VOLUME V: MAPS
1.0 INTRODUCTION

The Maps Volume of the Barren Ridge Renewable Transmission Project (BRRTP) Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) includes full-sized maps illustrating the locations of both human and natural environmental resources in the Project area. What follows is a general description of the resources illustrated on the maps.

1.1 PROJECT DESCRIPTION

The BRRTP would be located in Kern and Los Angeles counties. As proposed by the Los Angeles Department of Water and Power (LADWP), it would be approximately 76 miles in length extending from the Barren Ridge Switching Station to Rinaldi Substation, and extending approximately 12 miles from the Castaic Power Plant to the proposed Haskell Canyon Switching Station. As shown on the Proposed Action and Alternatives Map, the proposed BRRTP would include the following:

1) Construction of a new 230 kilovolt (kV) double-circuit transmission line from the LADWP Barren Ridge Switching Station to Haskell Canyon;
2) Addition of a new 230 kV circuit on the existing double-circuit structures from Haskell Canyon to the Castaic Power Plant;
3) Reconductoring of the existing Barren Ridge-Rinaldi (BR-RIN) 230 kV transmission line with larger capacity conductors between the Barren Ridge Switching Station and the Rinaldi Substation;
4) Construction of a new switching station in Haskell Canyon;
5) Expansion of the existing Barren Ridge Switching Station.

1.2 PROJECT AREA

The northernmost component of the BRRTP would be the Barren Ridge Switching Station, located north-northwest of California City. The new 230 kV transmission line and reconductoring component of each action Alternative would continue to the Haskell Canyon Switching Station, located north of Santa Clarita in Haskell Canyon. The action Alternatives have different proposed alignments for the new 230 kV transmission line. The furthest west would extend to just southwest of Quail Lake, and the furthest east would extend to just west of Palmdale.

The reconductoring component of the Project would extend from the Barren Ridge Switching Station to the Rinaldi Substation in Los Angeles. The Project study area therefore encompasses the area from Rancho Seco to the north, Palmdale to the east, Los Angeles to the south, and just west of Neenach to the west.

2.0 MAPS

All maps in this volume show the following features and boundaries in the BRRTP area:

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1 By their nature, these maps cannot be made fully compliant with Section 508 of the Rehabilitation Act. Assistance with the maps and their content can be accessed by calling the U.S. Department of the Interior, Bureau of Land Management (BLM) Ridgecrest Field Office at (760) 384-5400.
Utility Features
Facility footprint
500 kV transmission line
230 kV transmission line
115 kV transmission line
69 kV transmission line
Pipeline

Transportation Features
Divided highway
Major highway
Major road
Local road
Railroad

Administrative Boundaries
County boundary
City boundary
State of California
USDI Bureau of Land Management
USDA Forest Service

Water Features
Aqueduct
River or perennial stream
Lake or pond
Intermittent lake or pond

2.1 PROPOSED ACTION AND ALTERNATIVES
This map illustrates the Project area boundaries as described above, and shows the placement of the action Alternative alignments for the new 230 kV transmission line, new 230 kV circuit, and reconductoring components of the Project. It also illustrates the locations of the Barren Ridge Switching Station and proposed Haskell Canyon Switching Station.

2.2 SENSITIVE PLANT AND WEED SPECIES
This map illustrates the sensitive plant and weed species, and estimated residual impacts to those species, by tenth mile increments along the proposed alignments of each action Alternative. Impacts of high, moderate, low, and no residual impact are demarcated for Peirson’s morning glory, short-joint beavertail, and slender mariposa lily. Additionally, weed species located during biological resource surveys are demarcated on the map.
2.3 VEGETATION COMMUNITIES

This map illustrates the vegetation communities, and estimated residual impacts to those communities, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no residual impact are demarcated for the following vegetation communities:

- Agricultural land
- California annual grassland
- Chamise chaparral
- Barren/developed
- Interior live oak chaparral
- Joshua tree woodland
- Mojave creosote bush scrub
- Mojave wash scrub
- Rabbitbrush scrub
- Riparian community (from California Natural Diversity Database; includes southern coast like oak riparian forest, southern cottonwood willow riparian forest, southern riparian scrub, and southern sycamore alder riparian woodland)
- Riversidian sage scrub
- Scrub oak chaparral
- Southern mixed chaparral
- Southern willow scrub
- Valley oak woodland

2.4 WILDLIFE SPECIES

This map illustrates the wildlife species and habitat, and estimated residual impacts to those species, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no residual impact are demarcated for the following wildlife species and related locations:

**Amphibians**
- Arroyo toad survey site
- California red-legged frog survey site
- Arroyo toad and California red-legged frog survey site

**Mammals**
- Coast horned lizard
- Coastal rosy boa
- Desert tortoise (live)
- Desert tortoise (sign)
- Southwestern pond turtle

**Birds**
- Bird present
- Bird and nest present
Burrowing owl
Coastal California gnatcatcher
California spotted owl habitat
California spotted owl calling site
Condor activity
Raptor present
Raptor and nest present
Nest present
Potential habitat: southwest willow flycatcher, least Bell’s vireo, and western yellow-billed
cuckoo
Coastal California gnatcatcher habitat
Southwest willow flycatcher habitat

**Non-Species-Specific**
California Natural Diversity Database recorded wildlife species (January 2000 to February 2011)
U.S. Fish and Wildlife Service Final Critical Habitat
Important Suitable Habitat (includes modeled habitat)
Significant Ecological Area (existing and 2008 proposed)
South Coast Missing Linkages

### 2.5 GEOLOGIC AND SEISMIC HAZARDS

This map illustrates the geologic and seismic hazards along the proposed alignments for each action Alternative, along with the erosion potential of very severe, severe, moderate, and slight. It shows the location of earthquake-induced landslide potential, liquefaction potential, and mapped landslides.

### 2.6 PARKS, RECREATION, AND PRESERVATION AREAS

This map illustrates the parks, recreation, and preservation areas, along with estimated residual impacts, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no residual impact are demarcated for the following areas:

Incorporated city trail
County trail
Mountain Recreation and Conservation Authority Parkland Trail
National Forest trail
Pacific Crest National Trail
California Desert Conservation Area
California State Park
Mountain Recreation and Conservation Authority Santa Monica Mountains Conservancy Park
Mountain Recreation and Conservation Authority property
Proposed city park
Existing city park
Eligible Wild and Scenic River
Inventoried Roadless Area
Significant Ecological Area—Los Angeles County
Proposed Significant Ecological Area—Los Angeles County, 2008
Proposed wilderness area

Additionally, the map illustrates the following Forest Service Recreation Opportunity Spectrum Zones:

- Natural/roaded
- Rural
- Semi-primitive/motorized (near natural areas—roaded)
- Semi-primitive/non-motorized (near natural areas)

### 2.7 EXISTING AND PLANNED LAND USE

This map illustrates the existing and planned land uses, along with estimated residual impacts, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no residual impact are demarcated for the following areas:

#### Residential
- Residence
- Specific Plan
- Parcel map
- Tract

#### Public and Quasi-Public
- School or school district-owned parcel
- AVEK Ground Water Recharge Project Area

#### Commercial or Industrial
- Communication tower
- Enxco MET Tower site
- Active mining claim
- Existing or proposed wind energy project

#### Verified Renewable Energy Right-of-Way
- Solar energy facilities
- Wind energy facilities

#### Agricultural Designation
- Williamson Act lands (2007)
- Prime Farmland
- Farmland of Statewide Importance
- Farmland of Local Importance
- Unique Farmland
Military
R-2508 Joint Land Use Military Review Area

Utility Features
500 kV transmission line
230 kV transmission line
115 kV transmission line
69 kV transmission line
Pipeline
Westwide Energy Corridor (final)
Forest Service Utility Corridor

Transportation Features
Airport
Heliport
Divided highway
Major highway
Major road
Local road
Railroad
Runway
Kern County Airport Zones B2 and C

Administrative Boundaries
County boundary
Township line
Section line
State of California
City boundary
USDI Bureau of Land Management
USDA Forest Service

2.8 RECREATION AND TRAVEL VIEWPOINTS INVENTORY AND IMPACTS

This map illustrates the recreation and travel viewpoints, along with estimated impacts, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no impact are demarcated for the following areas:

High Sensitivity Viewpoints and Visibility
Recreation viewer
Trail
Immediate foreground view (0 to 500 feet)
Foreground view (500 feet to one-half mile)
Middleground view (one-half mile to three miles)
2.9 RESIDENTIAL VIEWPOINTS INVENTORY AND IMPACTS

This map illustrates the residential viewpoints, along with estimated impacts, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no impact are demarcated for the following areas:

- Residences
  - Immediate foreground view (0 to 500 feet)
  - Foreground view (500 feet to one-half mile)
  - Middleground view (one-half mile to three miles)

2.10 CONTRAST, SCENIC ATTRACTIVENESS IMPACTS, AND RESULTING SCENIC INTEGRITY

This map illustrates the scenic attractiveness and Forest Service Scenic Integrity Objectives, along with estimated impacts, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of high, moderate, low, and no impact are demarcated for scenic quality/scenic attractiveness classes A, B, and C.

2.11 WATER RESOURCES

This map illustrates the water resources, along with estimated residual impacts, by tenth mile increments along the proposed alignments for each action Alternative. Impacts of moderate, low, and no residual impact are demarcated for the following areas:

- **Water Resources**
  - Wells from U.S. Geological Survey database
  - Wells from California State database
  - 100 year floodplain
  - Partially hydric soil
  - Riparian Conservation Area
  - Significant Ecological Area
  - Wetlands

- **Water Features**
  - Aqueduct
  - River or perennial stream
  - Intermittent stream
  - Lake or pond
  - Intermittent lake or pond