

AMENDMENT NO. 10
TO THE
NAVAJO PROJECT
CO-TENANCY AGREEMENT

By FERC order/notice of acceptance dated _____ in FERC Docket
No. _____, this Amendment No. 10 was accepted for
filing and the rate schedules became effective on _____.

Execution Original
Issue Date: October 23, 2012

AMENDMENT NO. 10
TO THE
NAVAJO PROJECT
CO-TENANCY AGREEMENT

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1. PARTIES.....	1
2. RECITALS.....	1
3. AGREEMENT.....	3
4. AGREEMENT MODIFICATIONS	3
5. EFFECT.....	8
6. EXECUTION AND EFFECTIVE DATE.....	8
7. SIGNATURE CLAUSE.....	10

EXHIBITS

B	TRANSMISSION SYSTEM
B-B, SHEET 1	TRANSMISSION SYSTEM OWNERSHIP
B-B, SHEET 2	TRANSMISSION SYSTEM OWNERSHIP - NAVAJO GENERATING STATION & NAVAJO 500 KV SWITCHYARD
B-B, SHEET 3	TRANSMISSION SYSTEM OWNERSHIP - MOENKOPI SWITCHYARD
B-B, SHEET 4	TRANSMISSION SYSTEM OWNERSHIP - CEDAR MOUNTAIN SWITCHYARD & YAVAPAI SWITCHYARD
B-B, SHEET 5	TRANSMISSION SYSTEM OWNERSHIP - DUGAS SWITCHYARD
B-B, SHEET 6	TRANSMISSION SYSTEM OWNERSHIP - WESTWING SWITCHYARD
B-B, SHEET 7	TRANSMISSION SYSTEM OWNERSHIP - McCULLOUGH SUBSTATION
B-B, SHEET 8	TRANSMISSION SYSTEM OWNERSHIP - CRYSTAL SUBSTATION
D	ORIGINAL WESTWING 230 KV SWITCHYARD (INCLUDING COMMON FACILITIES) OWNERSHIP PERCENTAGES

**AMENDMENT NO. 10
TO THE
NAVAJO PROJECT
CO-TENANCY AGREEMENT**

1. **PARTIES:** The parties to this AMENDMENT NO. 10 to the NAVAJO PROJECT CO-TENANCY AGREEMENT ("Amendment No. 10") are: THE UNITED STATES OF AMERICA, hereinafter referred to as the "United States" or "U.S.," acting through the Secretary of the Interior, a duly appointed successor or a duly authorized representative; ARIZONA PUBLIC SERVICE COMPANY, hereinafter referred to as "Arizona" or "APS," an Arizona corporation; THE CITY OF LOS ANGELES by and through the Department of Water and Power, hereinafter referred to as "Los Angeles" or "LADWP," a department organized and existing under the Charter of the City of Los Angeles, a municipal corporation of the State of California; NEVADA POWER COMPANY, doing business as NV Energy, hereinafter referred to as "Nevada" or "NVE," a Nevada corporation; SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT, hereinafter referred to as "Salt River Project" or "SRP," an agricultural improvement district organized and existing under the laws of the State of Arizona; and TUCSON ELECTRIC POWER COMPANY, hereinafter referred to as "Tucson" or "TEP," formerly known as Tucson Gas & Electric Company, an Arizona corporation; all of the foregoing are sometimes individually referred to as "Participant" and collectively as "Participants."

2. **RECITALS:** This Amendment No. 10 is made with reference to the following facts, among others:

2.1 On March 23, 1976, the Participants entered into the NAVAJO PROJECT CO-TENANCY AGREEMENT ("Co-Tenancy Agreement"), as supplemented by Supplement No. 1 and amended by Amendment Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9, and as may be further supplemented and/or amended, which established certain terms and conditions relating to their interest in and their ownership of the Navajo

Project and which established certain rights and obligations under the Project Agreements.

- 2.2 On September 29, 1998, the Transmission Engineering and Operating Committee approved the technical feasibility of the addition of a second 500/230 kV transformer at the Yavapai Switchyard. This approval was based on the results of technical studies performed by Arizona and presented by Arizona to the Transmission Engineering and Operating Committee on September 29, 1998.
- 2.3 On September 30, 2008, the Transmission Engineering and Operating Committee approved the technical feasibility of the interconnection of the new Dugas Switchyard to the Navajo-Westwing 500 kV transmission line. This approval was based on the results of technical studies performed by Arizona and presented by Arizona to the Transmission Engineering and Operating Committee on April 17, 2008.
- 2.4 On April 13, 2011, the Transmission Engineering and Operating Committee approved the technical feasibility of the interconnection of the Cedar Mountain Switchyard to the Moenkopi-Yavapai 500 kV transmission line. This approval was based on the results of technical studies performed by Arizona and presented by Arizona to the Transmission Engineering and Operating Committee on April 13, 2011.
- 2.5 The Participants desire to enter into this Amendment No. 10 to reflect: (i) the addition of a second 500/230 kV transformer at the Yavapai Switchyard; (ii) the interconnection of the new Dugas Switchyard to the Navajo-Westwing 500 kV transmission line; (iii) the interconnection of the new Cedar Mountain Switchyard to the Moenkopi-Yavapai 500 kV transmission line; (iv) name change for the Waddell 230 kV Interconnection to the Raceway 230 kV Interconnection; (v) the addition of two (2) 500 kV bus reactors

in the Westwing 500 kV Switchyard; (vi) the removal of a TEP 500/345 kV transformer from the Westwing Substation; (vii) the removal of Project Series Capacitors from the Navajo 500 kV Switchyard end of the Navajo-Moenkopi 500 kV transmission line; (viii) the addition of two (2) 230 kV bus sectionalizing circuit breakers in the Westwing 230 kV Switchyard; (ix) the addition of new designated points of delivery for certain Participants; (x) changes to the descriptions of certain Components of the Transmission System in Exhibit B to reflect the above modifications; (xi) changes to the one line diagrams in Exhibit B-B to reflect the above modifications; (xii) modifications to Exhibit D to reflect name changes within the document.

3. **AGREEMENT:** In consideration of the mutual covenants and benefits to be derived from this Amendment No. 10, the Participants agree as follows:

4. **AGREEMENT MODIFICATIONS:**

4.1 Section 1, PARTIES, of the Co-Tenancy Agreement is hereby deleted in its entirety and a new Section 1 is hereby substituted to read in its entirety as follows:

"1. **PARTIES:** The parties to this AMENDMENT NO. 10 to the NAVAJO PROJECT CO-TENANCY AGREEMENT ("Amendment No. 10") are: THE UNITED STATES OF AMERICA, hereinafter referred to as the "United States" or "U.S.," acting through the Secretary of the Interior, a duly appointed successor or a duly authorized representative; ARIZONA PUBLIC SERVICE COMPANY, hereinafter referred to as "Arizona" or "APS," an Arizona corporation; THE CITY OF LOS ANGELES by and through the Department of Water and Power, hereinafter referred to as "Los Angeles" or "LADWP," a department organized and existing under the Charter of the City of Los Angeles, a municipal corporation of the State of California; NEVADA POWER COMPANY, doing business as NV Energy, hereinafter referred to as "Nevada"

or "NVE," a Nevada corporation; SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT, hereinafter referred to as "Salt River Project" or "SRP," an agricultural improvement district organized and existing under the laws of the State of Arizona; and TUCSON ELECTRIC POWER COMPANY, hereinafter referred to as "Tucson" or "TEP," formerly known as Tucson Gas & Electric Company, an Arizona corporation; all of the foregoing are sometimes individually referred to as "Participant" and collectively as "Participants." 4.2 Subsection 6.2.2, in Section 6, OWNERSHIP AND TITLES, of the Co-Tenancy Agreement is hereby deleted in its entirety and a new Subsection 6.2.2 is hereby substituted to read in its entirety as follows:

"6.2.2 Navajo-Dugas 500 kV line

Dugas-Westwing 500 kV line

Moenkopi-Cedar Mountain 500 kV line

Cedar Mountain Switchyard

Cedar Mountain-Yavapai 500 kV line

Yavapai-Westwing 500 kV line

Westwing 500 kV Switchyard

(i) Arizona = 24.7%

(ii) Salt River Project = 38.3% for its own use and benefit; and

23.7% for the use and benefit of the United States in accordance with Project Agreements.

(iii) Tucson = 13.3%"

4.3 A new Subsection 6.2.2.B in Section 6, OWNERSHIPS AND TITLES, of the Co-Tenancy Agreement is hereby inserted to read in its entirety as follows:

"6.2.2B Dugas Switchyard

Arizona = 100.0% for the use and benefit of the Participants in accordance with Project Agreements."

4.4 Paragraph 6.2.4 in Section 6, OWNERSHIPS AND TITLES, of the Co-Tenancy Agreement is hereby deleted in its entirety.

4.5 Paragraph 6.2.5 in Section 6, OWNERSHIPS AND TITLES, of the Co-Tenancy Agreement is hereby deleted in its entirety and a new Paragraph 6.2.4 is hereby substituted to read in its entirety as follows:

"6.2.4 Westwing 230 kV Switchyard

6.2.4.1 Original Westwing 230 kV Switchyard (including common facilities)

(i) Arizona = 32.1%

(ii) Salt River Project = 36.1% for its own use and benefit; and

= 31.8% for the use and benefit of the United States in accordance with Project Agreements.

The calculation of ownership percentages for the original Westwing 230 kV Switchyard shall be as set forth in Exhibit D hereto.

6.2.4.2 Raceway 230 kV Interconnection.

Salt River Project = 100% for the use and benefit of the United States in accordance with the Project Agreements.

6.2.4.3 Two (2) Westwing 230/69 kV Interconnections

Arizona = 100%

6.2.4.4 Westwing 230 kV Switchyard Bus Split

Arizona = 100%

4.6 Sections 6.2.6, 6.2.7, and 6.2.7A of Section 6, OWNERSHIPS AND TITLES, of the Co-Tenancy Agreement are hereby renumbered to 6.2.5, 6.2.6, and 6.2.7 respectively.

4.7 Subsection 8.5 in Section 8, USE OF THE TRANSMISSION SYSTEM, of the Co-Tenancy Agreement is hereby deleted in its entirety and a new Subsection 8.5 is hereby substituted to read in its entirety as follows:

"8.5 The Participants' designated points of delivery shall be as follows:

8.5.1 Arizona = Navajo 500 kV Switchyard, Westwing Substation, Moenkopi Switchyard, Cedar Mountain Switchyard, Yavapai Switchyard, and Dugas Switchyard.

8.5.2 Los Angeles = Navajo 500 kV Switchyard, McCullough 500 kV Switchyard, Moenkopi Switchyard and South Crystal 500 kV Switchyard.

8.5.3 Nevada = Navajo 500 kV Switchyard,
McCullough 500 kV Switchyard,
Moenkopi Switchyard and South
Crystal 500 kV Switchyard.

8.5.4 Salt River Project = Navajo 500 kV Switchyard,
Westwing Substation, Moenkopi
Switchyard, Cedar Mountain
Switchyard, Yavapai
Switchyard, and Dugas
Switchyard.

8.5.5 Tucson = Navajo 500 kV Switchyard,
Westwing Substation, Moenkopi
Switchyard, Cedar Mountain
Switchyard, Yavapai
Switchyard, and Dugas
Switchyard.

8.5.6 United States = Navajo 500 kV Switchyard,
McCullough 500 kV Switchyard,
Westwing Substation, Moenkopi
Switchyard, Cedar Mountain
Switchyard, Yavapai
Switchyard, South Crystal 500
kV Switchyard, and Dugas
Switchyard."

4.8 Exhibit B, TRANSMISSION SYSTEM, to the Co-Tenancy Agreement is hereby deleted in its entirety and replaced by a new Exhibit B attached hereto and by this reference incorporated herein.

4.9 Exhibit B-B, TRANSMISSION SYSTEM OWNERSHIP, to the Co-Tenancy Agreement is hereby deleted in its entirety and replaced by a new

EXHIBIT B-B attached hereto and by this reference incorporated herein.

4.10 Exhibit D, ORIGINAL WESTWING 230 KV SWITCHYARD (INCLUDING COMMON FACILITIES) OWNERSHIP PERCENTAGES, to the Co-Tenancy Agreement is hereby deleted in its entirety and replaced by a new Exhibit D attached hereto and by this reference incorporated herein.

5. **EFFECT:** Except for the changes set forth in this Amendment No. 10, all provisions of the Co-Tenancy Agreement as supplemented by Supplement No. 1 and as amended by Amendment Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 shall remain in full force and effect to the extent that such provisions are not in conflict or inconsistent with this Amendment No. 10. In the event of any conflict between the provisions of this Amendment No. 10 and the Co-Tenancy Agreement as supplemented by Supplement No. 1 and as amended by Amendment Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9, the provisions of this Amendment No. 10 shall govern.

6. **EXECUTION AND EFFECTIVE DATE:**

6.1 This Amendment No. 10 may be executed in any number of counterparts and, upon execution and delivery by each Participant, the executed and delivered counterparts together shall have the same force and effect as an original instrument as if all the Participants had signed the same instrument. Any signature page of this Amendment No. 10 may be detached from any counterpart of this Amendment No. 10 without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Amendment No. 10 identical in form thereto, but having attached to it one or more signature pages.

6.2 When this Amendment No. 10 to the Co-Tenancy Agreement has been executed by, and delivered to, the duly authorized representative of each Participant, Arizona shall promptly file this Amendment No. 10 with FERC and, if accepted for filing by FERC without

condition or modification, this Amendment No. 10 shall be effective as of the date specified by Arizona in the filing letter to FERC.

- 6.3 In the event FERC conditions or modifies this Amendment No. 10, Arizona shall promptly notify all the other Participants. Upon written notice given within thirty (30) days from the date of Arizona's notice to all other Participants by any Participant that such condition or modification is objectionable, this Amendment No. 10 shall terminate and be of no further force or effect. If no written notice is given by any Participant that such condition or modification is objectionable within such thirty (30) day period, this Amendment No. 10 shall become effective the day after such thirty (30) day period. Arizona shall set forth such conditions or modifications in an appendix which shall be attached hereto. Such appendix shall constitute an amendment to this Amendment No. 10 which amendment shall not require signature by the Participants.

[SIGNATURES APPEAR ON NEXT PAGE]

7. **SIGNATURE CLAUSE:** Each Participant hereto represents and warrants that the person executing this Amendment No. 10 to the Navajo Project Co-Tenancy Agreement has been duly authorized to act on its behalf. This Amendment No. 10 to the Navajo Project Co-Tenancy Agreement is hereby executed as of the ____ day of _____, 2012.

UNITED STATES OF AMERICA

Signature _____

Name _____

Regional Director
Lower Colorado Region
Title U.S. Bureau of Reclamation _____

Date Signed _____

ARIZONA PUBLIC SERVICE COMPANY

Signature _____

Name _____

Title _____

Date Signed _____

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES

by

BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

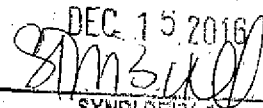
By _____

and _____

General Manager, David H. Wright
Secretary, Barbara Moschos

Date Signed _____

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER CITY ATTORNEY

DEC 15 2016
BY 
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

NEVADA POWER COMPANY, d/b/a NV Energy

Signature _____

Name _____

Title _____

Date Signed _____

SALT RIVER PROJECT AGRICULTURAL
IMPROVEMENT AND POWER DISTRICT

Signature _____

Name _____

Title _____

Date Signed _____

TUCSON ELECTRIC POWER COMPANY

Signature _____

Name _____

Title _____

Date Signed _____

EXHIBIT B

TRANSMISSION SYSTEM*

I. The SOUTHERN TRANSMISSION SYSTEM shall consist of the following Components of the Transmission System:

A. NAVAJO 500 KV SWITCHYARD

The Navajo 500 kV Switchyard, a basic breaker-and-a-half scheme, comprising:

- (i) the 500 kV busses and the structures therefor;
- (ii) the control building;
- (iii) the termination facilities for
 - (a) three (3) generator step-up transformers,
 - (b) one (1) station service transformer,
 - (c) the Navajo-Crystal 500 kV line,
 - (d) the Navajo-Moenkopi 500 kV line, and
 - (e) the Navajo-Dugas 500 kV line,including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor; and
- (iv) relays.

B. NAVAJO-CRYSTAL LINE COMPENSATION

The Project Series Capacitors, Incremental Series Capacitors and shunt reactors on the Navajo 500 kV Switchyard end of the Navajo-Crystal 500 kV line including, but not limited to, the capacitors, control equipment, reactors, surge arrestors, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.

C. NAVAJO-MOENKOPI 500 KV LINE

The Navajo-Moenkopi 500 kV line, from and including the first 500 kV line dead-end tower outside the Navajo 500 kV Switchyard to a

similar tower location outside the Moenkopi Switchyard and the Navajo-Moenkopi 500 kV line right-of-way.

D. NAVAJO-DUGAS-WESTWING 500 KV LINE

1. Navajo-Dugas 500 kV Line

- a. The Navajo-Dugas 500 kV line, from and including the first 500 kV line dead-end tower outside the Navajo 500 kV Switchyard to a similar tower location outside the Dugas Switchyard and the portion of the original Navajo-Westwing 500 kV line right-of-way associated with the Navajo-Dugas 500 kV line segment.
- b. The Project Series Capacitors and shunt reactors on the Navajo 500 kV Switchyard end of the Navajo-Dugas 500 kV line including, but not limited to, the capacitors, control equipment, reactors, surge arrestors, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.
- c. The Project Series Capacitors and shunt reactors on the Dugas Switchyard end of the Navajo-Dugas 500 kV line including, but not limited to, the capacitors, control equipment, reactors, surge arrestors, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.

2. Dugas-Westwing 500 kV Line

The Dugas-Westwing 500 kV line, from and including the first 500 kV line dead-end tower outside the Dugas Switchyard to a similar tower located outside the Westwing 500 kV Switchyard

and the portion of the original Navajo-Westwing 500 kV line right-of-way associated with the Dugas-Westwing 500 kV line segment.

E. MOENKOPPI-CEDAR MOUNTAIN-YAVAPAI 500 KV LINE

1. The Moenkopi-Cedar Mountain 500 kV line from and including the first 500 kV line dead-end tower outside the Moenkopi Switchyard to a similar tower location outside the Cedar Mountain Switchyard and the portion of the original Moenkopi-Westwing 500 kV line right-of-way associated with the Moenkopi-Cedar Mountain 500 kV line segment.
2. The Cedar Mountain-Yavapai 500 kV line from and including the first 500 kV line dead-end tower outside the Cedar Mountain Switchyard to a similar tower location outside the Yavapai Switchyard and the portion of the original Moenkopi-Westwing 500 kV line right-of-way associated with the Cedar Mountain-Yavapai 500 kV line segment.

F. OTHER ASSOCIATED COMPONENTS

1. The additions to the Moenkopi Switchyard comprising:
 - (i) the additional 500 kV busses and the structures therefor;
 - (ii) the termination facilities for
 - (a) the Navajo-Moenkopi 500 kV line, and
 - (b) the Moenkopi-Cedar Mountain 500 kV line, including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor;
 - (iii) the additions to the termination facilities for
 - (a) the Four Corners-Moenkopi 500 kV line, and
 - (b) the Moenkopi-Eldorado 500 kV line,

including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor; and

(iv) relays.

2. The Project Series Capacitors on the Moenkopi Switchyard end of the Navajo-Moenkopi 500 kV line including, but not limited to, the capacitors, control equipment, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.
3. The Project Series Capacitors and shunt reactors on the Moenkopi Switchyard end of the Moenkopi-Cedar Mountain 500 kV line including, but not limited to, the capacitors, control equipment, reactors, surge arrestors, hazard fencing, disconnects, structures, and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.

G. YAVAPAI SWITCHYARD

The Yavapai Switchyard, a basic ring bus scheme, comprising:

- (i) the 500 kV busses and the structures therefor;
- (ii) the termination facilities for
 - (a) two (2) 500/230 kV transformer banks,
 - (b) the Cedar Mountain-Yavapai 500 kV line, and
 - (c) the Yavapai-Westwing 500 kV line,
including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor;
- (iii) relays;

- (iv) common facilities; and
- (v) other facilities up to, but excluding, the connection to the high-side bushings of the two (2) 500/230 kV transformer banks.

The Yavapai Switchyard common facilities include, but are not limited to, roads, trenches and conduit for system control and power cables, station grounding grid, overhead static shield, fencing and gates, yard lighting, maintenance and control buildings, station batteries, chargers and distribution panels, station power transformers and distribution panels, remote terminal units, digital fault recorders, alarms, annunciators, public address system, communications equipment, and related land or land rights.

H. YAVAPAI-WESTWING 500 KV LINE

1. The Yavapai-Westwing 500 kV line, from and including the first 500 kV line dead-end tower outside the Yavapai Switchyard to a similar tower location outside the Westwing 500 kV Switchyard and the portion of the original Moenkopi-Westwing 500 kV line right-of-way associated with the Yavapai-Westwing 500 kV line segment.
2. The Project Series Capacitors and shunt reactors on the Westwing 500 kV Switchyard end of the Yavapai-Westwing 500 kV line including, but not limited to, the capacitors, control equipment, reactors, surge arrestors, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.

I. WESTWING SUBSTATION

1. The Westwing 500 kV Switchyard, a basic breaker-and-a-half scheme, comprising:

- (i) the 500 kV busses and the structures therefor;
- (ii) the termination facilities for
 - (a) the Yavapai-Westwing 500 kV line,
 - (b) the Dugas-Westwing 500 kV line,
 - (c) two (2) 500/230 kV transformer banks,
 - (d) one (1) 500 kV line to TEP 500/345 kV substation,
 - (e) 500 kV bus reactor #1, and
 - (f) 500 kV bus reactor #2,including, but not limited to, power circuit breakers, metering transformers, surge arresters, disconnect switches, and the structures therefor;
- (iii) relays;
- (iv) the control building; and
- (v) related land and land rights.

2. The two (2) Westwing Substation 1494 MVA 500/230 kV transformer banks and spare 498 MVA 500/230 kV transformer to be located within the boundaries of the Westwing 500 kV Switchyard and the equipment associated therewith including, but not limited to, foundations, structures, insulators and hardware, transformer leads from 500 kV bushings to points of termination on the attachments to the 500 kV switchyard structure, and 230 kV leads up to the points of attachment where the 230 kV lines from adjacent facilities attach to the transformer dead-end tower.

3. Westwing 230 kV Switchyard

3.1 The original Westwing 230 kV Switchyard (including common facilities), a basic breaker-and-a-half scheme, comprising:

- (i) the 230 kV busses and the structures therefor;
- (ii) the termination facilities for
 - (a) two (2) 500/230 kV transformer banks,
 - (b) one (1) Arizona 230 kV line,
 - (c) one (1) future Arizona 230 kV line,
 - (d) two (2) Salt River Project 230 kV lines,and
 - (e) two (2) United States 230 kV lines, including, but not limited to, power circuit breakers, metering transformers, disconnect switches, insulators and hardware, and the structures therefor;
- (iii) the 230 kV leads between points of attachment on the transformer dead-end towers to the main switchyard structures, and the structures therefor;
- (iv) the 230 kV leads up to the points of attachment where the 230 kV transmission lines attach to the main switchyard structures, and the structures therefor;
- (v) relays;
- (vi) the control building; and
- (vii) related land or land rights.

3.2 The 230 kV switchyard common facilities which are described in Exhibit L-1, COMMON FACILITIES COSTS - 230KV SWITCHYARD, attached hereto.

- 3.3 The Raceway 230 kV Interconnection comprising termination facilities for the Raceway 230 kV transmission line, including, but not limited to, power circuit breakers, metering transformers, disconnect switches, structures, turning tower, take-off structure, insulators and associated hardware, 230 kV conductor from its point of attachment on the first tower located outside the perimeter fence to the turning tower, 230 kV leads between the turning tower and the take-off structure, and the fiber optic cable between its termination point at the patch panel on the turning tower to the control house. In addition, the termination facilities for the Raceway 230 kV Interconnection shall be deemed to include the remote terminal unit (RTU) installed pursuant to Letter Agreement No. 87-BCA-10084, dated September 3, 1987 between the United States of America, acting by and through the Western Area Power Administration, and the Arizona Public Service Company.
- 3.4 The two (2) Westwing 230/69 kV Interconnections comprising termination facilities for the two (2) Westwing 230/69 kV transformer banks, including, but not limited to, power circuit breakers, metering transformers, disconnect switches, structures, relays, turning towers, take-off structures, insulators, associated hardware, and 230 kV conductors from their point of attachment on the 230 kV bus to the first towers located outside the perimeter fence.
- 3.5 The Westwing 230 kV Switchyard Bus Split comprising two (2) bus sectionalizing breakers and one (1) 100

MVAR reactor which split the Westwing 230 kV Switchyard into two (2) switchyards.

J. CEDAR MOUNTAIN SWITCHYARD

The Cedar Mountain Switchyard, a basic ring bus scheme, comprising:

- (i) the 500 kV busses and the structures therefor;
- (ii) the termination facilities for
 - (a) the Cedar Mountain-Yavapai 500 kV line,
 - (b) the Cedar Mountain-Moenkopi 500 kV line, and
 - (c) the Perrin Ranch Wind Farm 500 kV Interconnection, including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor;
- (iii) relays; and
- (iv) common facilities.

The Cedar Mountain Switchyard common facilities include, but are not limited to, roads, trenches and conduit for system control and power cables, station grounding grid, overhead static shield, fencing and gates, yard lighting, maintenance and control buildings, station batteries, chargers and distribution panels, remote terminal units, digital fault recorders, alarms, annunciators, public address system, communications equipment, and related land or land rights.

K. DUGAS SWITCHYARD

The Dugas Switchyard, a basic ring bus scheme, comprising:

- (i) the 500 kV busses and the structures therefor;
- (ii) the termination facilities for
 - (a) the Navajo-Dugas 500 kV line,
 - (b) the Dugas-Westwing 500 kV line, and
 - (c) the APS 500/69 kV transformer bank,

including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor;

- (iii) relays;
- (iv) common facilities; and
- (v) other facilities up to, but excluding, the high-side bushings of the 500/69 kV transformer.

The Dugas Switchyard common facilities include, but are not limited to, roads, trenches and conduit for system control and power cables, station grounding grid, overhead static shield, fencing and gates, yard lighting, maintenance and control buildings, station batteries, chargers and distribution panels, station power transformers and distribution panels, remote terminal units, digital fault recorders, alarms, annunciators, public address system, communications equipment, and related land or land rights.

L. COMMUNICATION FACILITIES

All the communication facilities necessary to control the Southern Transmission System including such facilities located at the Navajo 500 kV Switchyard, the Moenkopi Switchyard, the Cedar Mountain Switchyard, the Yavapai Switchyard, the Dugas Switchyard, and the Westwing Substation, more particularly described in Exhibit K attached hereto.

II. The WESTERN TRANSMISSION SYSTEM shall consist of the following Components of the Transmission System:

A. MCCULLOUGH FACILITIES

The McCullough Facilities shall consist of the following components:

1. The McCullough 500 kV Switchyard, a basic breaker-and-a-half scheme, comprising: (i) the 500 kV busses and the structures therefor; (ii) the termination facilities for the 500/230 kV transformer banks H, I and J, the Crystal-McCullough 500 kV line, the McCullough-Eldorado 500 kV line, and the McCullough-Victorville 500 kV Line 1 and Line 2 including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor; and (iii) other facilities up to and including the connection to the high-side bushings of the 500/230 kV transformer banks. The McCullough 500 kV Switchyard shall not include: (i) the McCullough Substation Site; (ii) any termination facilities associated with a third-party interconnection; (iii) any McCullough Substation Common Facilities; or (iv) any 500/230 kV transformer banks located at the McCullough Substation.
2. The McCullough Substation Common Facilities, all or part of those certain structures, improvements and facilities of the McCullough Substation, which include, but are not limited to: dikes, roadways, control building, communications building, ancillary buildings, trenches, conduits, control and power cables, control equipment, station communication equipment, protection equipment, batteries, auxiliary equipment, station grounding grid, fencing, lighting and yard improvements; and any other facilities that provide support for the McCullough Substation. McCullough Substation shall not include: (i) the McCullough Substation Site; (ii) any termination facilities associated with any line or transformer termination at the McCullough Substation; or (iii) any 500/230 kV transformer banks located at the McCullough Substation.

B. NAVAJO-CRYSTAL 500 KV LINE

The Navajo-Crystal 500 kV line, from and including the first 500 kV line dead-end tower located outside the Navajo 500 kV Switchyard to the first 500 kV transmission line tower located outside the Crystal 500 kV Switchyard, including the patrol headquarters and the Navajo-Crystal 500 kV line right-of-way.

C. CRYSTAL FACILITIES

1. The South Crystal 500 kV Switchyard; a basic breaker-and-a-half scheme to be initially installed as a basic ring bus scheme, comprising:

- (i) the 500 kV busses and the structures therefor;
- (ii) the termination facilities for:
 - (a) two (2) 500/230 kV transformer banks,
 - (b) two (2) 500 kV phase-shifting transformers,
 - (c) the Navajo-Crystal 500 kV line, and
 - (d) the Crystal-McCullough 500 kV line,including, but not limited to, power circuit breakers, disconnect switches, and the structures therefor;
- (iii) relays; and
- (iv) other facilities up to and including the connection to the high-side bushings of the 500/230 kV transformer banks.

The South Crystal 500 kV Switchyard shall not include: (i) any Crystal Substation Common Facilities; (ii) any 500/230 kV transformer banks located at the Crystal Substation; or (iii) any 230 kV or 500 kV phase-shifting transformers located at the Crystal Substation.

2. The Crystal Substation Common Facilities, all or part of those certain structures, improvements and facilities of the

Crystal Substation, which include, but are not limited to: dikes, roadways, control building, communications building, ancillary buildings, trenches, conduits, remote terminal unit (RTU) and SCADA interface equipment, control and power cables, control equipment, batteries, auxiliary equipment, station grounding grid, fencing, lighting and yard improvements, and related land or land rights. Crystal Substation Common Facilities shall not include: (i) any termination facilities associated with any line or transformer termination at the Crystal Substation; (ii) any 500/230 kV transformer banks located at the Crystal Substation; or (iii) any 230 kV or 500 kV phase-shifting transformers located at the Crystal Substation.

3. The Project Series Capacitors and shunt reactors on the South Crystal 500 kV Switchyard end of the Navajo-Crystal 500 kV line including, but not limited to, the capacitors, control equipment, reactors, power circuit breaker, lightning arrestors, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV transmission line tower located outside the switchyard to the attachment on the main switchyard structure.

D. CRYSTAL-McCULLOUGH 500 KV LINE

1. The Crystal-McCullough 500 kV line, from and including the first 500 kV transmission line tower located outside the Crystal 500 kV Switchyard to the first 500 kV line dead-end tower located outside the McCullough 500 kV Switchyard, including the Crystal-McCullough 500 kV line right-of-way.
2. The Project Series Capacitors, Incremental Series Capacitors and shunt reactors on the McCullough 500 kV Switchyard end of the Crystal-McCullough 500 kV line including, but not

limited to, the capacitors, control equipment, reactors, power circuit breaker, lightning arrestors, hazard fencing, disconnects, structures and bus work from the switchyard side of the first 500 kV line dead-end tower located outside the switchyard to the attachment on the main switchyard structure.

E. WESTERN TRANSMISSION COMMUNICATIONS SYSTEM

The microwave system from a terminal located at the Navajo 500 kV Switchyard carrier room to a terminal located at the Red Mountain Microwave Station near Boulder City, Nevada, more particularly described as follows:

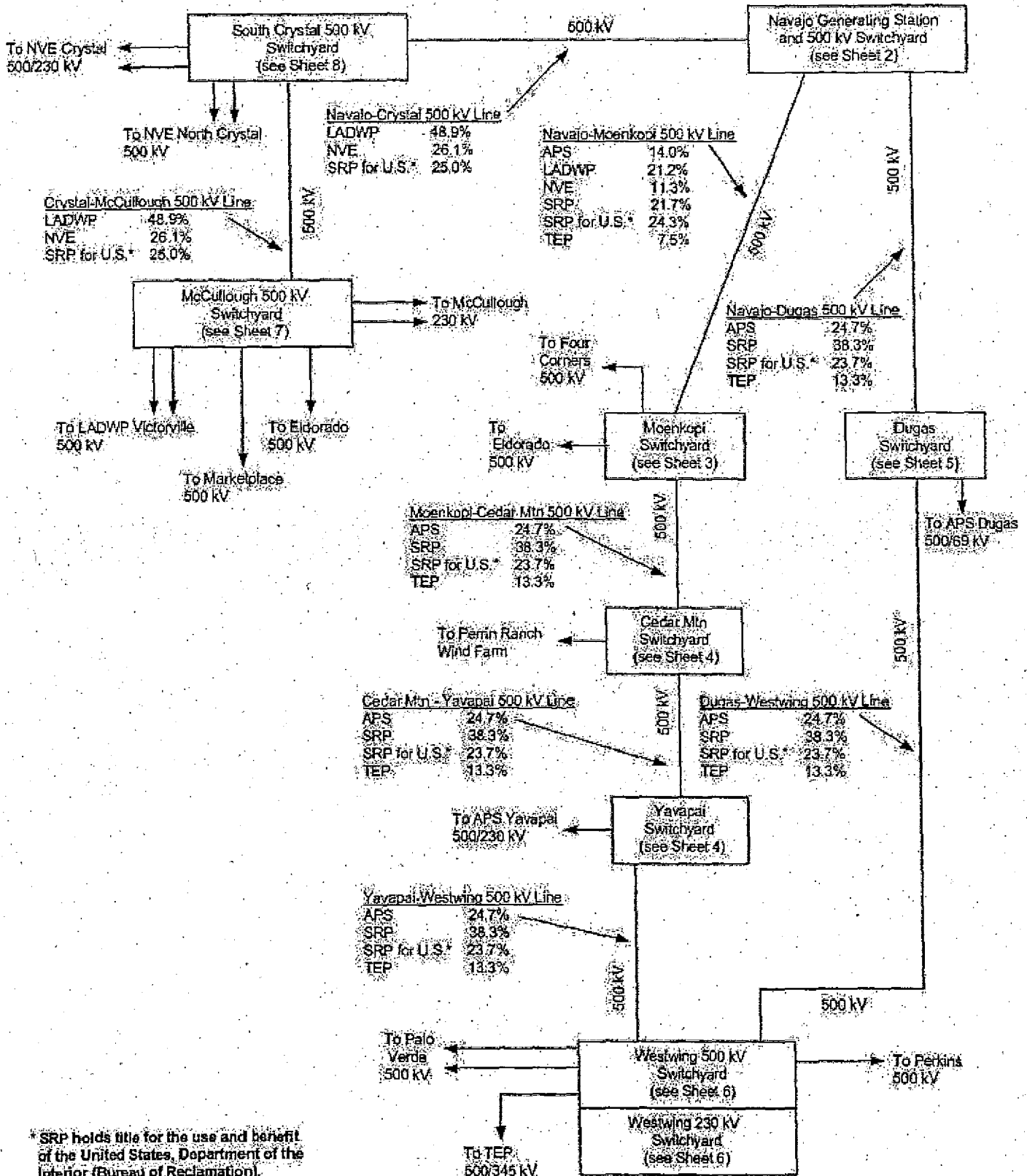
1. EQUIPMENT AT NAVAJO 500 KV SWITCHYARD: The Backbone Radio Frequency (RF) System shall include the following: (i) RF microwave equipment; (ii) the coaxial cable; (iii) the antenna; and (iv) batteries and battery chargers. The antenna and the coaxial cable shall be located in the Navajo 500 kV Switchyard and mounted on a tower structure which is part of the Navajo 500 kV Switchyard. The microwave equipment shall be located in the carrier room.
2. EQUIPMENT AT REPEATER STATIONS: The Backbone RF System shall include the following: (i) RF microwave equipment (digital or analog); (ii) all baseband treatment, including but not limited to amplifiers, bridges, filters, pads, and power supplies; (iii) supervisory alarm and control system; (iv) auxiliary power units, generators, fuel tanks, batteries, battery chargers and associated equipment; (v) buildings and associated electrical wiring, lighting, and air conditioning equipment; (vi) all tower structures, antennas, coaxial cable, mounting brackets, and associated equipment; (vii) microwave site property including fencing

and other required improvements; (viii) roads required for microwave site access; and (ix) any other material and/or equipment which may be required to implement the Backbone RF System.

3. EQUIPMENT AT RED MOUNTAIN: The Backbone RF System shall include the following: (i) RF microwave equipment; (ii) all baseband treatment; (iii) supervisory alarm and control system; (iv) the antenna; and (v) the coaxial cable.

**EXHIBIT B-B, SHEET 1
NAVAJO PROJECT CO-TENANCY AGREEMENT**

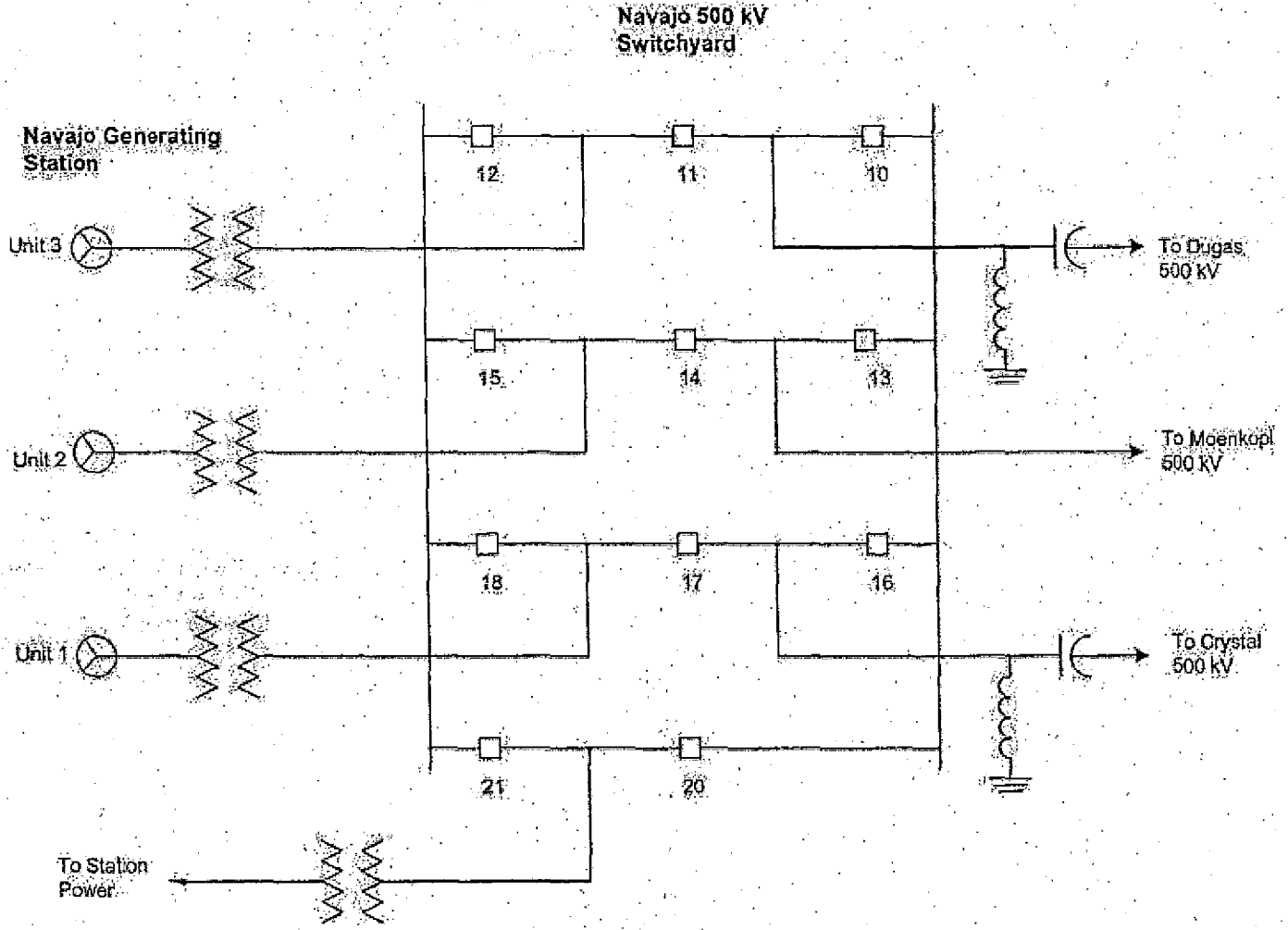
TRANSMISSION SYSTEM OWNERSHIP



* SRP holds title for the use and benefit of the United States, Department of the Interior (Bureau of Reclamation).

**EXHIBIT B-B SHEET 2
 NAVAJO PROJECT CO-TENANCY AGREEMENT
 TRANSMISSION SYSTEM OWNERSHIP**

**NAVAJO GENERATING STATION
AND
NAVAJO 500 kV SWITCHYARD**



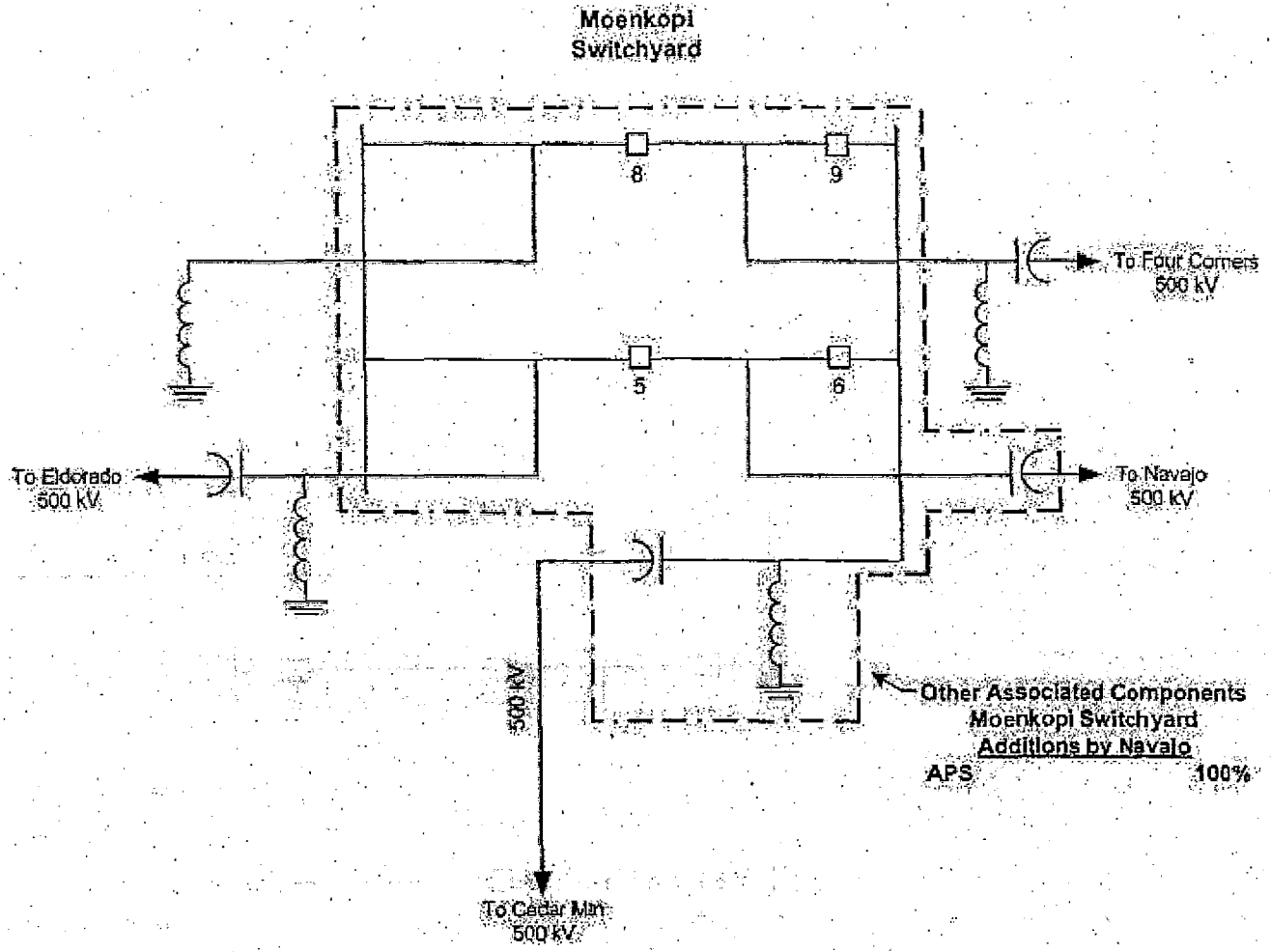
<u>Navajo Generating Station</u>	
APS	14.0%
LADWP	21.2%
NVE	11.3%
SRP	21.7%
SRP for U.S.*	24.3%
TEP	7.5%

<u>Navajo 500 kV Switchyard</u>	
APS	14.0%
LADWP	21.2%
NVE	11.3%
SRP	21.7%
SRP for U.S.*	24.3%
TEP	7.5%

* SRP holds title for the use and benefit of the United States, Department of the Interior (Bureau of Reclamation).

**EXHIBIT B-B, SHEET 3
 NAVAJO PROJECT CO-TENANCY AGREEMENT
 TRANSMISSION SYSTEM OWNERSHIP**

MOENKOPI SWITCHYARD

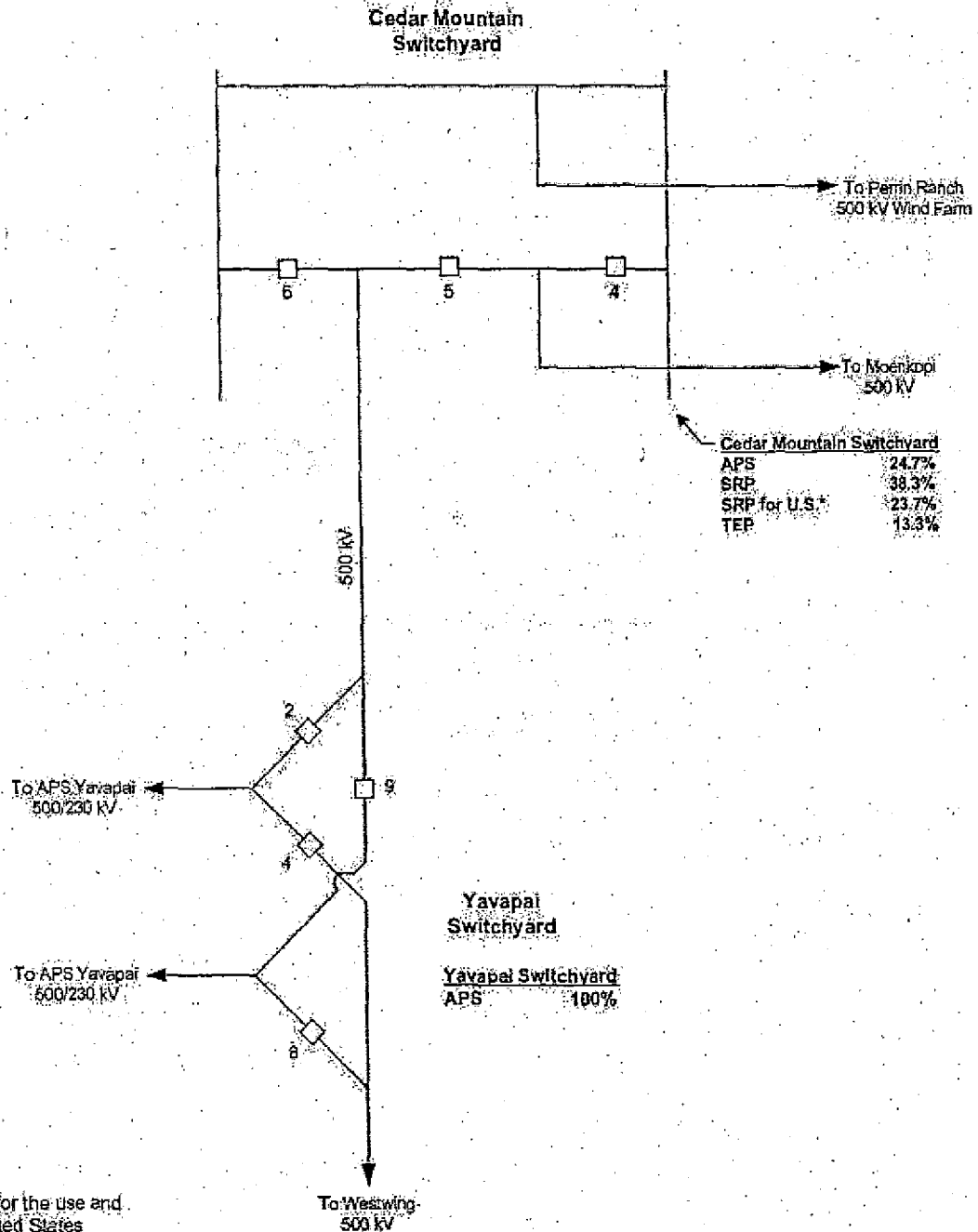


Legend:

- - - - - Non-Navajo

**EXHIBIT B-B, SHEET 4
 NAVAJO PROJECT CO-TENANCY AGREEMENT
 TRANSMISSION SYSTEM OWNERSHIP**

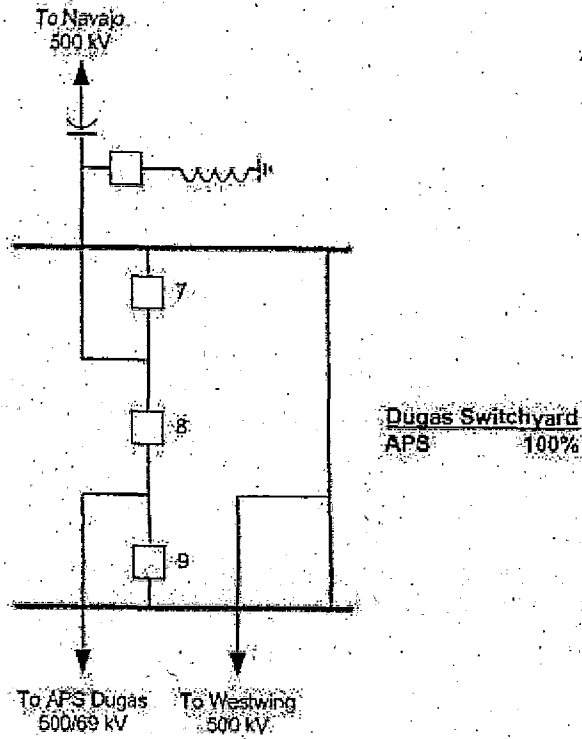
**CEDAR MOUNTAIN SWITCHYARD
 AND
 YAVAPAI SWITCHYARD**



* SRP holds title for the use and benefit of the United States Department of the Interior (Bureau of Reclamation).

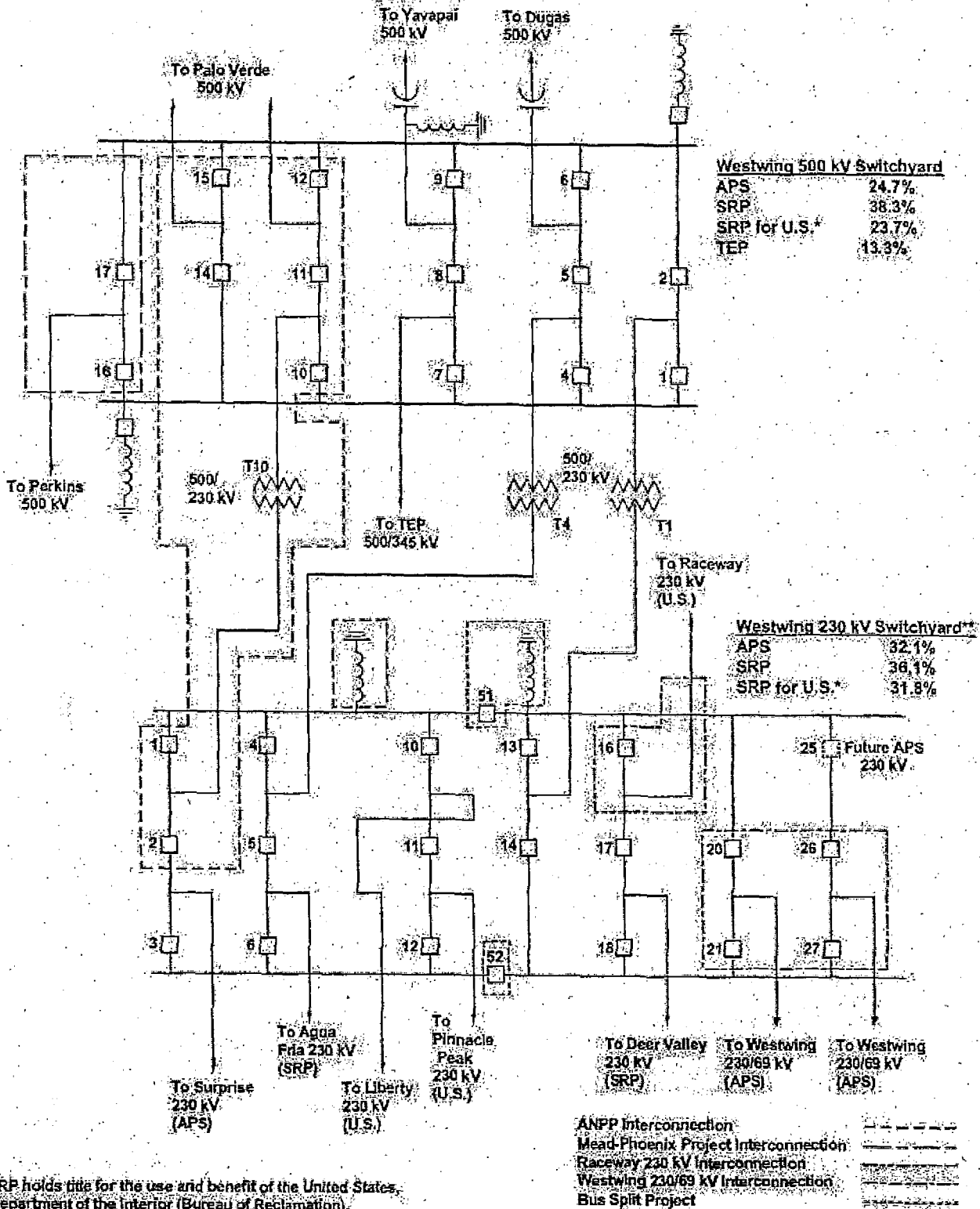
EXHIBIT B-B, SHEET 5
NAVAJO PROJECT CO-TENANCY AGREEMENT
TRANSMISSION SYSTEM OWNERSHIP

DUGAS SWITCHYARD



**EXHIBIT B-B, SHEET 6
NAVAJO PROJECT CO-TENANCY AGREEMENT
TRANSMISSION SYSTEM OWNERSHIP**

WESTWING SUBSTATION

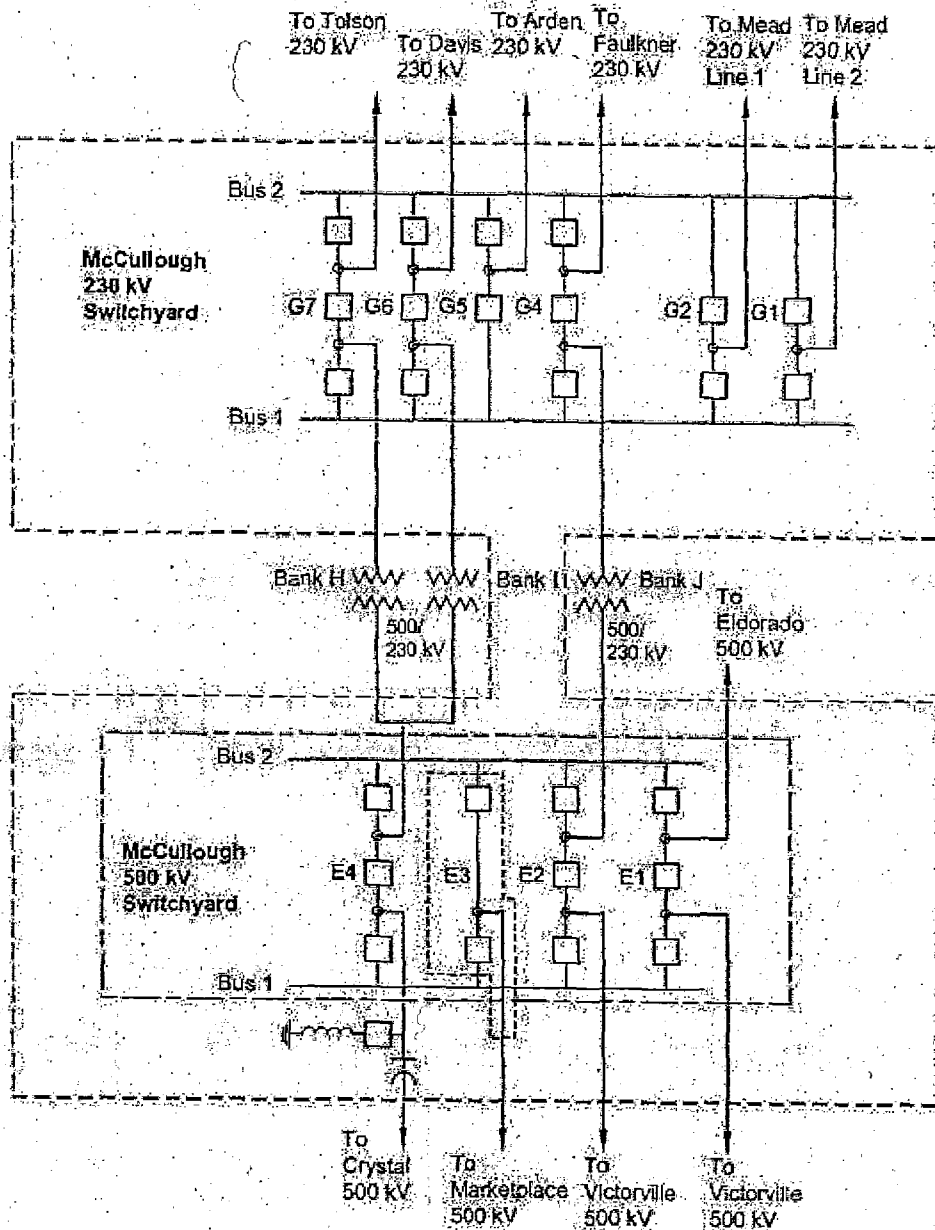


* SRP holds title for the use and benefit of the United States, Department of the Interior (Bureau of Reclamation).

** Ownership percentage calculation shown in Exhibit D.

**EXHIBIT B-B, SHEET 7
 NAVAJO PROJECT CO-TENANCY AGREEMENT
 TRANSMISSION SYSTEM OWNERSHIP**

McCULLOUGH SUBSTATION



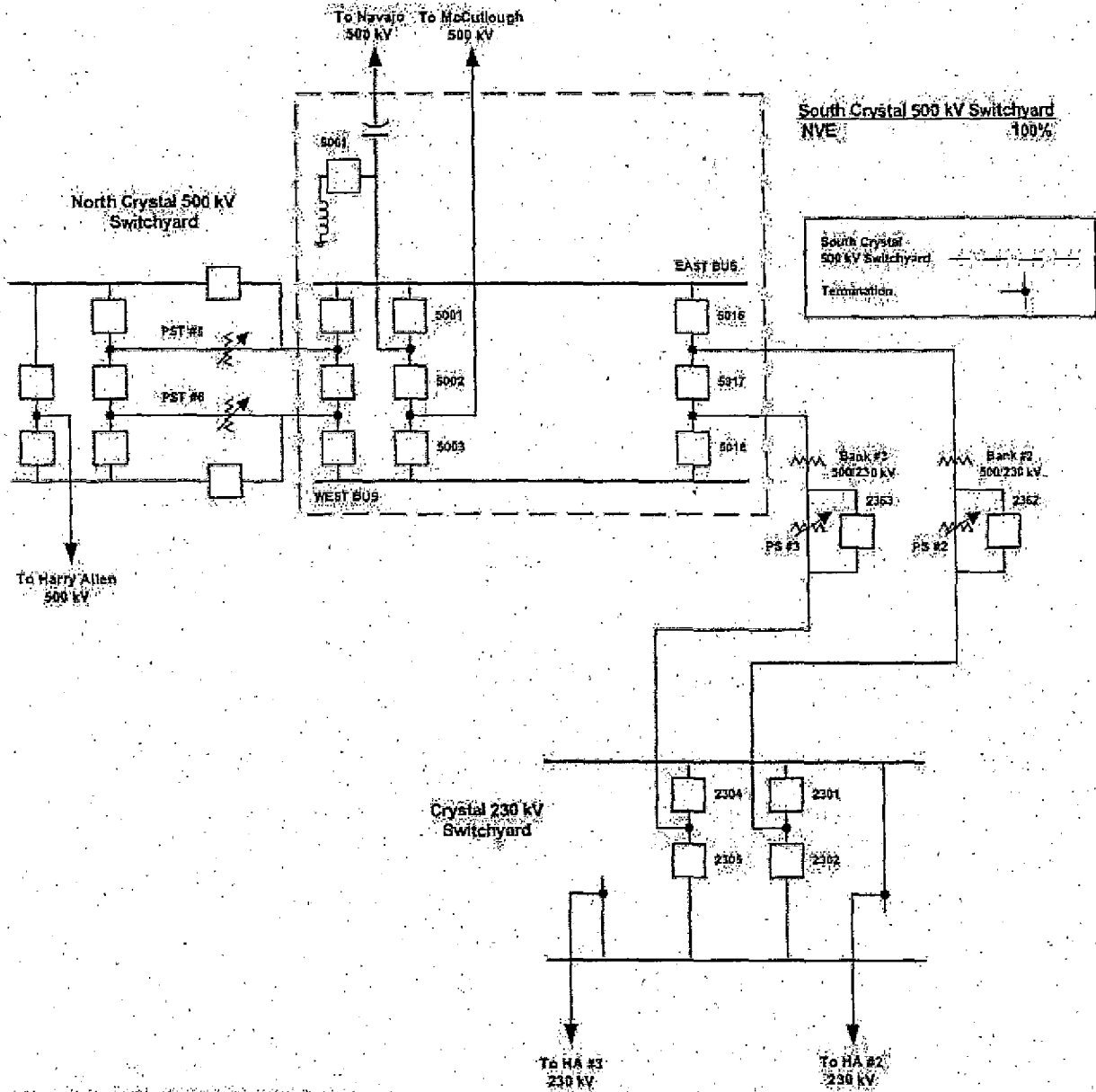
McCullough 500 kV Switchyard**		McCullough Substation Common Facilities***	
LADWP	70.1%	LADWP	70.1%
NVE	17.4%	NVE	17.4%
SRP for U.S.*	12.5%	SRP for U.S.*	12.5%

* SRP holds title for the use and benefit of the United States, Department of the Interior (Bureau of Reclamation).
 ** Ownership percentage calculation shown in Exhibit E.
 *** Ownership percentage calculation shown in Exhibit F.

Note: The McCullough 230 kV switchyard and transformer banks H, I and J are shown for information purposes only.

**EXHIBIT B - B, SHEET 8
 NAVAJO PROJECT CO-TENANCY AGREEMENT
 TRANSMISSION SYSTEM OWNERSHIP**

CRYSTAL SUBSTATION



Note: The North Crystal 500 kV switchyard, the 500 kV phase-shifting transformer, the Crystal 230 kV Switchyard, the 500/230 kV transformer banks, and the 230 kV phase-shifting transformers are shown for information purposes only.

EXHIBIT D

**ORIGINAL WESTWING 230 KV SWITCHYARD (INCLUDING COMMON FACILITIES)
OWNERSHIP PERCENTAGES**

<u>DESCRIPTION OF TERMINATION</u>	<u>OWNERSHIP (%)</u>		
	<u>ARIZONA</u>	<u>SRP</u>	<u>SRP FOR UNITED STATES⁽¹⁾</u>
500/230 kV Transformer Bank T1 ⁽²⁾	28.5	44.2	27.3
500/230 kV Transformer Bank T4 ⁽²⁾	28.5	44.2	27.3
Westwing-Deer Valley	0.0	100.0	0.0
Westwing-Agua Fria	0.0	100.0	0.0
Westwing-Pinnacle Peak	0.0	0.0	100.0
Westwing-Liberty	0.0	0.0	100.0
Westwing-Surprise	100.0	0.0	0.0
<u>Westwing-APS (future)</u>	<u>100.0</u>	<u>0.0</u>	<u>0.0</u>
TOTAL	257.0	288.4	254.6

Sum of Ownership Percentages:

$$\text{Arizona} + \text{SRP} + \text{SRP for United States}^{(1)} = 257.0 + 288.4 + 254.6 = 800.0$$

Ownership percentages for the terminations in the original Westwing 230 kV Switchyard (including common facilities) are shown in the above table and are used below to determine the ownership percentages for the original Westwing 230 kV Switchyard (including common facilities) infrastructure facilities such as, but not limited to, the busses, bus protection and metering, steel switchracks and associated concrete works, cable trenches and grounding.

$$\begin{aligned} \text{Arizona} &= (257.0/800.0) \times 100\% = 32.1\% \\ \text{SRP} &= (288.4/800.0) \times 100\% = 36.1\% \\ \text{SRP for United States}^{(1)} &= (254.6/800.0) \times 100\% = 31.8\% \end{aligned}$$

- (1) SRP holds title for the use and benefit of the United States, Department of the Interior (Bureau of Reclamation).
- (2) Ownership percentages for the two Westwing 500/230 kV transformer banks are set forth in Paragraph 6.2.3 of Section 6, OWNERSHIPS AND TITLES, to the Navajo Project Co-Tenancy Agreement.

NOTE: The calculation of ownership percentages for the original Westwing 230 kV Switchyard (including common facilities) shall not include any third party terminations at such switchyard, the United States' Raceway 230 kV Interconnection, or Arizona's Westwing 230/69 kV Interconnections.