by a qualified archaeologist prior to ground disturbing activities.
2. Powerline will span the site.
3. All power poles will be place outside of site boundary.


In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7198.

FORM PREPARED BY: Tamara Billie

FINALIZED: July 29, 2015 - Revised #2

Notification to Proceed  
Recommended  
Conditions:

☒ Yes ☐ No  
☒ Yes ☐ No

  
The Navajo Nation  
Historic Preservation Office

7/29/15  
Date

Navajo Region Approval

☒ Yes ☐ No

  
BIA - Navajo Regional Office

8/24/15  
Date

**BIOLOGICAL RESOURCES COMPLIANCE FORM  
NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE  
P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480**

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

**PROJECT NAME & NO.:** Ramona Begay Power Line Right-of-Way

**DESCRIPTION:** Jemez Mountains Electric Cooperative, Inc. proposes to construct, operate, and maintain a 14.4kV single-phase power line 528.07-ft. in length within a 20-ft. wide right-of-way. Total land use is 0.25 acres.

**LOCATION:** NW¼ of Section 31, T22N, R10W and SE¼ of Section 35, T22N, R11W, San Juan Co., New Mexico

**REPRESENTATIVE:** Kitty Wood, Permits West, Inc.

**ACTION AGENCY:** Jemez Mountains Electric Cooperative, Inc.

**B.R. REPORT TITLE / DATE / PREPARER:** EA-Ramona Begay Power Line ROW, Appendices 3 & 4/27 MAY 2012, REVISED 18 DEC 2014/Permits West, Inc.

**SIGNIFICANT BIOLOGICAL RESOURCES FOUND:** Area 3.

**POTENTIAL IMPACTS**

NESL SPECIES POTENTIALLY IMPACTED: NA

FEDERALLY-LISTED SPECIES AFFECTED: NA

OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES: NA

**AVOIDANCE / MITIGATION MEASURES:** [1] The NNDFW concurs with EA Sect. 2.2.1.

**CONDITIONS OF COMPLIANCE\*:** NA

**FORM PREPARED BY / DATE:** Pamela A. Kyselka/13 JUL 2012; amended on 23 FEB 2015

**COPIES TO:** (add categories as necessary)

☐ \_\_\_\_\_ ☐ \_\_\_\_\_

<b>2 NTC § 164 Recommendation:</b> <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Conditional Approval (with memo) <input type="checkbox"/> Disapproval (with memo) <input type="checkbox"/> Categorical Exclusion (with request letter) <input type="checkbox"/> None (with memo)	<b>Signature</b>  Gloria M. Tom, Director, Navajo Nation Department of Fish and Wildlife	<b>Date</b> 2/24/15
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*I understand and accept the conditions of compliance, and acknowledge that lack of signature may be grounds for the Department not recommending the above described project for approval to the Tribal Decision-maker.	
Representative's signature	Date



THE NAVAJO NATION  
HISTORIC PRESERVATION DEPARTMENT  
PO Box 4950, Window Rock, Arizona 86515  
TEL: (928) 871-7198 FAX: (928) 871-7886

CULTURAL RESOURCES COMPLIANCE FORM

ROUTE COPIES TO:	NNHPD NO.: <b>HPD-12-114 - REVISED</b>
<input checked="" type="checkbox"/> CRC	OTHER PROJECT NO.: <b>CRC 526</b>

PROJECT TITLE: A Cultural Resource Survey for the Proposed Jemez Mountain Electric Co-op Ramona Begay Power Line Project, San Juan County, New Mexico Cibola Research Consultants No. 526

LEAD AGENCY: BIA/NR

SPONSOR: Jemez Mountain Electrical Cooperative, Contact: Carmen Campbell, PO Box 10, Cuba, New Mexico 87013

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CHAPTER: Nageezi

LOCATION: T.22N, R.10W - Sec. 31; T.22N, R.11W - Sec. 35; Pueblo Bonito Quadrangle, San Juan County, New Mexico NMPM

PROJECT ARCHAEOLOGIST: Michael P. Marshall

NAVAJO ANTIQUITIES PERMIT NO.: B12061

DATE INSPECTED: 01/17/12

DATE OF REPORT: 02/017/12

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LIST OF CULTURAL RESOURCES FOUND:	(1) Site (NM-G-64-12)
LIST OF ELIGIBLE PROPERTIES:	(1) Site (NM-G-64-12)
LIST OF NON-ELIGIBLE PROPERTIES:	None
LIST OF ARCHAEOLOGICAL RESOURCES:	None

EFFECT/CONDITIONS OF COMPLIANCE: No historic properties will be affected with the following conditions:

Site NM-G-64-12:

1. Site boundary will be flagged by a qualified archaeologist prior to ground disturbing activities.
2. Powerline will span the site.
3. All power poles will be place outside of site boundary.

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7198.

FORM PREPARED BY: Tamara Billie

FINALIZED: July 29, 2015 - Revised #2

Notification to Proceed

Recommended

Conditions:

☒ Yes ☐ No

☒ Yes ☐ No

Tamara Billie 7/29/15  
The Navajo Nation  
Historic Preservation Office  
Date

Navajo Region Approval

☒ Yes ☐ No

[Signature] 8/24/15  
BIA - Navajo Regional Office  
Date

Turn 8-20-15

## INTRODUCTION AND PROJECT DESCRIPTION

This project involves the proposed construction of a Jemez Mountain Electric Co-op residential power line in San Juan County, New Mexico (Figures 1 and 2). The power line construction involves a 6,259.45-foot (ft) (1.19-mile) power line from an existing line to the Ramona Begay residence. The single pole overhead power line is located on an open grassland plain south of the Escavada Wash. The project crosses 528.07 ft of Navajo Tribal Trust land and 5,731.38 ft of State land. No grading or road construction will be needed as part of the improvements.

The power line right-of-way (R.O.W.) is a 20-ft (6.1-meter [m]) corridor, and the project area contains approximately 2.895 acres of which 0.25 acres is on Navajo Tribal Trust lands. Survey included a total area of 17.24 acres including buffer zones of 50 ft on either side of the right-of-way.

A cultural resource survey and context evaluation for the project areas was conducted by Michael Marshall of Cibola Research Consultants, LLC under Navajo Nation Permit Number B-12061 and N.M. State Permit No. S-045-2011. The survey was completed in 2011 and the report filed on February 1, 2012. The present report includes minor corrections of the project length and land status, but the project remains identical to the route surveyed in 2011. Contact: Michael Marshall, P.O. Box 743, Corrales, New Mexico, 87048. Phone 505-898-0614. The survey was conducted for Jemez Mountain Electric Co-op at the request of their agent Brian Wood of Permits West, Inc. Contact: Brian Wood, Permits West, Inc. 37 Verano Loop, Santa Fe, New Mexico, 87508. Phone: 505-466-8120.

Funding for the project is from the Navajo Nation Capital Improvement Office. An attempt was made to contact the Nageezi Chapter President, Ervin Chavez, but no one was present at the Nageezi Chapter at the time of the visit.

The survey resulted in the identification of three cultural sites. These included two Navajo cultural properties of middle 20<sup>th</sup> century affinity, and a segment of the Chaco North Road. One site (NM-G-64-12, LA 171062) consists of the partial ruins of an abandoned house located on Navajo lands at the east end of the project. The other two sites include a segment of the prehistoric Chaco North Road (LA 171063) and the ruins of a Navajo hogan (LA 171973), both of which are located on State land.

The project involves a single wood pole overhead power line construction typical of residential service lines. There will be no grading or subsurface disturbance other than power pole placements. The power line will be built adjacent to the abandoned house (LA 171062) and 25 meters north of the Navajo hogan (LA 171973), and will have no effect on these cultural properties.

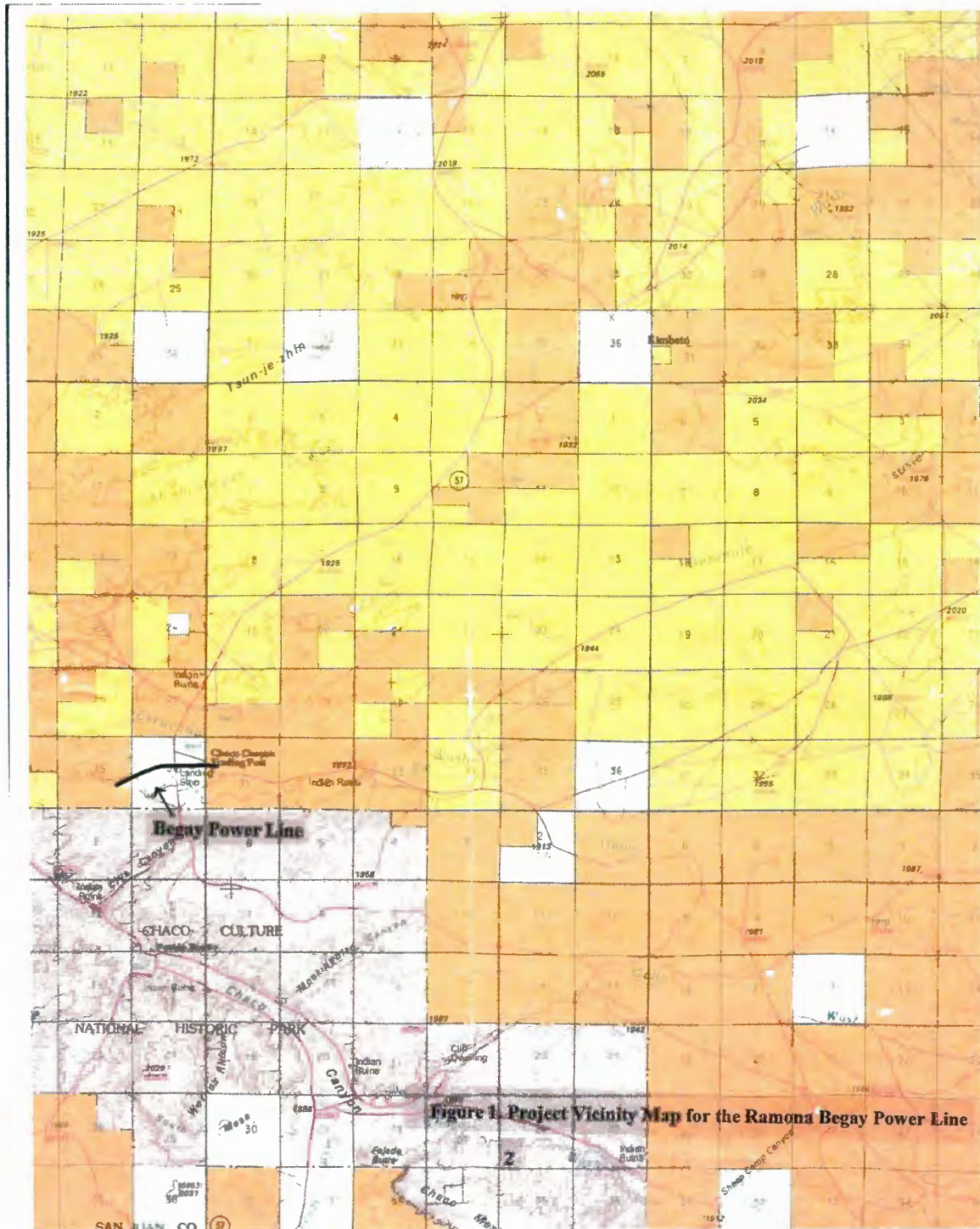


Figure 1. Project Vicinity Map for the Ramona Begay Power Line

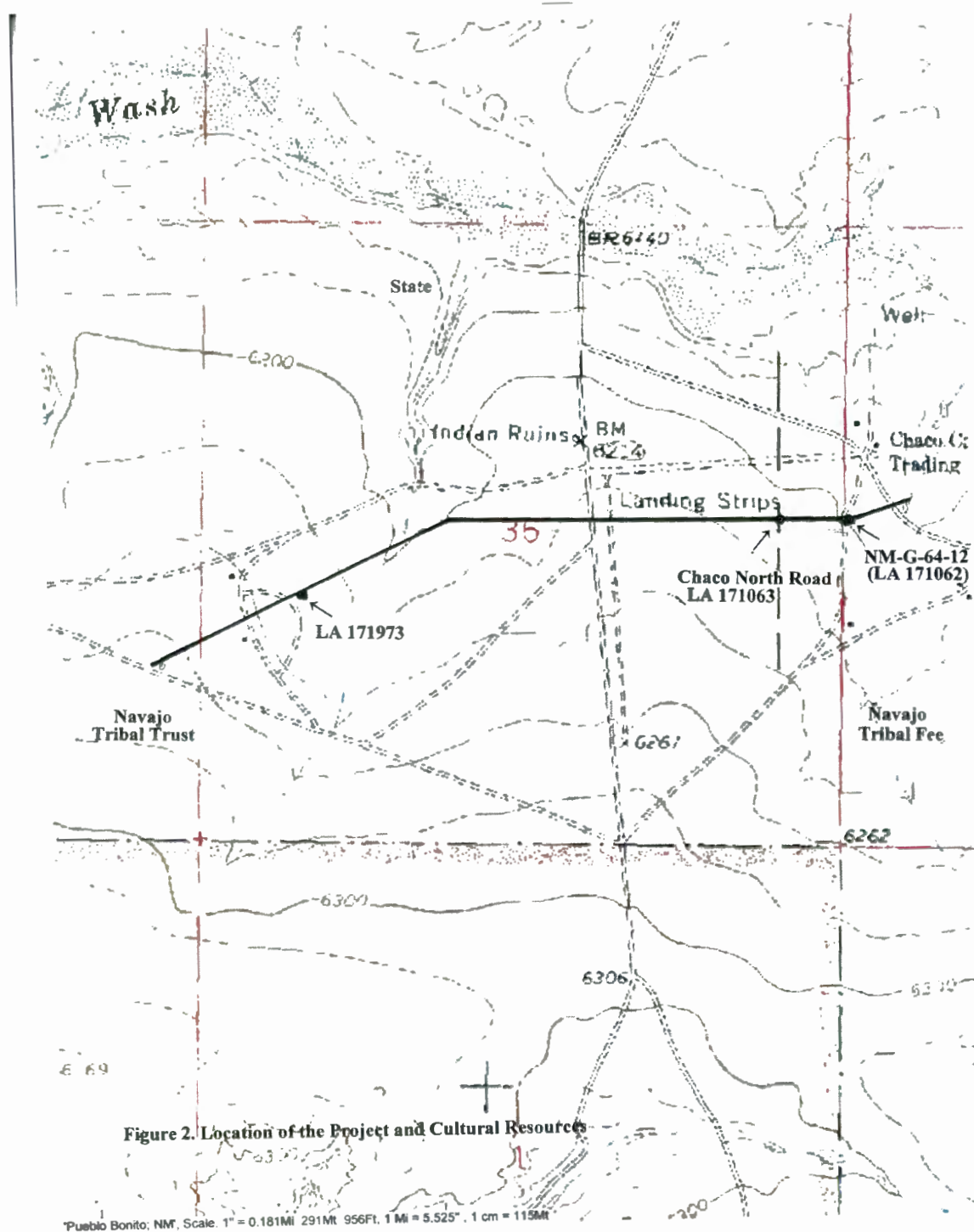


Figure 2. Location of the Project and Cultural Resources on the Pueblo Bonito Quadrangle

Vehicles should avoid crossing the Chaco North Road (LA 171063) in the site area, but they may cross about 200 meters north of proposed power line, where the North Road is buried and protected by an alluvial cover. The approach to Pole No 2 (Station No. 6+00) should be from the west. No vehicles should be used east of Pole No. 2 in the North Road site area. The line should be hand carried across the Chaco North Road to Pole No. 2.

The cultural resource investigation was completed in compliance with the provisions of the National Historic Preservation Act of 1966, as amended through 1992, and applicable regulations. The report is consistent with federal and state standards for cultural resource management as identified by the State of New Mexico and the Navajo Nation Historic Preservation Division (NNHPD). The investigation was completed in compliance with Section 106 of the National Preservation Act and pursuant regulations (36 CFR Part 800).

### PROJECT LOCATION

The Ramona Begay power line is located 0.4 miles (0.64 kilometers [km]) north of the Chaco Culture National Historic Park (Figures 1 and 2). The beginning of the project (B.O.P.) is about 0.3 miles (0.5 km) south of Escavada Wash and just below the junction of Kimbeto Wash. The power line runs west-southwest 6,259.45 ft (1.19 miles) to the end of the project (E.O.P.) at the Ramona Begay residence. The project right-of-way is 20 ft in width.

A previous proposed alignment extending from the same eastern power line source was subject to archeological survey (Marshall 2011), but was relocated further north due to land access problems. The present survey is for the power line realignment.

Location	Land Ownership	Length	Acres
T22N, R10W, Section 31	Navajo Tribal Trust	52.09 ft	0.024 acre
T22N, R11W, Section 36, NE-SE ¼	State	1,410.28 ft	0.655 acre
T22N, R11W, Section 36, SW-NE ¼	State	1,348.41 ft	0.619 acre
T22N, R11W, Section 36, SE-NW ¼	State	778.01 ft	0.364 acre
T22N, R11W, Section 36, NE-SW ¼	State	706.48 ft	0.324 acre
T22N, R11W, Section 36 NW-SW ¼	State	1,488.20 ft	0.683 acre
T22N, R11W, Section 35	Navajo Tribal Trust	475.98 ft	0.226 acre
Total		6,259.45 ft.	2.895 acres

#### GPS Coordinates (Zone 13, NAD 83)

B.O.P. (East End)	234541 E. by 3998718 N. (Sta. 0+00)
E.O.P. (West End)	232746 E. by 3998373 N. (Begay house)

## ENVIRONMENTAL CONTEXT

The proposed Jemez Mountain Electric Co-op project is located in the San Juan Basin north of Chaco Canyon National Historic Park in the Escavada drainage (Figures 1-2). The project ranges in elevation from 6,200 to 6,280 feet. The location is on an open desert grassland plain south of Escavada Wash.

The San Juan Basin forms the eastern half of the Navajo section of the Colorado Plateau physiographic province. Stratigraphically, the basin is actually a series of “nested basins with a younger central basin surrounded by uplands of varying structure and age” (Vivian 1990:16; Kelley 1950). The strata of the San Juan Basin are composed primarily of sandstone, shale, and clay deposits of late Cretaceous and early Tertiary period affinity. During the late Cretaceous period, the study area was located near the western shoreline of a tropical sea. The edge of the sea fluctuated over time leaving a variety of depositional strata of both marine and terrestrial nature. At the end of the Cretaceous period, the sea retreated and extensive volumes of sediments were deposited in the San Juan Basin.

The San Juan Basin is characterized by three major structural features-the Central Basin, the Hogback monocline, and uplifts and platforms that border the monocline. The Central Basin is roughly circular, extending 160 km north-south and 145 km east-west. Elevations within this basin range from 4,570 ft to 7,600 ft above sea level. The majority of the basin is drained by the San Juan River. The landscape, which consists of broad plains and valleys with small mesa and buttes and occasional canyons, was produced by erosion. The Hogback monocline “represents a steep flexure between an outer anticlinal bend and an inner synclinal bend” (Vivian 1990:16). Alternating uplifts-the Carrizo, Ute, La Plata, Nacimiento, San Pedro, Zuni Mountains and Defiance Plateau-and platforms-the Four Corners, Chama, Puerco, Acoma, and Zuni-comprise the outermost rim of the San Juan Basin and were formed during the Cretaceous period.

The climate of the project area can be classified as semiarid. Generally, it is mild and dry. Winds are moderate, with dry westerly winds maintaining a low relative humidity. Air masses from the Pacific and Gulf of Mexico lose most of their moisture before reaching the San Juan Basin. The climate of the area “is conditioned by cyclic shifts of air mass circulation that move varying quantities of heat and moisture and create a biseasonal precipitation pattern” (Vivian 1990:20). During the winter, high pressure systems moving south and southeast draw cool, moist polar Pacific air from the northwest, producing winter storms. During the summer, most of the moisture comes from warm, moist tropical air originating in the Gulf of Mexico.

These weather patterns result in a biannual precipitation regime for the San Juan Basin. While the Central Basin averages about 20 cm (8 inches) per year, the surrounding mountains receive 40 to 50 cm (24 to 28 inches). The amount of precipitation can vary from year to year and cyclical patterns in overall rainfall in the past have created more arid or mesic conditions than presently exist.

The project area is characterized by high diurnal and annual temperature variations. Summers are hot and winters are cold to very cold. Yearly maximum temperatures in the Central Basin area range from minus 24 degrees to 106 degrees Fahrenheit. The average frost-free season is 150 days. There is a strong, inverse correlation between the length of the frost-free period and elevation. The frost-free seasons are also affected by topographic location and cold air drainage (Gillespie 1985). Consequently, valley and canyon floors have shorter growing seasons. Late spring or early fall frosts in the historic period occasionally resulted in corn and squash crop loss by Navajo farmers (Brugge 1980:461).

The vegetation of the San Juan Basin is affected by a number of interrelated factors—latitude, elevation, rate of evaporation, temperature, annual precipitation, and seasonal distribution of rainfall. In general, the Central Basin and the location of the project area is characterized by grasslands and sagebrush communities. Juniper and mixed pinyon-juniper woodlands occur in the intermediate elevations. The mountains surrounding the basin support coniferous forests. Vegetation observed in proximity to the project area includes: grasses, sagebrush, rabbitbrush, snakeweed, narrow-leaf yucca, Ephedra, four-wing saltbush, greasewood, tumbleweed, ground cholla, prickly pear cactus and various annual species.

## **SURVEY METHODS**

A cultural resource survey for the proposed power line project was completed by Cibola Research Consultants under permits from the Navajo Nation (Permit No B-12061) and the State of New Mexico (Permit S-045-2011). The survey included a systematic inspection of the proposed 6,259.45-ft (1.19-mile) long Ramona Begay power line realignment. The corridor was marked in the field with survey lath prior to the archeological survey. The survey included the power line right-of-way (20 ft) and a buffer zone of 50 ft on either side of the corridor. The actual project area consists of 2.895 acres, but a total of 17.24 acres including the buffer zones was surveyed. All cultural resources and isolated occurrences within the survey area were recorded. They included 3 cultural sites and 2 isolated occurrences. Ground surface visibility in all of the project areas was good, and the possibility that buried cultural remains are present is unlikely.

Documentation of each cultural resource included identifying the site boundaries with respect to the project areas. Where needed, these boundaries were marked in the field with flagging tape which defined the areas to be avoided during the project construction. Standard site documentation was completed including site mapping, descriptions, artifact inventories and records of site condition.

Additional survey of a 100-meter section of the Chaco North Road was conducted in proximity to the proposed Ramona Begay power line. This included multiple transect survey at 5-meter intervals perpendicular to the road for a distance of 50 meters east and west of the road. The location of the Chaco North Road in the project vicinity was

determined by imaged segments visible in the aerial photography and the 1981 BLM low sun angle imagery, LiDAR imagery, and Google Earth aerial photography.

## **RECORDS SEARCH**

A cultural resource records search for the project area was completed prior to and during the period of the survey. It included a review of the New Mexico Cultural Resource Information System (NMCRIIS) files in Santa Fe and recent review of the Navajo Nation HPD for the former Ramona Begay alignment and vicinity. The search also involved consultation with the New Mexico State Register of Cultural Properties and the National Register of Historic Places. The records search also included a review of General Land Office (GLO) maps dating from 1883 for the project area and vicinity.

A previous proposed alignment of the Ramona Begay power line (now abandoned for the proposed realignment) was subject to archeological survey in September 2011 by Cibola Research Consultants, LLC (Marshall and Marshall 2011). The proposed realignment (the subject of the present survey report) begins at an existing power line at the eastern B.O.P., but runs north of the former alignment. Two archeological sites including an abandoned house (Navajo Nation No. NM-G-64-12, LA 171062) and a segment of the Chaco North Road (LA 171063) were found near the east end of the project in the former alignment survey (Marshall and Marshall 2011). The abandoned house (LA 171062) is located near the power line source at the same location as the former survey. The power line realignment crosses the Chaco North Road (LA 171063) about 31 meters north of the former alignment. From this point west, the power line diverges significantly north of the former alignment. Along the western power line corridor near proposed Pole No. 15 an additional previously unknown Navajo hogan site (LA 171973) was discovered on State land in the recent survey.

A number of 20<sup>th</sup> century Navajo and prehistoric Anasazi sites have been previously identified in the general project area along the south side of Escavada Wash, but no site records have been filed for cultural properties in the immediate project area except those for the former abandoned alignment (Marshall and Marshall 2011). However, the power line is known to cross a section of the Chaco North Road about 500 meters south of what is known as the Escavada Angle Change, where it turns within one-half degree of true north for 16 km to the Pierre's Complex and then close to 2 degrees east for an additional 31 km to Kutz Canyon Stairway-Shrine complex (Sofaer, Marshall and Sinclair 1989:367). Detailed surveys of the Chaco North Road, north and south of the project vicinity have been completed, but the road in the project area and immediate area is not reported. However, it is likely that this section was subject to previous reconnaissance by BLM and National Park Service (NPS) research teams. The projected route of the Chaco North Road in the project area and vicinity is identified in the BLM site files, maps and Lidar imagery. The North Road alignment in this area is also identified in the BLM low sun angle aerial photography and can be seen on Google Earth aerial imagery dating to 5-9-2010. The segment of the Chaco North Road crossed by the Ramona Begay power line was subject to detailed examination during the former alignment survey (Marshall and

Marshall 2011) and in the current realignment survey, and is updated herein as site LA 171063.

A general archeological reconnaissance survey along the south edge of Escavada Wash was completed by the National Park Service in 1981, and a number of cultural sites were recorded (Hayes, Brugge and Judge 1981). However, this survey does not appear to have included the Chaco North Road. The closest previously recorded site to the Ramona Begay power line is a Navajo corral (LA 42383), which is 200 meters to the south. Another 20<sup>th</sup> century Navajo settlement with a hogan, 4 corrals and 2 ovens (LA 42333) is located 300 meters to the east of the project.

There are no recorded prehistoric Anasazi sites in close proximity to the power line or the nearby alignment of the Chaco North Road. The closest known Anasazi sites to the project include a Pueblo II-III period house mound with associated kiva (LA 40401) 225 meters to the north, a PII-III period masonry roomblock with 2 kivas and 2 middens (LA 42261) 600 meters to the east, and a Pueblo II-III period house mound (LA 43330) located 700 meters to the east. These and other sites along the south bank of Escavada Wash north of Chaco Canyon are sub-nuclear site clusters which been described as part of the "Chaco-Halo" (Marshall, Doyel and Breternitz 1982).

Inspection of the 1883 General Land Office map (Linsey, James P.) for T22N, R11W and T22N, R10W does not show any cultural features within or close to the Ramona Begay project area.

### **STATE AND NATIONAL REGISTER PROPERTIES**

There are no properties listed on the N.M. State Register of Cultural Properties or the National Register of Historic Places within or in direct proximity to the project. The closest property listed on the National Register is the Chaco Culture National Historic Park (HPD 57), which is 500 meters south of the proposed Ramona Begay power line.

### **TRADITIONAL CULTURAL PROPERTIES**

There are no known Traditional Cultural Properties (TCPs) within or in proximity to the project area. No traditional sites are listed in the published ethnographic literature, consulted in this study, which identify traditional and sacred site investigations for the Chaco area of the San Juan Basin (Akins 1993; Van Valkenburgh 1974; Carroll 1982; and Loebig et al. 1999). There are numerous important Navajo traditional sites and place names in the general area of the projects, but none will be affected by the proposed power line project. Some of the major Chacoan ruins in the area are recognized by the Navajo as traditional sites (Franstead and Werner 1979), but none of these are near the project areas. Chacoan roads are recognized by the Navajo as components of the traditional landscape and any adverse effect should take into consideration possible Navajo concerns. The

Ramona Begay power line crosses the Chaco North Road, but the Chaco North Road will be avoided and the project will have no adverse effect on this cultural site.

## **CULTURAL-HISTORICAL CONTEXT**

A cultural-historical overview for the San Juan Basin, including the upper Chaco drainage system, is included in research completed by Magers (1979) for the BLM and Marshall (1987) for the NM 44 (US 550) highway improvement project. A good regional overview of the historic properties of northwest New Mexico was prepared by the N.M. State Historic Preservation Division (Pratt and Scurlock 1990). Overview of Anasazi sites in the general area have been completed (Marshall, Stein, Loose, and Novotny 1979, and Powers et al. 1983). A comprehensive history of the Chaco Navajo was written by David Brugge (Brugge 1980). Some cultural-historical information related to the sites identified in this survey including the Chaco North Road and a brief note on Navajo settlement in the area during the historic period is provided in the following discussion.

### **Chaco North Road**

The Chaco North Road is a prehistoric construction that extends north for approximately 50 km from Chaco Canyon to Kutz Canyon. The road has a general northern orientation. However, the south 3.1 km of the road from Pueblo Alto to Escavada Wash is oriented 13 degrees east of north, while the 16-km section from Escavada Wash to the Pierre's site complex is within ½ degree of true north, and the 31-km section north of Pierre's is oriented at 2 degrees east of north (Sofaer, Marshall and Sinclair 1989: 367, Stein 1983).

A number of archeologists have suggested that the road made an abrupt angle change at Kutz Canyon, and proceeded northwest to Aztec Ruins. However, this has not been empirically demonstrated, as the road appears to terminate at shrines in Kutz Canyon and has a northern orientation well to the east of the San Juan River Anasazi communities. Because of this, the Chaco North Road has been considered by some as a "Directional Corridor" of probable cosmographic nature rather than a transportation corridor linking Chaco to the San Juan communities. For a detailed discussion of this interpretation of the North Road and supporting ethnographic evidence, see Marshall (1997a) and Sofaer, Marshall and Sinclair (1989).

Ceramic evidence from the North Road sites and a few tree-ring dates obtained from the road at the related Pierre's site complex indicates that the Chaco North Road was constructed and used during the Late Bonito phase from ca. AD 1050 to 1125-1150. There is no evidence to indicate that the North Road was utilized by Post-Classic populations who continued to occupy the Chaco region until about 1300 A.D. A cluster of tree-ring dates ranging from AD 1106-1109 +vv obtained from the road-related Pierre's site complex (Powers et al. 1983:114-116) indicates that one of the largest structures associated with the North Road was constructed in the early 12th century. Another date of AD 1124 +r indicates that construction continued at the Pierre's site complex until at least the first quarter of the 12th century.

Ceramic inventories obtained from the North Road sites are remarkably similar (Marshall 1997b, Marshall and Marshall 2006). All of the ceramic assemblages obtained from sites with defined North Road association are of Late Bonito phase affinity (ca. AD 1050 to 1150). The North Road ceramic inventories are characterized by a predominance of Gallup, Escavada and Chaco B/W styles in association with Cibolan Corrugated-Indented materials. Chuskan ceramic materials represent about 5% of the materials from the Pierre's sites and the North Road south of Pierre's (Kincaid et al. 1983:9:49). Carbon painted Chaco McElmo materials appear in minor quantities, but actual San Juan/Mesa Verde affiliated McElmo B/W materials are usually absent or very rare (two sherds were seen on the North Road Kutz Canyon Stairway). Chaco McElmo materials are considered to be of local Chaco manufacture, but in some earlier studies have been listed as Mesa Verde affiliated, giving the incorrect impression that imported San Juan materials occur along the North Road. Chaco McElmo materials represent about 16 to 19 percent of the whiteware assemblage on the Chaco North Road (Marshall and Sofaer 1988). Ceramic types such as Houck Polychrome (begin ca. AD 1125 or 1150), St. Johns Polychrome (begin ca. AD 1175), and Mesa Verde B/W (begin ca. AD 1175-1200) (Breternitz 1966) are entirely absent from the North Road inventories.

Parallel or double alignments of the Chaco North Road have been identified and probably begin in the vicinity of the Pierre's site complex. The area immediate to the Pierre's site complex is an eroded slope, and no expression of the road can be identified in the imagery. The double alignments, as defined in the aerial imagery, discontinuously extend for a distance of approximately 15 km north from Pierre's to the area of Halfway House (Nials 1983:6-29). Approximately 3.0 km north of Pierre's there appears to be two close sets of precisely parallel alignments (Sofaer, Marshall and Sinclair 1989:368 and Figure 29.4) extending for a distance of 1.5 km.

The North Road parallel alignments are restricted to the 15-km section north of Pierre's, and apparently do not occur in the area from Chaco to Pierre's or in the northern section of the road. The double alignments are clearly visible in the aerial imagery in various areas along this 15-km section. A survey of the North Road near in middle point along the corridor (Marshall and Marshall 2010) confirms the location of two parallel corridors, based on well-defined linear ceramic scatters in areas where the double alignments cannot be seen in the low sun angle aerial photography.

The orientation of the double alignments in the study area south to Pierre's site complex suggests an articulation of the North Road with the pinnacle site of El Faro and the adjacent Great House structure (LA 16514). The more impressive Acropolis site at Pierre's is about 150 to 200 meters east of the alignment. This alignment to El Faro is also demonstrated by the orientation of the North Road south of Pierre's (Kincaid et al., Figure 8-4). The known features along the double section of the North Road include Pierre's on the south, the double set alignments at Flat Lake (named here), the burned jacal building at Carson Divide on the highest point of the North Road, and end at Halfway House on the north.

Parallel Chacoan roads are uncommon, but double segments have been identified in other locations and may be more frequent than originally believed (personal communication

with Richard Friedman, April 2006). The Toyee Road, which leads west from Standing Rock Great House 3.0 km to Toyee Spring pond (Wozniak, Ponczynski and Church 1991:19) is one of the most conspicuous double roads. Other parallel road alignments have been identified at Haystack (Nails, Stein and Roney 1987:23); and on the Chaco South Gap Road (Marshall and Sofaer 1988 manuscript).

### **Notes on Post Revolt Period Historic Navajo Occupation in the Chaco District**

Navajo populations in the northwest San Juan Basin district during the Revolt and Post-Revolt period from 1680 to 1780 (Towner 1992) clustered in the Dinetah area in the Blanco, Largo and Gobernador Canyon areas where numerous hogans and Gobernador phase Pueblito settlements have been identified (Powers and Johnson 1987). There were Navajo populations outside the Dinetah during the 18<sup>th</sup> and century and earlier, but the Dinetah was a major center and is the focus of the Navajo origin myths and other legends (Zolbrod 1984).

During the late 18<sup>th</sup> century, most of the Navajo pueblito settlements in the Dinetah District were abandoned, perhaps due to continued depredations by the Ute and Comanches and Hispanic slave raiders. There was a shift of Navajo populations to the south and west into the Chaco and Puerco areas. This shift may have also been stimulated by the need to provide open pasturelands for sheep and goats which were becoming increasingly important to Navajo economy.

Some Navajo settlement along the northeast edge of the San Juan Basin appears to have continued into the early 19<sup>th</sup> century as a few tree-ring cutting dates were obtained from Blanco Canyon and the Sisnathyel Mesa area, and range during the period from 1780 to 1866 (Magers 1979:134). However, it is clear that the focus of Navajo settlement had shifted outside of the Dinetah. The 1796 Cordero Report listed ten Navajo settlement areas; Sevolleta, Chocoli (Chaco), Cerro Cabezon, Guadalupe, Agua Salada, Cerro Chato, Chuska, Tunicha, Chelle, and Carrizo (Matson and Schroeder 1957:356). Navajo settlements and farms are noted in the La Plata and Animas drainages in 1835 (Reeve 1974:12), and a few Navajo sites dating between 1800 and 1868 have been identified in the Chaco Canyon area (Magers 1979:134). Spanish military activity among the Navajo in the Chaco area occurred in 1804-1805 (Brugge 1980:11).

Some Navajo families escaped the American military during the period of their incarceration at Bosque Redondo from 1863-1868. However, it is unknown if any inhabited the Chaco area. After the release of the Navajo from Bosque Redondo in 1868, some returned to the San Juan Basin to find that in some areas Hispanic and Anglo ranchers had moved in and had taken control over many of the better springs and pastures.

The earliest trading posts in the area were informal supply houses maintained by local Hispanic and Anglo ranchers during the early 1870s. One of the earliest posts near Chaco was Tzin-na-tzin founded in 1878 (McNitt 1962:294). Many Navajos probably returned to the area following their release from Bosque Redondo in 1868. However, it was not until the 1880s after the entrance of the railroad across the southern edge of the Navajo

country and the establishment of other trading posts in the area that manufactured trade goods occur with any frequency at Navajo sites. Navajo sites which date from ca. 1868 to 1880 are often difficult to identify in archaeological survey, since they contain little in the way of dateable artifact material. The sites identified in this study date from the late 19<sup>th</sup> to early-middle 20<sup>th</sup> centuries. A good overview of this period is provided by David Brugge (1980) in his history of the Chaco Navajo.

## **FINDINGS OF THE SURVEY**

The cultural resource survey of the proposed residential power line identified three cultural resources and two isolated occurrences (IOs). The archeological sites included an abandoned rock house (NM-G-64-12), a segment of the Chaco North Road (LA 171063), and a Navajo hogan of ca. 1940-1960 affinity (Navajo Nation No. NM-G-64-12, LA 171062). The abandoned rock house is located on Navajo Trust land, while the North Road segment (LA 171063) and the hogan site (LA 171973) are on New Mexico State land.

### **Site Descriptions**

Three cultural sites were identified within the proposed Ramona Begay power line corridor. Two of the sites, including an abandoned house (LA 171062) and a segment of the Chaco Great North Road (LA 171063) are located near the east end of the project and were identified in a previous survey for the proposed Ramona Begay power line route (Marshall and Marshall 2011). The other site, a middle/late 20<sup>th</sup> century hogan (LA171973) was first identified in the recent survey along the realignment of the proposed power line.. The power line realignment crossing the Chaco North Road is 31 meters north of the previously identified crossing. Because of this, an additional 100 meters of the North Road was inspected and some additional information was added to the LA 171063 site form update. The final site (LA 171973) consists of the ruins of a middle 20<sup>th</sup> century hogan that was discovered during the recent survey along the power line realignment and is described herein for the first time.

**Navajo Nation Site NM-G-64-12  
LA 171062 (Site 1)  
Site Update**

This site was first identified during a previous survey of the Ramona Begay power line (Marshall and Marshall 2011). Since the proposed power line in this area is identical to the previous survey, no revision of the earlier site record is needed.

**Site Type:** Abandoned House

**Cultural-Temporal Affinity:** Navajo. This house was probably built in the late 19<sup>th</sup> or early 20<sup>th</sup> century and used into the middle 20<sup>th</sup> century.

**References:** Marshall and Marshall 2011

**Location:** This site is located on the south side of Escavada Wash in San Juan County, New Mexico. It is about 200 m (656.17 ft) southwest of the old Chaco Trading Post (now a residence), 500 m (1640.4 ft) south of Escavada Wash, and 600 m (1968.5 ft) east of the old NM 57 highway. The site is in an open grassland plain. The soil is sandy. Vegetation includes grasses, snakeweed, ground cholla and prickly pear cactus.

USGS Quadrangle: Pueblo Bonito, N.M., 1966

Township 22 North, Range 10 West, Section 31, SW-SW-NW ¼

GPS Locus: Zone 13, 234584 Easting by 3998716 Northing (NAD 83)

Land Ownership: Navajo Tribal Trust. This site is located very close to the T10N-T11N line and plots out very close to the line between Section 31 (Navajo) and Section 36 (State). Because of its Navajo affinity, it is identified in the Navajo site files.

Elevation: 6,200 feet

**Description (Figure 3):** This site is an abandoned rock house located 15 meters south of the B.O.P. at the existing power line. The site consists of an older rock house with a frame addition, an outside hearth area, 2 ash piles and a wood chopping area. The site extends over an area 30- by 40-meters. The house was probably occupied until the 3<sup>rd</sup> quarter of the 20<sup>th</sup> century. The house is 5 by 14 meters, and contained 3 rooms. The east side of the house is an older rock structure, while the west room is a frame and stucco addition. The entire house has a low pitched roof that was originally covered with asphalt paper. There is a “U”-shaped hearth about 8 meters north of the house. Nearby are 2 ash piles and an area of wood chips and bark.

**Artifact Assemblage:** Artifacts include clear bottle glass, window glass, tin cans, round nails, sheet rock debris, alluvium-topped beer/soda cans, and a few fragments of amethyst bottle glass and older tin cans dating to the earlier house occupation.

**Site Condition and Research Value:** The ruins of this abandoned house are located directly adjacent to an existing power pole. The house is standing, but the roof surface is uncovered and the doors and windows are open and broken. Livestock are using the house for shelter. This site is one of a number of residential buildings that cluster around the old Chaco Trading Post. The house itself has little additional research value.

**Project Effect and Recommended Treatment:** This site is located directly adjacent to the power line source for the Ramona Begay line. The site will not be affected by the proposed power line construction and no further treatment is recommended.

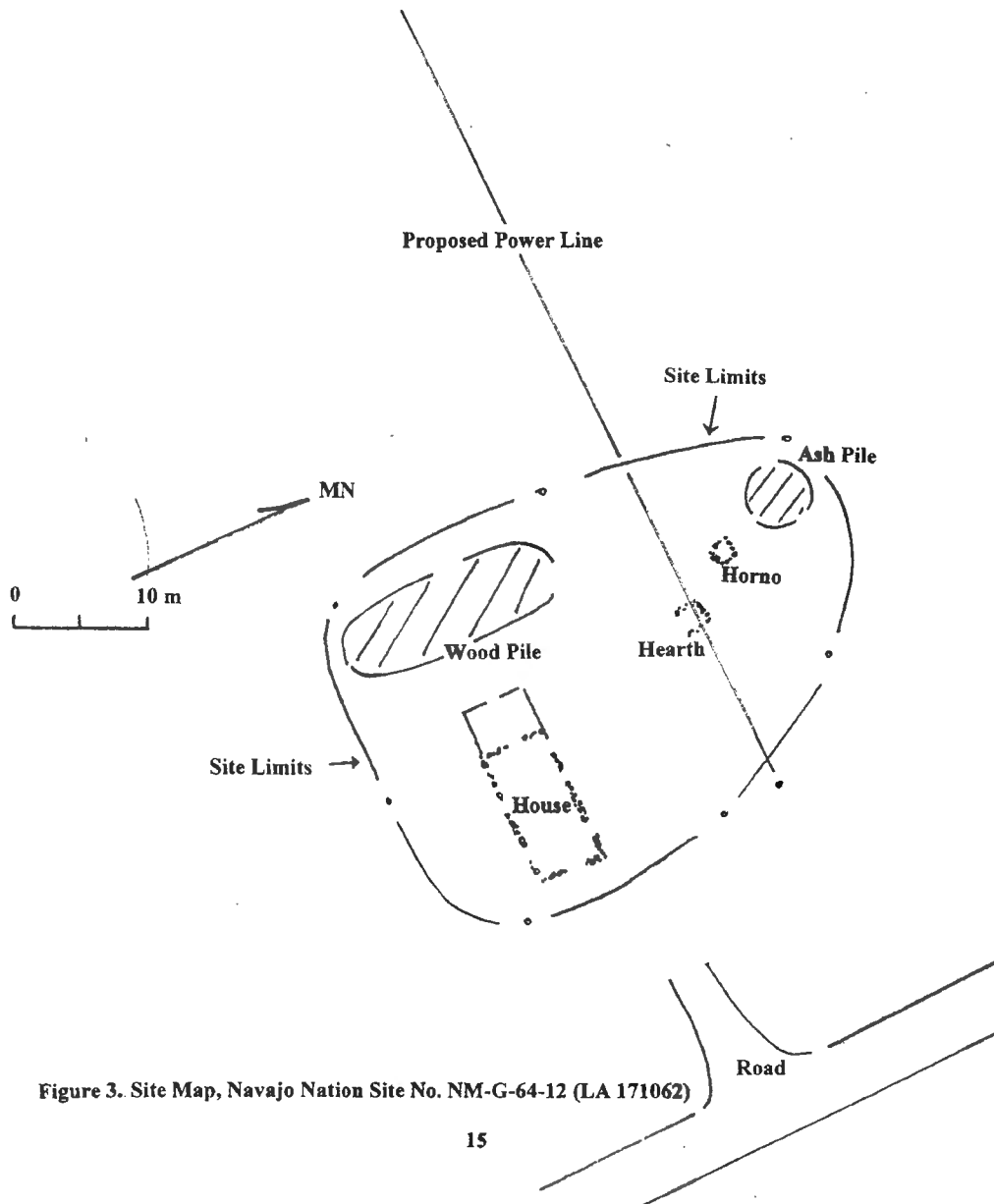


Figure 3. Site Map, Navajo Nation Site No. NM-G-64-12, LA 171062

**LA 171063 (Site 2)**  
**Chaco Great North Road Segment**  
**Site Update**

This site was identified during the initial survey for the Ramona Begay power line. The realignment of the power line crosses the North Road about 31 meters north of the former power line route. Because of this, additional survey of about 100 meters north of the former study area was subject to investigation. Since the areas surveyed are contiguous, the results of the present survey are appended to the previous record and required only minor revision of the previous site record.

**Site Type:** Segment of the Chaco Great North Road

**Cultural-Temporal Affinity:** Anasazi Late PII-Early PIII, ca. 1050-1150 A.D.

**References:** Morenon 1975; Obenauf 1980; Kincaid et al. 1983; Stein 1983; Sofaer, Marshall and Sinclair 1989; Marshall 1997a; Marshall and Marshall 2006 and 2010; Marshall and Marshall 2011.

**Location:** This short segment of the Chaco North Road is located on the south side of Escavada Wash in San Juan County, New Mexico. The segment is about 300 meters southwest of the old Chaco Trading Post (now a residence), 550 meters south of Escavada Wash, 800 meters north of the Chaco Park boundary, and about 500 meters east of the abandoned NM 57 highway. The segment is situated on the open grassland plain and slope to Escavada Wash. Exposure is to the north. The soil is a sandy loam. Vegetation includes grasses, snakeweed, ground cholla, and prickly pear cactus.

USGS Quadrangle: Pueblo Bonito, N.M., 1966

Township 22 North, Range 11 West, Section 36, SE-SE-NE ¼

GPS Locus: Zone 13, 234369 Easting by 3998662 Northing (NAD 83)

Land Ownership: New Mexico State

Elevation: 6,210 ft

**Description (Figures 4 and 5):** This short segment of the Chaco North Road is about 1.8 miles (2.9 km) north of Pueblo Alto and 1,969 ft (600 m) south of the Escavada Wash. A 200-meter length of the road was investigated adjacent to the proposed residential power line crossing. Artifacts associated with the road occur in a 131-ft (40-m) wide area adjacent to the road, south of the proposed power line realignment crossing.

The Chaco North Road in the identified site area is located in an area where the road crosses the lower slope of Escavada Valley and begins to join an alluvial apron along the south side of the wash. The road on the lower valley slope (in the area of the former power line alignment) is defined by a linear swale and parallel mound and was partly captured by an arroyo. The road on the edge of the alluvial apron (in the area of the proposed power line realignment) is buried and is defined by a faint vegetative line caused in part by the drainages of the arroyo along the former roadbed.

The south part of the North Road in the LA 171062 site area has been partly captured and entrenched by an arroyo on a slope break coming down to Escavada Wash. The arroyo appears to have followed along the west side of the road, leaving the east side mostly intact. The arroyo is about 19.7 ft (6.0 m) wide and 3.3 to 4.9 ft (1.0 to 1.5 m) in depth. The Chaco North Road in the site area is 32.8 ft (10 m) wide and has a depth of about 50 cm. The east edge of the roadway swale remains intact and is well-defined.

Directly east of the road is a low mound, 32.8 ft (10 m) wide, which is probably backfill debris from the North Road construction. This mound is about 50 cm high and consists of soil, and sandstone slabs and spalls. Many of these sandstone elements show carbonate-stained surfaces, indicating that they are from a disturbed source and were probably removed from the roadbed excavation. Some sandstone slabs along the edge of the arroyo also show carbonate-stained surfaces. Most of the artifact materials found along this section of the road were located in the area of the east mound.

The North Road in the vicinity of the proposed power line realignment is situated on the edge of an alluvial apron and flat. In this area the road is mostly buried by alluvial fill carried downslope from the arroyo. A faint linear swale and vegetative line can be detected where the drainages follows the old roadbed. The North Road in this area is buried, and no clear swale edge or backfill mound can be detected.

**Artifact Assemblage:** All of the associated artifact materials are located in the south site area adjacent to the arroyo entrenchment and low earth mound. Artifacts in the northern part of the site are likely covered by alluvium.. Artifacts included 6 fragments of chipped stone and 18 ceramic sherds. The chipped stone materials are all unmodified small to medium-sized flakes. Material types include white silicified wood (4), white chalcedony (1) and gray chert (1). Ceramic artifacts include Cibola Gray Corrugated-indentured (5 jars), Cibola Whiteware unidentified (6 jars), 1 Chaco B/W jar, and Chaco-McElmo B/W (1 bowl and 4 jars). The predominance of decorated jars at this site is typical of the North Road assemblages. The relatively high incidence of Chaco-McElmo B/W of early 12<sup>th</sup> century affinity along this segment of the North Road is of interest, but the use of the Chaco North Road from all evidence seems to be primarily between 1050-1150 A.D.

**Site Condition and Research Value:** This segment of the Chaco North Road has been partly damaged by a small arroyo, which has captured the alignment, while the area directly north is on an alluvial flat where the roadway is buried. The Chaco North Road is one of the more significant prehistoric cultural features in the region and is clearly eligible for nomination to the National Register of Historic Places. Further study of the Chaco North Road, including this segment, has the potential to yield additional information on this highly important cultural property.

**Project Effect and Recommended Treatment:** The proposed Ramona Begay residential power line crosses a short segment of the Chaco North Road. It is recommended that the road be avoided during the power line construction and that no vehicles cross the road in the site area. Access to the proposed Pole No. 2 (Station 6+20) west of the Chaco Road should be approached from the west and no vehicles or heavy

equipment should be used east of the pole in the site area. The line should be hand carried across the North Road in the project area. Access from east to west across the North Road should be made about 200 meters north of the proposed power line where the North Road is buried in the alluvium, which will protect the road from scarring. Given this treatment, the project should have no adverse effect on the Chaco North Road.

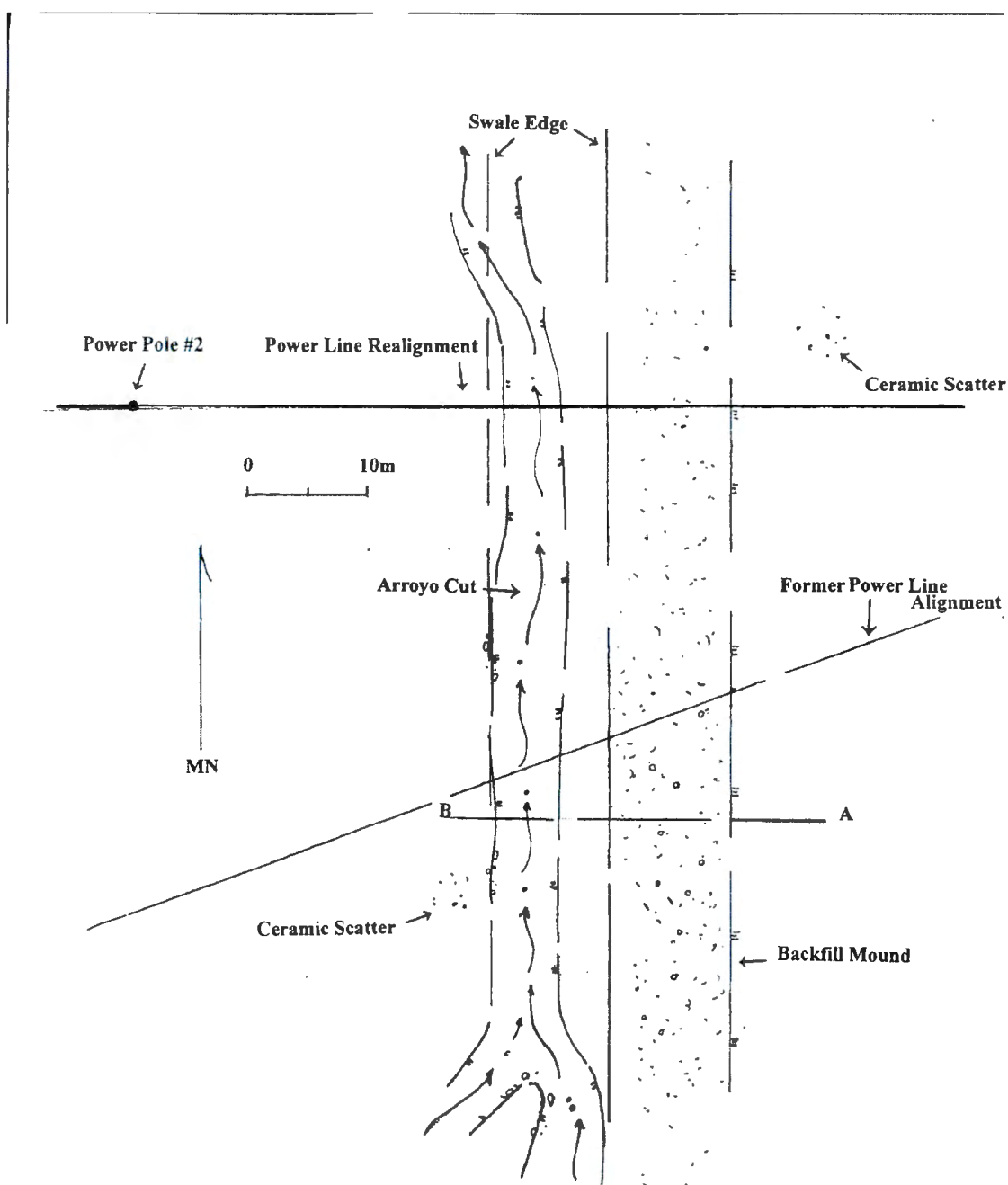


Figure 4. Site Map, LA 171063, Chaco North Road Segment LA 171063

Figure 4. Site Map, LA 171063, Chaco North Road Segment

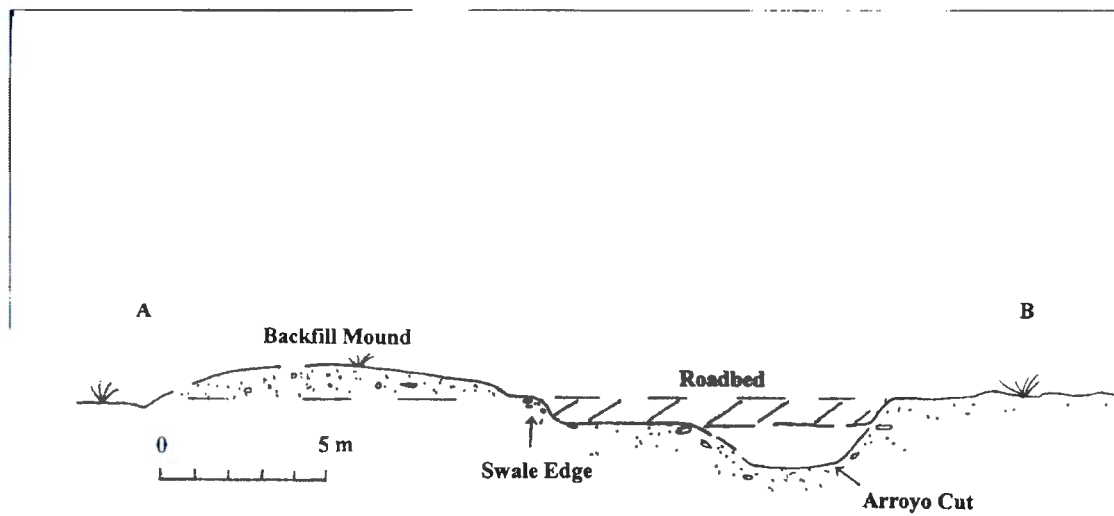


Figure 5. Cross Section, Chaco North Road Segment, LA 171063

Figure 5. Cross Section, Chaco North Road Segment, LA 171063

**LA 171973 (Site 3)**

**Site Type:** Hogan

**Cultural-Temporal Affinity:** Navajo, ca. 1940s to 1980s

**Previous Reference:** No previous record

**Location:** This site is located 1.1 km (0.68 miles) south of Escavada Wash in San Juan County, New Mexico. It is 600 m (1968.5 ft) north of the Chaco National Historic Park boundary, and 750 m (2460.6 ft) west of the abandoned NM 57 highway alignment. The site is situated on an open grassland plain.

USGS Quadrangle: Pueblo Bonito, N.M., 1966

Township 22 North, Range 11 West, Section 36, NE-NW-SW ¼

GPS Locus: Zone 13, 233117 Easting by 3998511 Northing (NAD 83)

Land Ownership: New Mexico State

Elevation: 6,220 feet

**Description (Figure 6):** This site consists of the ruins of a hogan and a scatter of associated trash debris over an area approximately 35 by 35 m (115 by 115 ft). The hogan is about 25 m (82 ft) south of Pole No. 15 (Station No. 48+30) of the proposed power line. Trash debris includes 2 gas stoves, lumber, cans and bottles, and is mostly scattered to the east of the hogan. The hogan is defined by a circular depression about 6.0 m (19.7 ft) across, which was apparently a wood frame or cribbed log hogan. The building materials at this site were salvaged or used for firewood and only scattered log fragments and lumber occur near the hogan depression. Part of a lumber frame door is located directly east of the hogan.

**Artifact Assemblage:** Artifacts suggest an occupation from about the 1940s to the 1980s. Bottle glass is mostly clear. Cans are all modern sanitary types. Other artifacts include a 55-gallon barrel, barrel lids, tin sheeting, stove pipe, white ironstone ceramics, hog wire fencing, and 2 gas stoves. One stove is a heater and the other is a stove top range. The latter may have been a kerosene fuel stove. An automobile tire rim (6 holes) appears to be from a modern pickup truck. A hood part from another vehicle is from an older car. Construction debris includes lumber, particle board, tar paper, nails and other debris. The non-returnable soda bottles indicate an occupation after 1970.

**Site Condition and Research Value:** The site is a relatively modern Navajo habitation area which may have been occupied as late as the 1980s. This site has little research value and is not eligible for nomination to the National Register of Historic Places. The structural component at this site consists of the foundational remnants of a single hogan.

**Project Effect and Recommended Treatment:** The proposed power line crosses the northern edge of the site in an area of scattered artifact debris. The hogan is 25 meters south of the power line at Pole No. 15. The project should have no effect on this site, as long as no heavy equipment or vehicles cross the hogan itself. The hogan is marked with red pin flags and should be avoided during the power line construction.

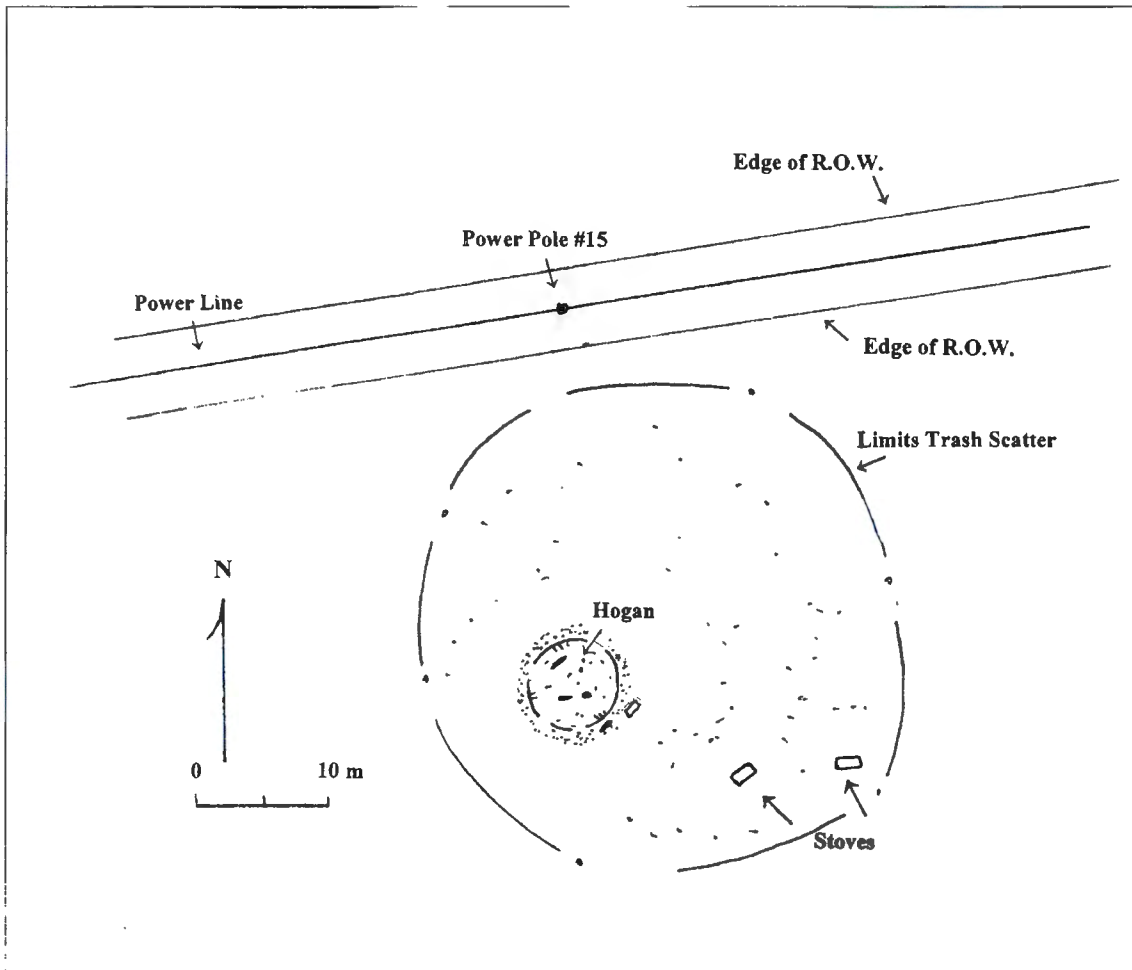


Figure 6. LA 171973 Site Map

Figure 6. LA 171973 Site Map

### Isolated Occurrences

**IO # 1, Auto Lamp**

T22N, R11W, Section 36, NE-NW-SW ¼

GPS Locus: Zone 13, 234321 Easting by 3998686 Northing (NAD 83)

Land Ownership: New Mexico State

A single automobile lamp was found at this location. It is a globular free-unit type that probably dates to the 1920s or 1930s.

**IO # 2, Bread Tin and Lard Can**

T22N, R11W, Section 36, SE-SE-NE ¼

GPS Locus: Zone 13, 233248 Easting by 3998594 Northing (NAD 83)

Land Ownership: New Mexico State

A rectangular tin bread pan and a single one-half gallon lard bucket were found at this location.

### CULTURAL RESOURCE MANAGEMENT

This project involves the proposed construction of a short residential Jemez Mountain Electric Co-op power line to a Navajo user in the Chaco Canyon area, San Juan County, New Mexico. This service line crosses New Mexico State land and Navajo Tribal Trust lands. The lead agency in this project is the State Land Office, as most of the land and two of the three identified cultural properties occur on State land.

Three cultural sites were identified in the survey along the proposed power line. These include two 20<sup>th</sup> century Navajo habitation sites (LA 171062 and LA 171973) and one segment of the prehistoric Chaco North Road (LA 171063). There are no properties listed on the State or National registers near the project area and the proposed power line will have no effect on State or National Register properties. There are designated Traditional Cultural Properties within or in close proximity to the project, although the Chaco North Road might be considered a traditional site to various Native Americans.

Site NM-G-64-12 (LA 171062) is an abandoned house near the east end of the Ramona Begay power line south of Escavada Wash. This site is located on Navajo Tribal Trust land. An existing pole is situated near the house from which the power line will be constructed. The project should have no effect on this site and no additional cultural resource treatment is recommended.

A short segment of the Chaco Great North Road, recorded as LA 171063, was identified in the previous power line alignment survey (Marshall and Marshall 2011). The power line realignment crosses about 31 meters north of the former location near the north end of the previous survey. The present site update extended the survey 100 meters further north of the present crossing, while the earlier site record defined the road 100 meters to

the south, thus providing documentation of a 200-meter long section. In general, the Chaco North Road south of the present crossing remains intact, and is defined by a linear swale and parallel mound with associated artifacts, while the North Road north of the present crossing is buried in alluvium and is defined by a faint line of vegetation.

No vehicles or heavy equipment should cross the Chaco North Road in the site area. The approach to Power Pole No. 2 at Station 6+20 should be made from the west and no equipment should be used directly east of the pole in the area of the North Road site. Vehicles needing access to Pole No. 2 should cross the alignment of the Chaco North Road about 200 meters north of the site area where the North Road is buried below a blanket of alluvium.

The remnants of a middle 20<sup>th</sup> century Navajo hogan (LA 171973) were found in the recent realignment survey on State lands. The hogan is 25 meters south of proposed Power Pole No. 15 (Station 48+50). The proposed power line crosses the edge of the artifact scatter associated with this site. Since the hogan is outside the power line right-of-way, the proposed undertaking should have no effect on this structure. However, care should be taken to insure no vehicles or heavy equipment cross the hogan ruins. If equipment is confined to the power line right-of-way, the project should have no adverse effect on this site.

Given the recommended avoidance treatments described above, the proposed construction of the Ramona Begay power line should have no adverse effect on the cultural properties of the Chaco area.

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# PERMITS WEST, INC.

PROVIDING PERMITS for LAND USERS

37 Verano Loop, Santa Fe, NM 87508 (505) 466-8120

September 11, 2015

Esther Kee  
Project Review Office  
P.O. Box 9000  
Window Rock, AZ 86515

Dear Esther:

On behalf of Jemez Mountains Electric Cooperative, Inc., I am requesting a field clearance for the Owl Springs 1-Ramona Begay project in San Juan County, NM. The project is marked on the attached map. The legal description of the project is:

SW/4 NW/4 Section 31, T. 22 N., R. 10 W.; NMPM, San Juan County, NM  
NE/4 SE/4 Section 35, T. 22 N., R. 11 W.; NMPM, San Juan County, NM

The proposed right-of-way for the power line is 20 feet in width, 528.07 feet in length, and .25 acres in size.

A field clearance request was made for this project in 2012, and it is my understanding you received the consent of the grazing permittees at that time, so it is unclear if the request needs to be made again.

Sincerely,



Jeanette Reisenburg  
Consultant

## **Project Fact Sheet**

Company: Jemez Mountains Electric Cooperative, Inc.  
P.O. Box 128  
Espanola, NM 87532

Project: **Owl Springs I-Ramona Begay 14.4 kV Single Phase Power Line**

Purpose: To serve the Ramona Begay residence

Surface: Navajo Tribal Trust

Tribal Location: Section 31, T. 22 N, R. 10 W.; Section 35, T. 22 N., R. 11 W.; all NMPM,  
San Juan County, NM

Line Length: 528.07 feet

Right-of-Way Width: 20 feet

Total acreage .25 acres

Agent : Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87508  
505/466-8120  
Fax: 505/466-9682