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A Company of Specialists

June 21, 2010

Ms. Karen D. Wilson
San Diego Gas & Electric
8315 Century Park Court, CP21G
San Diego, CA 92123-1548

Reference: Rare Plant and Invasive Weed Report for Alpine Construction Yard 18 and Alpine Regional Field Offices Yard 18A of the San Diego Gas & Electric Sunrise Powerlink Project (RECON Number 5091-1)

Dear Ms. Wilson:

This letter describes the results of RECON's rare plant survey conducted on Alpine Construction Yard 18 and Alpine Regional Field Offices Yard 18A in Alpine, California, for the proposed Environmentally Superior Southern Route (ESSR) of the San Diego Gas & Electric (SDG&E) Sunrise Powerlink Project (Project).

METHODS

SDG&E proposes to construct a new electric transmission line between the existing Imperial Valley and Sycamore Canyon Substations, a proposed new substation (Suncrest Substation), and other system modifications and upgrades in order to reliably operate the new line. The entire Project would traverse approximately 120 miles between the El Centro area of Imperial County and southwestern San Diego County in southern California (Figure 1).

The focus of this report is Alpine Construction Yard 18, which will be used for material storage and staging to support the Project area and Alpine Regional Field Offices Yard 18A, an administrative field construction office complex. Both yards are located in Alpine, California, north of Interstate 8, north and south of Tavern Road, west of Victoria Park Terrace, and east of Taverna Vista Way. The Project alignment is south of Interstate 8. These yards are privately owned (property of Tom C. Dyke Drilling and Blasting Company). The landscape has been shaped by industrial uses, including many graded areas used for vehicular access and staging. These occur intermixed with coastal sage scrub and chaparral vegetation communities on slopes, medians, drains, and bordering the property (Figure 2).

SURVEY

On May 5, 2010, Corporate Guidance Solutions (CGS) biologist Ben Lardiere visited Alpine Construction Yard 18 and Alpine Regional Field Offices Yard 18A in Alpine, California, and conducted rare plant surveys in accordance with the Project Environmental Impact Report. On May 25, 2010, RECON biologist Michael Nieto visited the site and conducted an invasive weed and verification survey (Table 1). Information on potential sensitive plant species' habitat preferences, soil types, and phenology was compiled and used to guide survey efforts. Soil types



 Project Alignment
(ROW, Temporary and
Permanent Impact Areas)

 Alpine Construction Yard 18 and
Alpine Regional Field Offices Yard 18A
 Mileposts

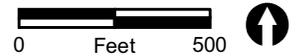

0 Feet 500

FIGURE 2

Alpine Construction Yard 18 and
Alpine Regional Field Offices Yard 18A
in Relation to Project Alignment

within the study area were identified based on the reports and maps in the Soil Surveys for the San Diego and Imperial County areas (U.S. Department of Agriculture 1973, 1981).

A survey buffer of 30 feet outside of project boundaries was surveyed in order to record rare plant and invasive weed populations adjacent to the two proposed yards.

TABLE 1
PERSONNEL AND DATES OF SENSITIVE SPECIES SURVEYS

Date	Biologists
May 5, 2010	Ben Lardiere (CGS)
May 25, 2010	Michael Nieto (RECON)

The survey area was traversed on foot, with biologists walking meandering transects within the construction yard, spending the majority of time in areas contacting intact native soil and vegetation and areas with high densities of invasive weeds. Potential and observed sensitive plant populations are described in Attachment A.

Surveyors recorded the location of all target sensitive plant species when encountered using Trimble GeoXT or handheld units. Any additional information pertaining to global positioning system (GPS) points were recorded into each surveyor's field notebook. Survey data was downloaded from the GPS units into a geographic information system (GIS) database. Following the last survey, the GIS database was updated and refined with the information contained in each surveyor's field notes.

Prior to the survey effort, a thorough literature review was performed. Identification of species was confirmed through species lists and recognized taxonomic keys (Hickman 1993; Baldwin et al. 2002; Rebman 2006, 2008a, 2008b). Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for the species (State of California 2009a, 2009b; California Native Plant Society [CNPS] 2001; Reiser 2001), species occurrence records from the California Natural Diversity Database (CNDDDB) (State of California 2009a) and the All Species Occurrences Database (U.S. Fish and Wildlife Service 2009), and species occurrence records from other sites in the vicinity of the survey area. Vegetation communities, when characterized, are consistent with those described in the final Environmental Impact Report/Environmental Impact Statement (California Public Utilities Commission and U.S. Department of the Interior, Bureau of Land Management 2008), which parallels Holland (1986) as modified by Oberbauer (1996).

For purposes of this report, species are considered to be sensitive if they are: (1) listed by state or federal agencies as threatened or endangered or are proposed for listing; (2) on List 1B (considered endangered throughout its range) or List 2 (considered endangered in California but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001); or (3) considered rare, endangered, or threatened by the CNDDDB (State of California 2009a) or local conservation organizations or specialists. Impacts to CNPS List 1B and 2 species, due to their relatively high regional sensitivity, will require in-kind mitigation.

Invasive weeds for this survey were defined by the Environmental Impact Report/Environmental Impact Statement as follows: (1) species within the project area that promote the spread of wildfires such as cheatgrass (*Bromus tectorum*), Saharan mustard (*Brassica tournefortii*) and medusa head (*Taeniatherum caput-medusae*) (CPUC/BLM 2008 and USFWS 2009); (2) species within the project that the County of San Diego has identified as "targeted noxious weeds" (County of San Diego 2009); and (3) species categorized by the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory as High or Moderate for negative ecological impact (Cal-IPC 2006). Each exotic species population located within the project area was categorized into one of four density

classes. Density categorization was based on qualitatively derived ocular cover estimates of the population. The density categories assigned are presented in Table 2.

**TABLE 2
EXOTIC SPECIES DENSITY CATEGORIES**

Category	Description	Density
T	Trace	Individual(s), less than 1 %
Class 1	Low	1 to 25 % Cover
Class 2	Medium	26 to 50 % Cover
Class 3	Dense	51 to 100 % Cover

EXISTING CONDITIONS

- 1. Regional Location.** Alpine Construction Yard 18 and Alpine Regional Field Offices Yard 18A are located in Alpine, California, in San Diego County.
- 2. Topography.** The survey area ranges in elevation from 1,850 feet above mean sea level at Alpine Construction Yard 18 to 1,650 feet above mean sea level at Alpine Regional Field Offices Yard 18A. The survey area includes paved areas, graded unpaved areas, remnant vegetated slopes, and constructed drainage ditches..
- 3. Soils.** Two soil types have been mapped on the project site: Cieneba-Fallbrook rocky sandy loams, 30 to 65 percent slopes, and Cieneba rocky coarse sandy loam, 9 to 30 percent slopes
- 4. Vegetation Communities.** Five vegetation community types were mapped within the survey area: Southern Mixed Chaparral (SMC), Disturbed Habitat (DH), Diegan Coastal Sage Scrub (DCSS), Diegan Coastal Sage Scrub - Disturbed (DCSS-D), Eucalyptus Woodland (EUC). As the construction yards are on private property undergoing improvements, these vegetation communities reflect what was observed only at the time of the surveys. No major vegetation changes were observed between surveys (May 5, 2010 and May 25, 2010). Areas which had been observed to be graded to mineral soil on May 5, 2010 were observed to be asphalt and gravel on May 25, 2010.

SENSITIVE PLANT RESOURCES AND PROJECT IMPACTS

Attachment A provides a list of sensitive plant species that have the potential to occur within Alpine Construction Yard 18 or Alpine Regional Field Offices Yard 18A based on their range and habitat requirements. No sensitive plants were observed in the Project survey area during the May 2010 surveys; therefore, no surveyed CNPS List 1B and List 2 rare plants will be impacted by the construction of the two yards.

INVASIVE PLANTS

A list of species identified during the survey and target species are presented in Table 3. Invasive weeds were observed in disturbed and intact vegetated areas, constructed drainage ditches, and colonizing previously graded lands. The constructed drainage ditches are located adjacent to the roads and developed areas. These ditches collect urban and on-site run-off and will not be impacted by project activities.

TABLE 3
INVASIVE WEED SPECIES OBSERVED

Scientific Name	Common Name	Cal-IPC Rating	Density
<i>Atriplex semibaccata</i>	Australian saltbush	Moderate	Trace
<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red Brome	High	Low
<i>Centaurea melitensis</i>	Tocolote	Moderate	Low
<i>Cortaderia selloana</i>	Pampas grass	High	Trace
<i>Hirschfeldia incana</i>	Shortpod mustard	Moderate	Low
<i>Nicotiana glauca</i>	Tree tobacco	Moderate	Low
<i>Pennisetum setaceum</i>	Crimson fountaingrass	Moderate	Low
<i>Vulpia myuros</i>	Rattail fescue	Moderate	Low

If you have any questions, please do not hesitate to contact me.

Sincerely,



Michael Nieto
Biologist

MJN:sjg

Attachment

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ATTACHMENT A

ATTACHMENT A
SENSITIVE PLANT SPECIES (CNPS 1B or 2, USFS Sensitive)
OBSERVED OR WITH THE POTENTIAL FOR OCCURRENCE

Species	State/Federal Status	CNPS List	Other Status	Habitat/Blooming Period	Comments
ASTERACEAE					
SUNFLOWER FAMILY					
<i>Ericameria palmeri</i> var. <i>palmeri</i> Palmer's goldenbush	-/-	1B.1	-	Evergreen shrub; chaparral coastal sage scrub, typically in mesic areas; blooms July–Nov.; elevation less than 2,000 feet. Known from six occurrences in California.	Not observed
<i>Grindelia hirsutula</i> var. <i>hallii</i> San Diego gumplant	-/-	1B.2	-	Perennial herb; chaparral, lower montane coniferous forest, meadow, seep, valley and foothill grassland; blooms July–Oct.; elevation 500–5,800 feet.	Not observed
<i>Holocarpha virgata</i> ssp. <i>elongata</i> graceful tarplant	-/-	4.2	-	Annual herb; coastal sage scrub, cismontane woodland, valley and foothill grassland, chaparral; blooms July–Nov.; elevation 200–3,600 feet.	Not observed
BRASSICACEAE					
MUSTARD FAMILY					
<i>Caulanthus simulans</i> Payson's jewel-flower	-/-	4.2	USFS	Annual herb; chaparral, coastal sage scrub, sandy, granitic substrate; blooms March–June; elevation less than 7,300 feet.	Not observed
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's peppergrass	-/-	1B.2	-	Annual herb; coastal sage scrub, chaparral; blooms Jan.–July; elevation less than 1,700 feet.	Not observed
CAMPANULACEAE					
BELLFLOWER FAMILY					
<i>Githopsis diffusa</i> ssp. <i>filicaulis</i> Mission Canyon bluecup	-/-	3.1	USFS	Annual herb; chaparral, mesic and disturbed areas; blooms April–June; elevation 1,500–2,300 feet. Known in California from fewer than five occurrences.	Not observed

ATTACHMENT A
SENSITIVE PLANT SPECIES (CNPS 1B or 2, USFS Sensitive)
OBSERVED OR WITH THE POTENTIAL FOR OCCURRENCE (Continued)

Species	State/Federal Status	CNPS List	Other Status	Habitat/Blooming Period	Comments
CRASSULACEAE					
STONECROP FAMILY					
<i>Dudleya viscida</i> sticky dudleya	-/-	1B.2	-	Coastal sage scrub, mesic, north-facing slopes in shade, gabbroic rock; May-June.	Not observed
ERICACEAE					
HEATH FAMILY					
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	-/-	1B.2	-	Evergreen shrub; chaparral; blooms April-June; elevation less than 1,800 feet.	Not observed
GROSSULARIACEAE					
GOOSEBERRY FAMILY					
<i>Ribes canthariforme</i> Moreno currant	-/-	1B.3	USFS	Shrub; chaparral; blooms Feb.-April; elevation 1,100-4,000 feet.	Not observed
LAMIACEAE					
MINT FAMILY					
<i>Acanthomintha ilicifolia</i> San Diego thornmint	CE/FT	1B.1	-	Annual herb; chaparral, coastal sage scrub, and grasslands on friable or broken clay soils; blooms April-June; elevation less than 3,100 feet.	Not observed
<i>Lepechinia ganderi</i> Gander's pitcher sage	-/-	1B.3	USFS	Shrub; closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland, blooms June-July; elevation 1,000-3,500 feet. Known in California from fewer than 10 occurrences.	Not observed
<i>Monardella hypoleuca</i> ssp. <i>lanata</i> felt-leaved monardella	-/-	1B.2	USFS	Perennial herb; chaparral, cismontane woodland; blooms June-July; elevation 1,000-4,000 feet.	Not observed
<i>Satureja chandleri</i> San Miguel savory	-/-	1B.2	-	Perennial herb; chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and foothill grassland; blooms March-May; elevation less than 3,500 feet.	Not observed

ATTACHMENT A
SENSITIVE PLANT SPECIES (CNPS 1B or 2, USFS Sensitive)
OBSERVED OR WITH THE POTENTIAL FOR OCCURRENCE (Continued)

Species	State/Federal Status	CNPS List	Other Status	Habitat/Blooming Period	Comments
ONAGRACEAE					
Clarkia delicata delicate clarkia	-/-	1B.2	USFS	Annual herb; cismontane woodland; blooms April-June; elevation 780-3,300 feet.	Not observed
POLYGONACEAE					
Chorizanthe polygonoides var. <i>longispina</i> long-spined spineflower	-/-	1B.2	USFS	Clay soils; openings in chaparral, coastal sage scrub, near vernal pools and montane meadows, April-July.	Not observed
RHAMNACEAE					
Ceanothus cyaneus Lakeside ceanothus	-/-	1B.2	USFS	Evergreen shrub; closed-cone coniferous forest, chaparral; blooms April-June; elevation 800-2,500 feet.	Not observed
ROSACEAE					
Horkelia truncata Ramona horkelia	-/-	1B.3	USFS	Perennial herb; cismontane woodland, chaparral, clay soils; blooms May-June; elevation 1,300-4,300 feet.	Not observed
ANGIOSPERMS: MONOCOTS					
LILIACEAE					
Calochortus dunnii Dunn's mariposa lily	CR/-	1B.2	USFS	Perennial herb (bulbiferous); closed-cone coniferous forest, chaparral, gabbroic or metavolcanic, rocky substrate; blooms April-June; elevation 1,200-6,000 feet.	Not observed
Nolina interrata Dehesa nolina	CE/-	1B.1		Perennial herb; chaparral, ultramafic, gabbroic, serpentine; blooms June-July; elevation 600-2,800 feet.	Not observed

ATTACHMENT A
SENSITIVE PLANT SPECIES (CNPS 1B or 2, USFS Sensitive)
OBSERVED OR WITH THE POTENTIAL FOR OCCURRENCE (Continued)

Species	State/Federal Status	CNPS List	Other Status	Habitat/Blooming Period	Comments
THEMIDACEAE					
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	--	1B.1	USFS	Perennial herb (bulbiferous); closed cone coniferous forest, chaparral, meadows and seeps, valley and foothill grassland, vernal pools, mesic, clay soil; blooms May–July; elevation less than 5,300 feet.	Not observed
<i>Muilla clevelandii</i> San Diego goldenstar	--	1B.1	-	Perennial herb (bulbiferous); chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, clay soils; blooms May; elevation 170–1,500 feet.	Not observed

FEDERAL CANDIDATES AND LISTED PLANTS

FE = Federally listed endangered
 FT = Federally listed threatened
 FC = Federal candidate for listing as endangered or threatened

STATE LISTED PLANTS

CE = State listed endangered
 CR = State listed rare
 CT = State listed threatened

CALIFORNIA NATIVE PLANT SOCIETY (CNPS) LISTS

1A = Species presumed extinct.
 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
 2 = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

CNPS THREAT RANKS

0.1 = Seriously endangered in California
 0.2 = Fairly endangered in California
 0.3 = Not very threatened in California

U.S. FOREST SERVICE

USFS = Regional Forester's List Sensitive Plant