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August 13, 2015

Jensen Uchida
Project Manager
California Public Utilities Commission (CPUC)
505 Van Ness Avenue, 4th Floor
San Francisco, CA 94102

Re: Notice to Proceed (NTP) Request #3: Construction of the Transmission Line Components of the South Bay Substation Relocation Project (Project)

Dear Mr. Uchida:

On October 17, 2013, the CPUC granted San Diego Gas & Electric Company (SDG&E) a Permit to Construct the Project (Decision D13-10-025). The decision conditionally authorizes construction of the Project with the implementation of the applicant-proposed measures and mitigation measures (MMs) identified in the Mitigation Monitoring, Compliance, and Reporting Plan (MMCRP). A Notice of Determination was submitted to the State Clearinghouse on September 5, 2013, indicating the CPUC's approval of the Project.

SDG&E submitted a Petition for Modification (PFM) on July 31, 2014 to allow for Project design changes associated with Special Condition #14 of the Project's Coastal Development Permit (CDP), and amended the PFM on October 15, 2014 to allow for increased construction water usage, use of reclaimed water, and other Project design changes. An Addendum to the Project's Final Environmental Impact Report (EIR) was completed in December 2014. On January 15, 2015, the CPUC approved the Addendum through Decision 15-01-006.

Purpose

At this time, SDG&E is formally requesting authorization from the CPUC to begin activities associated with the transmission line components of the Project, including those approved in the Final EIR and Addendum. The following activities were approved by the Final EIR:

- an approximately 1,000-foot-long underground interconnection and an approximately 300-foot-long overhead interconnection of the existing 230 kilovolt (kV) transmission line (TL) 23042 and associated communication cables to the Bay Boulevard Substation;

- the relocation of six overhead transmission lines—TL641, TL642, TL644, TL645, TL646, and TL647—and associated communication cables to the new Bay Boulevard Substation, requiring the relocation of approximately 7,500 feet of overhead line and the construction of approximately 4,100 feet of underground line; and

- the connection of the existing TL13815, TL13823, and TL13824 via an approximately 3,800-foot-long underground duct bank, which will form the Grant Hill-Telegraph Canyon 138 kV transmission line, and the removal of seven lattice towers.

In accordance with the Addendum and Special Condition #14 of the CDP, the portion of the 138 kV transmission line crossing Bay Boulevard will include the following:

- the removal of two approximately 110-foot-tall and 145-foot-tall 138 kV steel lattice towers (188700 and 188701; one tower is located within an existing parking lot east of Bay Boulevard and the other is located west of Bay Boulevard within the fenceline of the new Bay Boulevard Substation Site;

- the installation of one approximately 165-foot-tall, 138 kV steel cable pole in SDG&E's transmission right of way (ROW) within a parking lot located east of Bay Boulevard (the new pole will be located 10 to 15 feet west of Tower 188700, which will be removed);

- undergrounding of approximately 1,000 feet of 138 kV double-circuit duct package from the west side of Bay Boulevard to the proposed new cable pole within the existing 138 kV overhead alignment; and

- installation of the 138 kV transmission cable system within the newly installed underground duct package position from SDG&E's ROW on the west side of Bay Boulevard to the new steel cable pole on the east side of the parking lot.

The components included as part of this NTP request are depicted in Attachment A: Transmission Line Component Map. The map shows the permanent and temporary workspace, pole, and transmission line locations. All work will be conducted within the existing SDG&E transmission and distribution ROWs.

Pre-Construction Mitigation Measures

A list of all of the pre-construction measures that are applicable to construction of the Bay Boulevard Substation (as identified in the MMCRP) and their statuses are summarized in Attachment B: Pre-Construction Status Report of this NTP request. Attachment B: Pre-Construction Status Report provides the full text of the measures, their corresponding statuses, and an explanation of their statuses. In order to facilitate tracking and implementation, some of the measures have been organized into task numbers so that the pre-construction and construction components of the measures can be tracked separately, and these measures may appear on more than one line in Attachment B: Pre-Construction Status Report. The pre-construction tasks of applicable measures may be identified as "complete," while the tasks that are not required immediately prior to construction will be marked as "to be implemented during construction." Pre-construction MMs and/or tasks that do not apply have been identified as "not applicable."

Attachment C: Geotechnical Design Certification provides evidence of SDG&E's consideration of recommendations and findings that resulted from geotechnical investigations in final design of Proposed Project components. In accordance with APM-GEO-01, Attachment C: Geotechnical Design Certification contains a letter certified by a Professional Engineer registered in the State of California.

Attachment D: Avian Power Line Interaction Committee (APLIC) Design Recommendations Memorandum and Design Drawings provides evidence of the incorporation of APLIC Suggested Practices and specifications into the construction contract and provides verification of conformance with Avian Power Line Interaction Committee guidelines in accordance with APM-BIO-04.

Attachment E: Contractor Commitments provides evidence of incorporation of MM compliance in the construction contract for the transmission line component.

All other outstanding pre-construction requirements that are designated as "to be implemented immediately prior to construction" will be completed between the issuance of this NTP and the start of construction of the transmission line components; no construction will occur until all of the pre-construction tasks have been

fulfilled and until documentation, when required, has been provided to the CPUC. All other required MM tasks, as stated in the MMCRP, will be implemented during construction.

Activity Summary

Construction of the 230 kV loop-in, 69 kV relocation, and 138 kV underground extension—as discussed previously—will occur in accordance with Section B.4.1 of the Final EIR and Section 1.1 of the Addendum to the Final EIR. The information described in the Final EIR includes specific details pertaining to disturbance areas, material staging and storage, and the installation of overhead and underground transmission components.

Upon completion of the Project, temporary facilities will be removed, and any waste, trash, and debris will be collected and properly disposed of. The construction activities associated with the transmission line components are anticipated to take approximately 22 months to complete, beginning in September 2015 and ending in March 2017.

SDG&E respectfully requests approval of this NTP request by August 28, 2015. Should you have any questions or need additional information, please do not hesitate to contact me at (XXX) XXX-XXXX.

Sincerely,

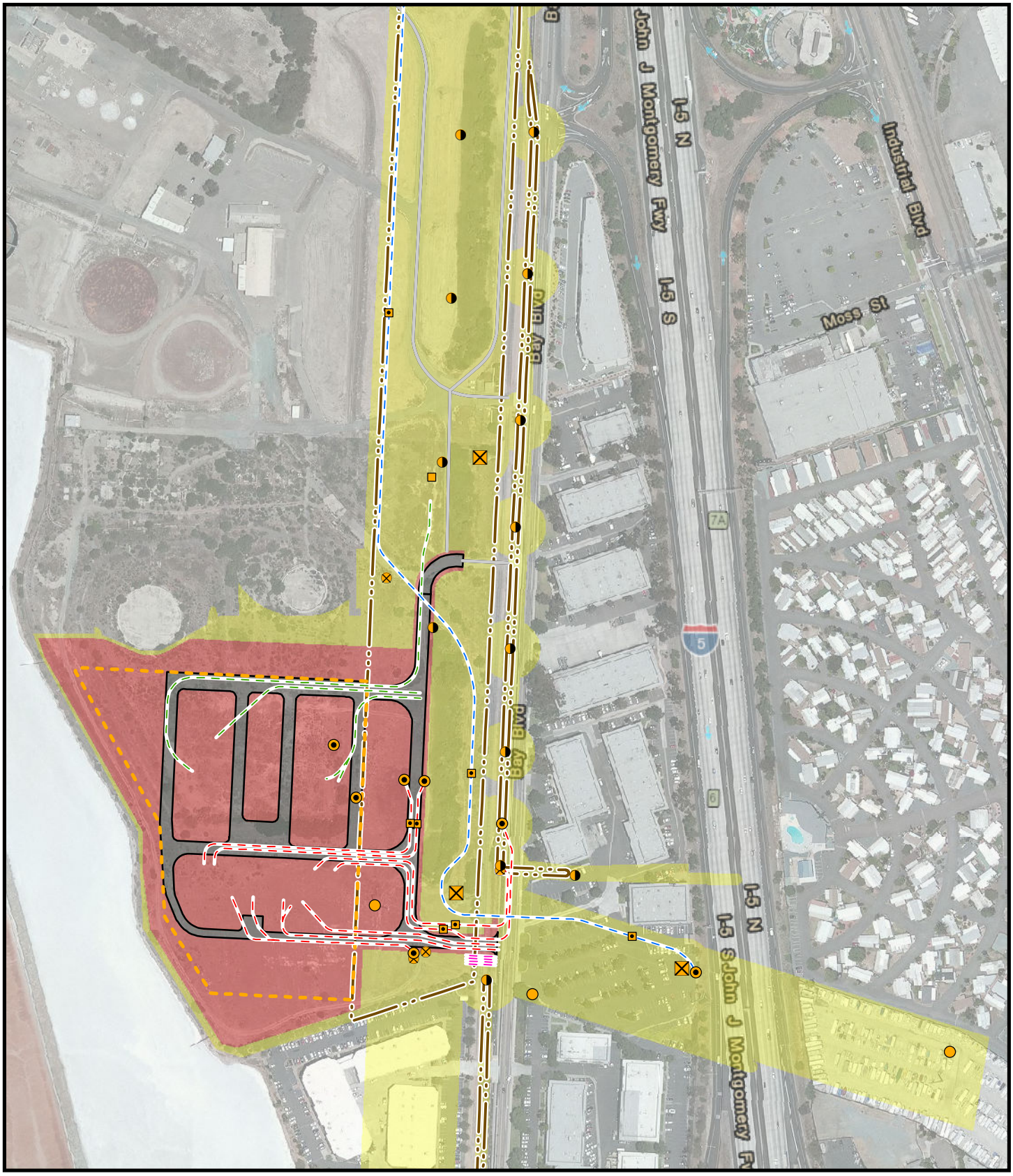
Don Houston

Don Houston
Major Projects Environmental Manager
San Diego Gas & Electric Company

Attachment A: Transmission Line Component Map
Attachment B: Pre-Construction Status Report
Attachment C: Geotechnical Design Certification
Attachment D: Avian Power Line Interaction Committee Design Recommendations Memorandum and Design Drawings
Attachment E: Contractor Commitments

cc: Kirstie Reynolds, SDG&E
Allison Schaffer, Dudek
David Hochart, Dudek
Armen Keochekian, Insignia Environmental (Insignia)
Anne Marie McGraw, Insignia
Jeffry Coward, Insignia

ATTACHMENT A: TRANSMISSION LINE COMPONENT MAP



Attachment A: Transmission Line Component Map 1 of 2

South Bay Substation Relocation Project

- Bore Pit
- New Vault
- Existing Vault
- Existing Pole
- New Pole
- Replace Pole
- Removal Pole
- Remove Lattice Tower
- 12 kV Undergrounding
- 138 kV Undergrounding
- 230 kV Undergrounding
- 69 kV Undergrounding
- Substation Wall
- SDG&E Easement
- Existing Access
- Permanent Impact Area
- Temporary Workspace

Source: NV5, 2015

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A Sempra Energy utility
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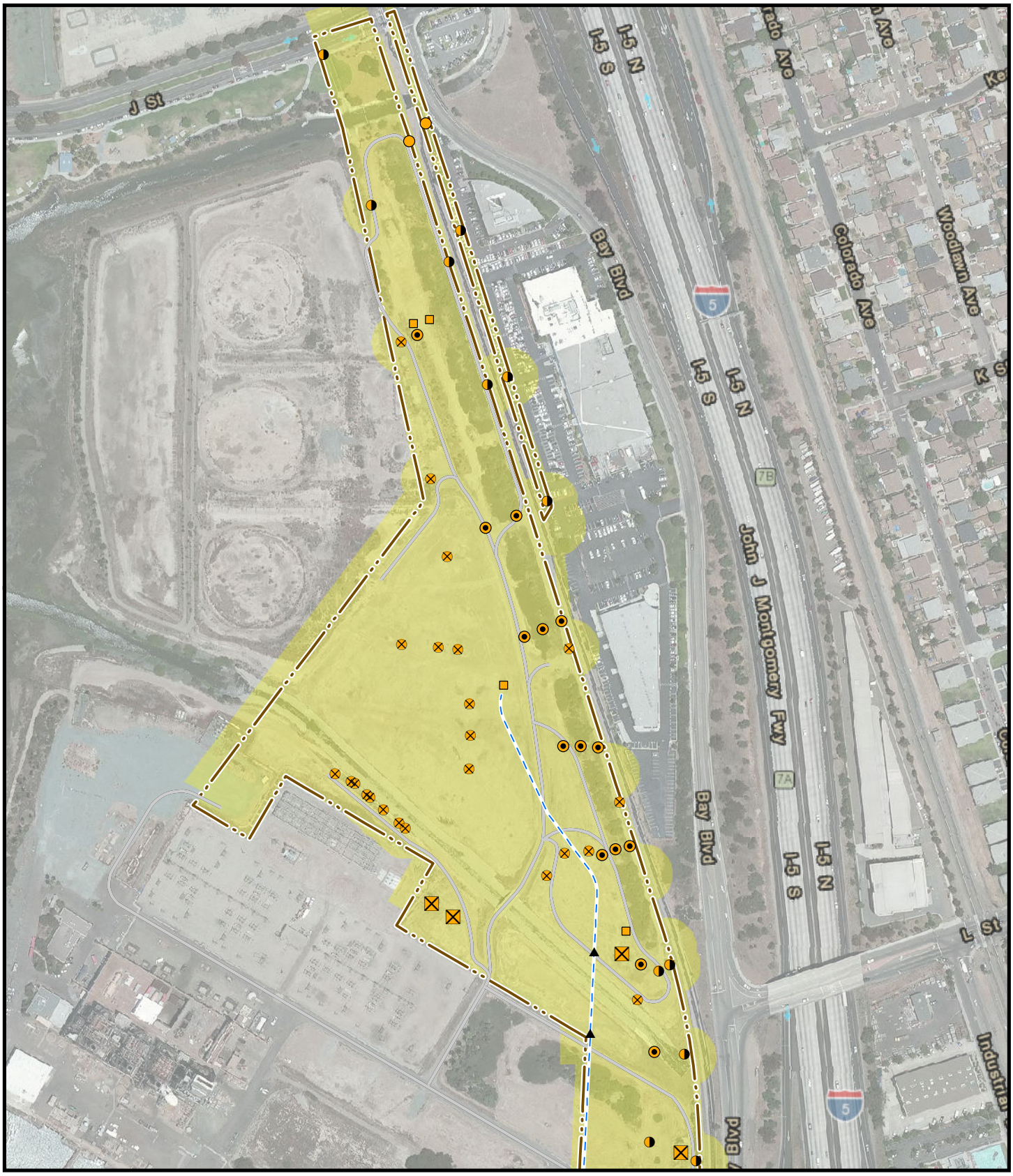

Attachment A: Transmission Line Component Map 2 of 2

South Bay Substation Relocation Project

- Bore Pit
- New Vault
- Existing Vault
- Existing Pole
- New Pole
- Replace Pole
- Removal Pole
- Remove Lattice Tower
- 12 kV Undergrounding
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- 230 kV Undergrounding
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- Permanent Impact Area
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07/29/15

ATTACHMENT B: PRE-CONSTRUCTION STATUS REPORT

Attachment B: Pre-Construction Status Report

AGENCY: California Public Utilities Commission (CPUC)
SOURCE: Mitigation Monitoring, Compliance, and Reporting Program (MMCRP)
TIMING: Design; Design and During; Design and Post; Pre; Pre and During; Pre and Post; Pre, During, and Post
LOCATION: Transmission Line Components

-To Be Implemented During Construction
-Pending OR To Be Implemented Immediately Prior to Construction
-To Be Implemented Following Construction
-Complete
-Not Applicable

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
Biological Resources	APM-BIO-01	01	Follow NCCP protocols	SDG&E would conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources.	Implementation of the Subregional Natural Communities Conservation Plan (NCCP) Operational Protocols is included in the construction contract for the transmission component of the South Bay Substation Relocation Project (Project) and will be followed during construction. Evidence of the incorporation of specifications into the construction contract is included as an attachment to this Notice to Proceed (NTP) request. The preactivity survey report covering the construction of the new Bay Boulevard Substation as well as temporary work areas throughout the existing transmission right of way (ROW) was submitted to the United States Fish and Wildlife Service (USFWS) on November 18, 2014 and to the California Department of Fish and Wildlife (CDFW) on December 2, 2014. Evidence was submitted to the CPUC on December 31, 2014. As the original PSR was submitted prior to final design of the transmission line and including approval from the CPUC of the Bayfront Enhancment Fund Alternative; the transmission specific project description was not included. SDG&E is coordinating with the USFWS and CDFW to determine if an updated PSR is required. This coordination will be completed prior to construction and evidence of coordination will be submitted to the CPUC. SDG&E will continue to implement NCCP Operational Protocols during construction of the Project.	Pre and During	To Be Implemented Immediately Prior to and During Construction
Biological Resources	APM-BIO-02	02	Conduct biological monitoring	Within 14 days prior to vegetation removal, the biological monitor would survey the site to ensure that no sensitive species would be impacted.	A survey of the transmission line work areas will be conducted within 14 days prior to vegetation removal activities. The survey results will be documented in the appropriate Weekly Environmental Compliance Status Report.	Pre and During	To Be Implemented During Construction
Biological Resources	APM-BIO-03	01	Protect raptor nests	If a raptor nest is observed during preconstruction surveys, a qualified biologist would determine if it is active. If the nest is deemed inactive, SDG&E, under the supervision of a biological monitor, would remove and dismantle the nest promptly from existing structures that would be affected by Proposed Project construction. Removal of nests would occur outside of the raptor breeding season (January to July).	Evidence of incorporation of specifications into construction contracts is included as an attachment to this NTP request. Pre-construction surveys will document active and inactive raptor nests. Survey reports regarding avoidance and USFWS or CDFW concurrence, as necessary, will be submitted to the CPUC.	Pre and During	To Be Implemented Immediately Prior to Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
Biological Resources	APM-BIO-03	02	Protect raptor nests	If the nest is determined to be active, it would not be removed and the biological monitor would monitor the nest to ensure nesting activities and/or breeding activities are not disrupted. If the biological monitor determines that Proposed Project activities are disturbing or disrupting nesting activities, the monitor would make recommendations to reduce the noise and/or disturbance in the vicinity of the nest.	This measure will be implemented during construction if a nest is determined to be active.	Pre and During	To Be Implemented During Construction
Biological Resources	APM-BIO-04	01	Minimize impacts to raptors	Structures would be constructed to conform to the Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines to help minimize impacts to raptors.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. SDG&E will submit construction drawing to provide verification of conformance with Avian Power Line Interaction Committee guideline as an attachment to this NTP request.	Pre	To Be Implemented Immediately Prior to Construction
Biological Resources	APM-BIO-05	01	Compensate for permanent impacts to jurisdictional resources	Permanent impacts to all jurisdictional resources would be compensated through habitat restoration at a minimum of a one-to-one ratio or as required by the permitting agencies.	APM-BIO-05 is superseded by MM BIO-03.	Pre	N/A
Biological Resources	APM-BIO-06	01	Decumbent goldenbush	Impacts to decumbent goldenbush would be minimized by avoiding impacts to individual plants to the maximum extent practical.	Geographic information system shapefiles of identified decumbent goldenbush locations were submitted to the CPUC on October 7, 2014, with the response to the CPUC's data request regarding the first submittal of Notice to Proceed (NTP) request #1. There are no decumbent goldenbush individuals located within the transmission line right-of-way (ROW); therefore, this measure is not applicable to this location.	Pre and During	N/A
Biological Resources	APM-BIO-06	02	Decumbent goldenbush	If avoidance is not feasible, individual plants would be transplanted and relocated to an appropriate site (as determined by a qualified biologist) within the Proposed Project area. The plants would be located as close as possible to their original location and in the same orientation (e.g., with the west-facing side of the plant facing west when relocated).	There are no decumbent goldenbush individuals located within the transmission line ROW; therefore, this measure is not applicable to this location.	Pre and During	N/A
Biological Resources	APM-BIO-06	03	Decumbent goldenbush	If relocation of decumbent goldenbush is not feasible, or if transplanted individuals are unsuccessful, seeds would be collected and used in restoration efforts following construction of the Proposed Project.	There are no decumbent goldenbush individuals located within the transmission line ROW; therefore, this measure is not applicable to this location.	Pre, During, and Post	N/A
Biological Resources	BIO-01	01	Habitat compensation for permanent impacts to native vegetation communities	Provide Habitat Compensation or Restoration for Permanent Impacts to Native Vegetation Communities. Where impacts to disturbed coyote brush scrub and non-native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to pre-construction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP.	Evidence of the incorporation of specifications into the construction contract is submitted as an attachment to this NTP request. SDG&E will restore temporarily disturbed areas to pre-construction conditions following the completion of construction. SDG&E will deduct mitigation credits for any permanent impacts to sensitive communities following construction. Permanent impacts to coastal sage scrub located outside of a designated preserve will be mitigated to a 1.5-to-one ratio, and permanent impacts to non-native grassland located outside of a designated preserve will be mitigated to a one-to-one ratio by deducting from the SDG&E Mitigation Bank.	Pre, During, and Post	To Be Implemented During Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
					As indicated by the CPUC in its email dated May 16, 2014, there is a discrepancy in the amount of credits that should be deducted from the mitigation credits, as described in the Final Environmental Impact Report (EIR) errata. The Final EIR errata for Impact BIO-01 corrected the impact acreages in Table D.5-4 Impacts on Vegetation Communities as follows: • from 9.46 acres to 8.74 acres of permanent impacts to non-native grassland, and • from 5.03 acres to 4.94 acres of permanent impacts to disturbed coyote brush scrub. SDG&E is coordinating with the USFWS and CDFW to determine if an updated PSR is required. This coordination will be completed prior to construction and evidence of coordination will be submitted to the CPUC.		
Biological Resources	BIO-01	02	Habitat compensation for permanent impacts to native vegetation communities	Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration.	Jeffry Coward was approved as the habitat restoration specialist by the CPUC on June 27, 2014.	Pre, During, and Post	Complete
Biological Resources	BIO-02	01	Topsoil salvaging	Topsoil Salvaging. During construction, the upper 12 inches of topsoil (or less depending on existing depth of topsoil) shall be salvaged and replaced wherever open trenching activities are required through open land with native vegetation (not including graded roads and road shoulders) for the installation of the underground banks.	Evidence of the incorporation of specifications into the construction contract is submitted as an attachment to this (NTP #3) request. MM BIO-02 applies to areas where open trenching activities will occur through open land with native vegetation. Topsoil will be salvaged and replaced in areas along the transmission line workspace where trenching activities are required through open land where native vegetation will be temporarily impacted.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-03	02	Habitat compensation for permanent impacts to jurisdictional resources	Appropriate permits from the wetland resource agencies including ACOE, CDFG, RWQCB, and CCC for the impacts to wetlands and jurisdictional waters shall be provided to the CPUC prior to construction. Buffers for wetland areas shall be included as required by the wetland resource agencies.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. The CPUC has been provided with evidence of the issuance of the Coastal Development Permit. Evidence of the issuance of the 1602 Streambed Alteration Agreement was submitted to the CPUC on January 6, 2015. Evidence of the issuance of the Section 404 Individual Permit and the Section 401 Water Quality Certification were submitted to the CPUC on February 12, 2015. A copy of the final Habitat Restoration Plan for compensation of permanent impacts to jurisdictional resources was submitted to the CPUC on December 9, 2014.	Pre	Complete
Biological Resources	BIO-04	01	Noxious Weeds and Invasive Species Control Plan	Prepare and implement a Noxious Weeds and Invasive Species Control Plan. A Noxious Weeds and Invasive Species Control Plan shall be prepared and reviewed by the California Department of Fish and Game and California Public Utilities	The CDFW approved the Noxious Weeds and Invasive Species Control Plan on August 28, 2014. The CPUC approved the plan on September 9, 2014.	Pre	Complete

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
				Commission. The plan shall be submitted to the CPUC at least 30 days prior to ground-disturbance activities.			
Biological Resources	BIO-05	01	Dust Control Plan	Prepare and Implement a Dust Control Plan. A Dust Control Plan shall be prepared and submitted to the California Public Utilities Commission.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. The Final Dust Control Plan was approved by the CPUC on July 9, 2014.	Pre	Complete
Biological Resources	BIO-06	01	Burrowing owl survey and monitoring	A survey shall be conducted within 30 days and not less than 14 days prior to initiation of construction by a qualified biologist in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) to determine the presence or absence of the burrowing owl in the project site limits, and the to the extent practicable, suitable habitat located within 250 feet of the project boundary. If the burrowing owl is present, no project-related disturbance shall occur within 160 feet of occupied burrows from October 16 through March 31. If burrowing owls are found within the project area or within 250 feet of the project area during the breeding season (February 1 through August 31), a no-construction or project-related disturbance buffer will be established around the active burrow until the young have fledged, as determined by a qualified biologist. A 660-foot (200-meter) no-disturbance buffer of occupied burrows is recommended from April 1 through October 15 (CDFG 2012); however, an appropriately sized buffer will be established in writing with concurrence from the CDFW. If burrowing owls are present within the project site and/or work areas, and those occupied burrows cannot be avoided during the non-breeding season (September 1 to January 31), temporary or permanent burrow exclusion and or burrow closure can be implemented if the following conditions are satisfied: 1) a Burrowing Owl Exclusion Plan is developed and approved by the local CDFW office; 2) permanent or temporary loss of occupied burrows and habitat is mitigated in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) recommendations; 3) site monitoring is conducted to ensure that take is avoided; and 4) excluded burrowing owls are documented using artificial or natural burrows on an adjacent site, consistent with requirements as established in the Burrowing Owl Exclusion Plan (CDFG 2012). Passive relocation of owls shall be implemented prior to construction only at the direction of CDFW and only if the previously described occupied burrow disturbance absolutely cannot be avoided (e.g., due to physical or safety constraints). If the alternate burrows are not used by the relocated owls, then the applicant shall work with CDFW to provide alternate mitigation for burrowing owls.	Surveys conducted for NTP #1 included the Bay Boulevard Substation and the transmission line ROW. A survey results memo regarding the burrowing owl survey conducted prior to activities associated with NTP #1 was submitted to the CPUC on December 31, 2014. A follow-up burrowing owl survey was conducted on January 23, 2015, and the results were documented in the weekly Environmental Compliance Status Report for the week ending on January 25, 2015. An additional burrowing owl survey of the transmission work areas that are not currently be utilized for substation construction will be conducted prior to activities associated with NTP #3, in accordance with MM BIO-6. The survey results will be documented in the weekly Environmental Compliance Status Report.	Pre and During	Complete
Biological Resources	BIO-06	02	Burrowing owl survey and monitoring	The survey results shall be provided to the CPUC within 14 days following completion of the surveys.	MM BIO-06, Task 01 provides the status of this measure.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-07	01	Nesting bird surveys	If construction activities including but not limited to grading or site disturbance are to occur between February 15 and September 15, a nesting bird survey shall be conducted by a qualified avian biologist to determine the presence of nests or	Nesting bird surveys will be conducted no more than 72 hours prior to the commencement of construction along the transmission line ROW.	Pre and During	To Be Implemented

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
				nesting birds within 500 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species such as but not limited to California horned lark, California least tern, western snowy plover, Caspian tern, gull-billed tern, and other nesting birds that may be disturbed by human activity.			During Construction
Biological Resources	BIO-08	01	Noise reporting at active nests	Prior to commencing any construction activity including ground disturbance, SDG&E shall provide a noise report to CPUC from a certified acoustician to document the noise levels that would result from proposed construction activities at the active nests identified under BIO-7.	This measure will be implemented if active nests are identified during construction.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-08	02	Noise reporting at active nests	In the event the report prepared by a certified acoustician indicates construction noise levels may exceed 60 dBA Leq(h) at nearby sensitive habitat areas and/or active nests, a temporary noise barrier shall be constructed to reduce noise levels to below 60 dBA Leq(h) where feasible or otherwise approved by the CDFG, to attenuate noise from construction equipment. The height and materials of the noise barrier would depend on several factors, including the construction noise level as well as distance from sensitive habitat areas and active nests. Depending on various geometric and design factors, a temporary noise barrier could attenuate construction noise by approximately 5 to 15 dB. If the installation of a temporary noise barrier is infeasible for specific construction activities, or if noise levels cannot be reduced below 60 dBA Leq(h), mufflers or other noise-suppression devices that exceed the original manufacturer's specifications shall be utilized to help reduce noise levels. Noise-monitoring equipment would be installed near active nests for areas where noise walls are infeasible to monitor noise levels during construction, and equipment would be turned off when not required for active construction activities. If noise levels still exceed 60 dBA Leq(h) at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged unless otherwise approved by the CDFG.	This measure will be implemented if active nests are identified during construction and if the noise report indicates that noise levels may exceed 60 A-weighted decibels (dBA) equivalent sound level (L_{eq})(h) at nearby sensitive habitat areas and/or active nests.	Pre and During	To Be Implemented During Construction
Biological Resources	BIO-09	01	Raptor perch deterrent devices	SDG&E shall install sufficient raptor perch deterrent devices (on the top of project components including buildings, structures, steel poles, and the lattice communication tower to discourage raptors from landing on the surface and potentially preying on special-status wildlife species in the area.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. The CPUC approved the Raptor Perch Deterrent Plan on August 26, 2014. The plan will be implemented according to SDG&E's safety protocols and guidelines during construction.	Pre and During	Complete
Biological Resources	BIO-10	01	Temporary work areas	To the maximum extent feasible, temporary work areas (cable pull sites, jack-and-bore operations, etc.) shall be sited in locations that do not contain any sensitive habitat. A qualified biologist shall review all proposed temporary work areas for presence of sensitive biological resources, and submit a letter signed by the qualified biologist to the CPUC 30 days prior to construction that identifies whether any sensitive resources are present.	The temporary workspace surveys conducted on November 25, 2014 included all workspaces associated with the transmission line ROW. The survey results were submitted to the CPUC on December 5, 2014.	Pre	Complete
Biological Resources	BIO-11	01	Helicopter activity during avian breeding season	Helicopter activity during construction shall be restricted to the avian non-breeding season defined as between September 15 and February 15. Should helicopter activity be deemed necessary during the breeding season, a nesting bird survey shall be conducted by a qualified avian biologist to determine whether any nesting birds and/or active nests are present within the boundaries of the project.	This measure will be implemented if helicopter use is necessary.	Pre	To Be Implemented During Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
				If nesting birds are present and/or an active nest is discovered, helicopter activity shall be postponed until a qualified avian biologist confirms that nesting is complete and the young have fledged. Additionally, SDG&E shall coordinate with USFWS representative of the Sweetwater Marsh NWR and South San Diego Bay NWR (collectively, the San Diego Bay NWR), as well as the CDFG, to determine whether helicopter activities may potentially impact nesting birds within the reserves.			
Biological Resources	BIO-11	02	Helicopter activity during avian breeding season	Should helicopter activity be deemed necessary in the presence of known or potentially nesting birds following surveys, the applicant shall coordinate with USFWS to determine whether the occurrence of helicopter activity is acceptable during the breeding season at the proposed locations.	This measure will be implemented if helicopter use is necessary.	Pre	To Be Implemented During Construction
Biological Resources	BIO-11	03	Helicopter activity during avian breeding season	Documentation of USFWS-approved helicopter use shall be provided to CPUC prior to helicopter activities occurring in the event that USFWS determines helicopter activities are permitted between February 15 and September 15.	Should coordination with the USFWS be necessary, documentation of the USFWS-approval for helicopter use will be provided to the CPUC prior to helicopter activity.	Pre	To Be Implemented During Construction
Cultural and Paleontological Resources	APM-CUL-01	01	Cultural and paleontological training	Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement the APMs and to comply with the applicable environmental laws and regulations, including the potential for exposing subsurface cultural resources and paleontological resources and to recognize possible buried resources. This training would include presentation of the procedures to be followed upon discovery or suspected discovery of archaeological materials, including Native American remains, and their treatment, as well as of paleontological resources.	Cultural and paleontological resources were discussed at the supervisory-level environmental awareness training conducted on August 26, 2014 and will be discussed at subsequent crew trainings. SDG&E will continue to administer the worker environmental awareness program to all construction personnel immediately prior to them commencing work on the Project. All crew training sign-in sheets will be submitted as attachments to the weekly Environmental Compliance Status Reports during construction.	Pre	To Be Implemented During Construction
Cultural and Paleontological Resources	APM-CUL-04	01	Paleontological monitoring	A qualified paleontologist would attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with an MS or PhD in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the region for at least 1 year. The requirements for paleontological monitoring would be noted on the construction plans.	The qualified paleontologists' resumes were provided to the CPUC on July 2, 2014. A qualified paleontologist has consulted with the excavation contractor as necessary during pre-construction meetings. A note will be included on the construction plans indicating the requirements for paleontological monitoring, which will be provided to the CPUC prior to construction.	Pre and During	To Be Implemented Immediately Prior to Construction
Geology and Soils	APM-GEO-01	01	Follow seismic design standards	SDG&E would consider the recommendations and findings of the geotechnical investigation prepared by GEOCON Inc. and the contractor's geotechnical engineer in the final design of all Proposed Project components to ensure that the potential for expansive soils and differential settling is compensated for in the final design and construction techniques. SDG&E would comply with all applicable codes and seismic standards. In addition, the Proposed Project would be configured according to the Institute of Electrical and Electronics Engineers 693 "Recommended Practices for Seismic Design of Substations" in order to withstand anticipated ground motion. The final design would be reviewed and approved by a professional engineer registered in the State of California prior to construction.	SDG&E's transmission line engineering contractor has reviewed and considered the recommendations from the geotechnical investigations in the final Project design. A letter stamped by a Professional Engineer will be submitted to the CPUC as an attachment to this NTP request.	Pre	To Be Implemented Immediately Prior to Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
Geology and Soils	G-01	01	Design-level geotechnical investigation	Geotechnical Investigations for Liquefaction and Slope Instability. SDG&E shall perform design-level geotechnical investigations to evaluate the potential for liquefaction, lateral spreading, seismic slope instability, and ground-cracking hazards to affect the approved project and all associated facilities. Where these hazards are found to exist, appropriate engineering design and construction measures shall be incorporated into the project designs. Appropriate measures could include construction of pile foundations, ground improvement of liquefiable zones, installation of flexible bus connections, and incorporation of slack in underground cables to allow ground deformations without damage to structures. The geotechnical investigations prepared by a certified geologist shall be submitted to the CPUC 60 days prior to construction of proposed structures.	According to the Final Environmental Impact Report, MM G-01 is only applicable to the alternative locations. The alternative locations were not carried forward; therefore, this measure is not applicable to the transmission line component.	Pre	N/A
Hydrology and Water Quality	HYDRO-01	01	SWPPP	In accordance with the stormwater pollution prevention plan (SWPPP) to be prepared under the State General Construction Permit, work crews shall use erosion control measures during grading activities. Implementation of the SWPPP shall help stabilize soil in graded areas and waterways and reduce erosion and sedimentation. Mulching, seeding, or other suitable stabilization measures shall be used to protect exposed areas during construction activities. The SWPPP shall be submitted to the California Public Utilities Commission prior to construction activities.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. The SWPPP was uploaded to the Storm Water Multiple Application and Report Tracking System (SMARTS) and a Notice of Intent (NOI) was received on July 25, 2014. The CPUC was notified of the SWPPP being uploaded to SMARTS on July 31, 2014. A copy of the SWPPP will be produced and kept on site during construction.	Pre and During	To Be Implemented During Construction
Hydrology and Water Quality	HYDRO-02a	01	Dewatering discharge permit	Prior to construction, SDG&E shall consult with the San Diego Regional Water Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering at any of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the California Public Utilities Commission prior to dewatering activities.	SDG&E representatives initially spoke with Roger Mitchell of the San Diego RWQCB on July 15, 2014. Roger indicated that a construction project with groundwater dewatering discharge to land would need to comply with Conditional Waiver No. 3 – Miscellaneous "Low Threat" Discharges to Land (Waiver) and an NOI form would need to be filed to enroll in the Waiver if necessary per the general and special conditions defined in the Waiver. San Diego RWQCB staff will review the NOI and determine eligibility within two weeks. The Construction General Permit (2009-0009-DWQ) authorizes dewatering of uncontaminated groundwater. However, discharges are required to check with appropriate Regional Water Boards for any required permit or basin plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies. The Waiver authorizes discharges to land from short-term construction dewatering operations averaging 5,000 gallons per day (or below) for any continuous 180-day period. Discharges in excess of that amount must file a complete NOI. If the discharge is not eligible for a waiver, then a Waste Discharge Requirement would be required. The new waivers were adopted on June 26, 2014. If a waiver for a discharge to land is necessary then it will be submitted to the CPUC prior to conducting dewatering activities. Additional communication between SDG&E and Roger Mitchell of the San Diego RWQCB occurred on June 18, 2015 to confirm	Pre	To Be Implemented During Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
					if groundwater that has come into contact with synthetic drilling polymers for wet-hole excavations could be discharged to land. Roger determined that dewatering groundwater from wet-hole excavations that used synthetic drilling polymers would require submittal of a Notice of Intent (NOI) form to enroll in the Waiver. A NOI form to cover SDG&E's short-term construction dewatering operations to land during wet-hole excavations that used synthetic drilling polymer was submitted electronically to the San Diego RWQCB on July 2, 2015. A notice of enrollment under Waiver No. 3 was received by SDG&E on July 28, 2015. The notice of enrollment will be submitted to the CPUC prior to conducting dewatering activities		
Hydrology and Water Quality	HYDRO-02b	01	Typical dewatering drawing	SDG&E shall submit to California Public Utilities Commission prior to construction a typical dewatering drawing that shall be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures, intake hose screening, and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.	The Dewatering Plan was approved by the California Coastal Commission (CCC) and the CPUC on September 3, 2014.	Pre	Complete
Land Use and Planning	L-01a	01	Public notice	SDG&E or its construction contractor shall provide advance notice, between 2 and 4 weeks prior to construction, by mail to all residents or property owners within 300 feet of the project. The announcement shall state specifically where and when construction will occur in the area.	A copy of the public notice was included with NTP request #1 as Attachment D: Revised Landowner Notice. Verification of the mailing was submitted to the CPUC on December 31, 2014. The public notice mailer will be mailed to residents or property owners within 300 feet of the transmission line component prior to construction. Evidence of mailing will be submitted to the CPUC.	Pre and During	To Be Implemented Immediately Prior to Construction
Land Use and Planning	L-01a	02	Public notice	SDG&E shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur. Prior to construction, copies of all notices shall be submitted to the CPUC.	A notice of construction for the Project was published in the San Diego Union-Tribune on December 18, 2014 and in The Star-News on December 19, 2014. A Spanish version was published in El Latino on December 19, 2014. A copy of the public notice was included with NTP request #1 as Attachment D: Revised Landowner Notice.	Pre and During	Complete
Land Use and Planning	L-01b	01	Public liaison	SDG&E shall identify and provide a public liaison officer before and during construction to respond to concerns of neighboring residents about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public in accordance with Mitigation Measure L-1a.	Procedures for reaching the public liaison officer have been included in the construction notice required by MM L-01a. A copy of the construction notice was included as Attachment D: Revised Landowner Notice within NTP request #1, which was approved on November 14, 2014. As discussed for MM L-01a, the public notice mailer will be mailed to residents or property owners within 300 feet of the transmission line component prior to construction. The construction notice for the Project was published in the San Diego Union-Tribune on December 18,	Pre and During	To Be Implemented Immediately Prior to Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
					2014, and in The Star-News on December 19, 2014. A Spanish version was published in El Latino on December 19, 2014. Bimonthly reports containing public inquiries and any responses will be submitted to the CPUC during construction.		
Land Use and Planning	L-03	01	Port Master Plan Amendment	SDG&E shall submit a request to the Unified Port of San Diego to process a Port Master Plan amendment that would modify the land uses prescribed in the PMP to accommodate a land use plan for the alternative project site located within the Port Master Plan planning boundary.	Per the MMCRP, which was included as an attachment to the CPUC Decision granting SDG&E a Permit to Construct the Project; this measure does not apply to the approved Project.	Pre	N/A
Noise	NOI-01	01	Noise ordinance	SDG&E shall conduct all construction activities in accordance with the City of Chula Vista Municipal Code allowable hours for construction unless otherwise approved by the City. For any evening and nighttime construction activities that are required outside of the permitted hours, SDG&E shall notice all property owners within 300 feet of the proposed work at least 1 week in advance of the construction activities. SDG&E shall notify the local jurisdiction and the California Public Utilities Commission prior to conducting any work that may deviate from the City noise ordinance. Nighttime work and the use of heavy construction equipment shall be limited to the extent practicable.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. This measure will be implemented during construction if evening or night work is required.	Pre and During	To Be Implemented During Construction
Public Health and Safety	APM-HAZ-01	01	Hazardous Substance Management and Emergency Response Plan	SDG&E would prepare and implement a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	The Hazardous Substance Management and Emergency Response Plan/Hazardous Site Assessment was approved by the CPUC on August 26, 2014. On June 25, 2014, SDG&E confirmed with the Department of Toxic Substances Control and the Department of Environmental Health that submittal of the plan is not required.	Pre and During	Complete
Public Health and Safety	HAZ-01a	01	Environmental awareness training program	Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a regular basis depending on the level of construction activity.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. Appropriate work practices regarding hazardous materials were discussed at the supervisory-level environmental awareness training on August 26, 2014, and will be discussed at subsequent crew trainings. SDG&E will administer the worker environmental awareness program to all construction personnel immediately prior to them commencing work on the Project. Sign-in sheets for the crew trainings and any additional supervisory-level trainings will be submitted as attachments to the weekly Environmental Compliance Status Report during construction.	Pre and During	To Be Implemented During Construction
Public Health and Safety	HAZ-01b	01	Hazardous Substance Management and Emergency Response Plan	The hazardous substance management and emergency response plan proposed by APM-HAZ-01 shall be reviewed and approved by the California Public Utilities Commission (CPUC), California Department of Toxic Substances Control, and San Diego County Department of Environmental Health (DEH), Hazardous Materials Division. The plan shall meet the requirements identified in California Health and Safety Code Sections 25503.4, 25503.5, and 25504 and specifically addressed for the County of San Diego in the County of San Diego DEH, Hazardous Material Division guidance on Hazardous Materials Business Plans.	The Hazardous Substance Management and Emergency Response Plan/Hazardous Site Assessment was approved by the CPUC on August 26, 2014. On June 25, 2014, SDG&E confirmed with the Department of Toxic Substances Control and the Department of Environmental Health that submittal of the plan is not required.	Pre	Complete

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
Public Health and Safety	HAZ-02	01	Hazardous materials site assessment	As part of the final design, a site assessment shall be performed to augment and consolidate previous studies performed for the entire Proposed Project site to identify where hazardous materials or wastes may be encountered. The site assessment shall be submitted to the California Public Utilities Commission and the Department of Toxic Substances Control at least 60 days prior to construction activities. In the event that grading, construction, or operation of proposed facilities will encounter hazardous waste, SDG&E shall ensure compliance with the State of California CCR Title 23 Health and Safety Regulations as managed by the Department of Toxic Substances Control and San Diego County Department of Environmental Health (DEH).	The Hazardous Substance Management and Emergency Response Plan/Hazardous Site Assessment was approved by the CPUC on August 26, 2014. On June 25, 2014, SDG&E confirmed with the Department of Toxic Substances Control and the Department of Environmental Health, that submittal of the plan is not required.	Pre	Complete
Public Health and Safety	HAZ-04	01	Fire prevention	Fires shall be prevented or minimized by exercising care when operating utility vehicles within the right-of-way and access roads and by parking vehicles away from dry vegetation where hot catalytic converters can ignite a fire.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. Fire prevention measures, as outlined in this measure, will be implemented during construction.	Pre and During	To Be Implemented During Construction
Public Health and Safety	HAZ-04	02	Fire prevention	In times of high fire hazard, it may be necessary for construction vehicles to carry water and shovels or fire extinguishers. Fire protective mats or shields would be used during grinding or welding to prevent or minimize the potential for fire.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. Fire prevention measures, as outlined in this measure, will be implemented during construction.	Pre and During	To Be Implemented During Construction
Public Services and Utilities	PSU-01	01	Utility service interruption noticing	Prior to construction in which a utility service interruption is known to be unavoidable, SDG&E shall notify members of the public affected by the planned outage of the impending interruption. Copies of the notices and dates shall be provided to the CPUC at the time the notices are distributed to the public.	This measure was included in the Final EIR, but is not included in the MMCRP. The CPUC will be provided a copy of the notice required for any planned service interruption, if required.	Pre and During	To Be Implemented During Construction
Transportation and Traffic	APM-TRA-01	01	Avoid heavy-duty vehicle use on L Street during p.m. peak hours	Heavy-duty construction vehicles and equipment would not utilize L Street during the p.m. peak hours (between 4:00 p.m. and 6:00 p.m. on weekdays). Alternate travel routes, such as J Street and Palomar Avenue, would instead be used during this time.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request This measure will be implemented during construction.	Pre and During	To Be Implemented During Construction
Transportation and Traffic	TRA-01	01	Traffic management/ control plans	Prior to the start of construction, SDG&E shall submit traffic management plans (TMPs) to the City as part of the required traffic encroachment permits. Traffic control plans (TCPs) shall define the locations of all roads that would need to be temporarily closed due to construction activities, including hauling of oversized loads by truck, conductor stringing activities, and trenching activities. The TCPs shall define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard guidelines outlined in the California Department of Transportation (Caltrans) Traffic Manual for Construction and Maintenance Work Zones (Caltrans 1996), the Standard Specifications for Public Works Construction (Caltrans 2009a), and the Work Area Traffic Control Handbook (WATCH) (Caltrans 2009b).	SDG&E has coordinated with the City of Chula Vista regarding the Traffic Control Plan for the Bay Boulevard Substation. The Traffic Management Plan (TMP) was approved by the CPUC on September 26, 2014. A Traffic Control Plan (TCP) that is specific to the transmission line component will be obtained from the City of Chula Vista prior to initiation of construction activities within Bay Boulevard when applicable.	Pre	To Be Implemented Immediately Prior to Construction
Transportation and Traffic	TRA-01	02	Traffic management/ control plans	Input and approval from the City shall be obtained, and copies of an approval letter from the City must be provided to the CPUC prior to the start of construction. Documentation of the approval of these plans, consistency with SDG&E's utility franchise agreements, and issuance of encroachment permits (if applicable) shall be provided to CPUC prior to the start of construction activities that require temporary closure of a public roadway.	Documentation demonstrating coordination with the City of Chula Vista was included as Attachment A: City of Chula Vista Letter of Coordination in the Traffic Management Plan. Documentation of all encroachment permits or additional TCPs approved by the city will be submitted to the CPUC as applicable.	Pre	To Be Implemented During Construction

Mitigation Measure (MM) Category Title	MM #	Task #	Mitigation Measures	Task Text	Comments	Timing:	Status:
Transportation and Traffic	TRA-02	01	Stagger work shifts	SDG&E shall stagger work shifts during the peak period of construction activity, which shall occur during the approximately 6-month grading and site development phase, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak traffic hours (7:30–8:30 a.m. and 4:30–5:30 p.m.) or as otherwise approved by the City of Chula Vista. Construction-related truck traffic shall also be scheduled to avoid travel during peak periods of traffic on the surrounding roadways.	This measure applies to grading and site development of the Bay Boulevard Substation. Therefore, this measure is not applicable to this location.	Pre	N/A
Transportation and Traffic	TRA-04	01	Emergency services coordination	SDG&E shall coordinate in advance with the City to avoid restricting movements of emergency vehicles. SDG&E shall request that police departments, fire departments, ambulance services, and paramedic services be notified by the City of the proposed locations, nature, timing, and duration of any construction activities and advised of any access restrictions that could impact their effectiveness. At locations where access to nearby property is blocked, provision shall be ready at all times to accommodate emergency vehicles, such as plating over excavations, short detours, and alternate routes in conjunction with local agencies. Traffic control plans (Mitigation Measure TRA-1) shall include details regarding emergency services coordination and procedures. Documentation of coordination with the City shall be provided to CPUC prior to the start of construction.	Evidence of the incorporation of specifications into the construction contract is included as an attachment to this NTP request. Documentation demonstrating the coordination with the City of Chula Vista was included as Attachment A: City of Chula Vista Letter of Coordination in the Traffic Management Plan.	Pre and During	Complete
Transportation and Traffic	TRA-05	01	Pedestrian access/bike route	Where construction will result in temporary closures of sidewalks and other pedestrian facilities, SDG&E shall provide temporary pedestrian access through detours or safe areas along the construction zone. Any affected pedestrian facilities and the alternative facilities or detours that shall be provided will be identified in the traffic management plan. Where construction activity will result in bike route or bike path closures, appropriate detours and signs shall be provided.	Temporary pedestrian access through detours or safe areas along the construction zone will be provided during temporary closures of sidewalks and other pedestrian facilities during construction. Documentation of coordination with affected public jurisdictions will be provided to the CPUC prior to implementation of the temporary closures.	Pre and During	To Be Implemented During Construction
Transportation and Traffic	TRA-06	01	Helicopter Lift Plan	Should helicopters be required to lift any structures during construction, SDG&E shall prepare a lift plan to be approved by both the Federal Aviation Administration (FAA) and CPUC that identifies procedures that will need to be implemented to ensure public safety.	This measure will be implemented if helicopter use is necessary.	Pre	To Be Implemented During Construction
Transportation and Traffic	TRA-06	02	Helicopter Lift Plan	Documentation of FAA approval of the lift plan shall be provided to the CPUC prior to the start of construction activities that require the use of a helicopter.	This measure will be implemented if helicopter use is necessary.	Pre	To Be Implemented During Construction
Transportation and Traffic	TRA-07a	01	Coordinate with parking lots	SDG&E shall coordinate with the lessee and/or owner of affected parking lots to minimize parking loss through timing restrictions that minimize potential conflicts with peak parking needs.	Documentation of the coordination with affected parking lot lessees/owners will be provided to the CPUC prior to construction within parking lots.	Pre and During	To Be Implemented Immediately Prior to Construction
Transportation and Traffic	TRA-07b	01	Trenching notifications	SDG&E shall post signage 24 hours in advance of trenching activities along affected streets to notify businesses that might be inconvenienced.	Documentation of the coordination with the city and businesses will be provided to the CPUC prior to construction of the transmission line component.	Pre and During	To Be Implemented Immediately Prior to Construction

ATTACHMENT C: GEOTECHNICAL DESIGN CERTIFICATION

NV5

August 5, 2015

Laurence Abcede
San Diego Gas & Electric Company
1010 Tavern Road, SD1116
Alpine, CA 91901

Subject: **Geotechnical Design Considerations**

Dear Laurence:

This letter is to certify compliance with the geotechnical mitigation measures set forth in the Final EIR for the South Bay Substation Relocation Project.

The design utilizes the recommendations from the Geotechnical Investigation report prepared for the site by Geocon Incorporated dated June 8, 2011.

Respectfully submitted,
NV5

Jack L. Abcarius
Associate

REGISTERED PROFESSIONAL ENGINEER
JACK L. ABCARIUS
No. 10459
EXP. 3/31/17
CIVIL
STATE OF CALIFORNIA

cc: Doug Taft, Power Group Director, NV5
Richard Rodriguez, PE, Principal Engineer, SDG&E

ATTACHMENT D: AVIAN POWER LINE INTERACTION COMMITTEE (APLIC) DESIGN RECOMMENDATIONS MEMORANDUM AND DESIGN DRAWINGS

A Sempra Energy utility

Memorandum

San Diego Gas & Electric Company

South Bay Substation Relocation Project **August 2015**

Subject

South Bay Substation Relocation Project transmission structures compliance with Avian Power Line Interaction Committee (APLIC) Suggested Practices

Objective

In accordance with South Bay Substation Relocation Project (Project) Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) applicant-proposed measure (APM) BIO-04, and the Project's Coastal Development Permit (CDP) Special Condition 3, this memo provides documentation that Project transmission structures conform to APLIC's *Suggested Practices for Avian Protection on Powerlines* (APLIC 2006) to help minimize impacts to raptors.

APLIC Suggested Practices

APLIC 2006 is a resource for addressing avian electrocution at electric power facilities. Avian electrocutions typically occur when a bird simultaneously contacts electrical equipment either phase-to-phase or phase-to-ground. APLIC design guidelines for the largest raptors (eagles) suggest a minimum standard of separation that establishes avian-safe spacing for all raptors that could be impacted by Project transmission.

APLIC Standards

APLIC 2006 recommends a minimum 60-inches (in) of horizontal separation, and 40-in of vertical separation between phase conductors (phase-to-phase) or a phase conductor and grounded hardware/conductor (phase-to-ground). Lines that are energized at voltages ≥ 60 kilovolts (kV) are considered transmission lines in ALIC 2006, and lines energized at voltages ≤ 60kV are considered distribution lines. For each kV over 60kV, the 60-in standard should be increased by 0.2 inches.

APLIC minimum recommended phase separation to protect raptors:

- 138kV: 56-in vertical spacing, 76-in horizontal spacing
- 69kV: 42-in vertical spacing, 62-in horizontal spacing
- 0 to 60kV: 40-in vertical spacing, 60-in horizontal spacing

SDG&E Transmission Design

The South Bay Substation Relocation Project transmission line structures include installation or relocation of 69kV wood poles, 69kV steel cable poles, and a 230kV[1] steel dead-end cable pole. SDG&E Overhead Construction Standards require a minimum distance of uncovered conductor phase-to-phase or phase-to-neutral (-ground) of 60-in (SDG&E 2014). Phase separation for the Project is illustrated in the attached overhead transmission structure drawings and summarized below.

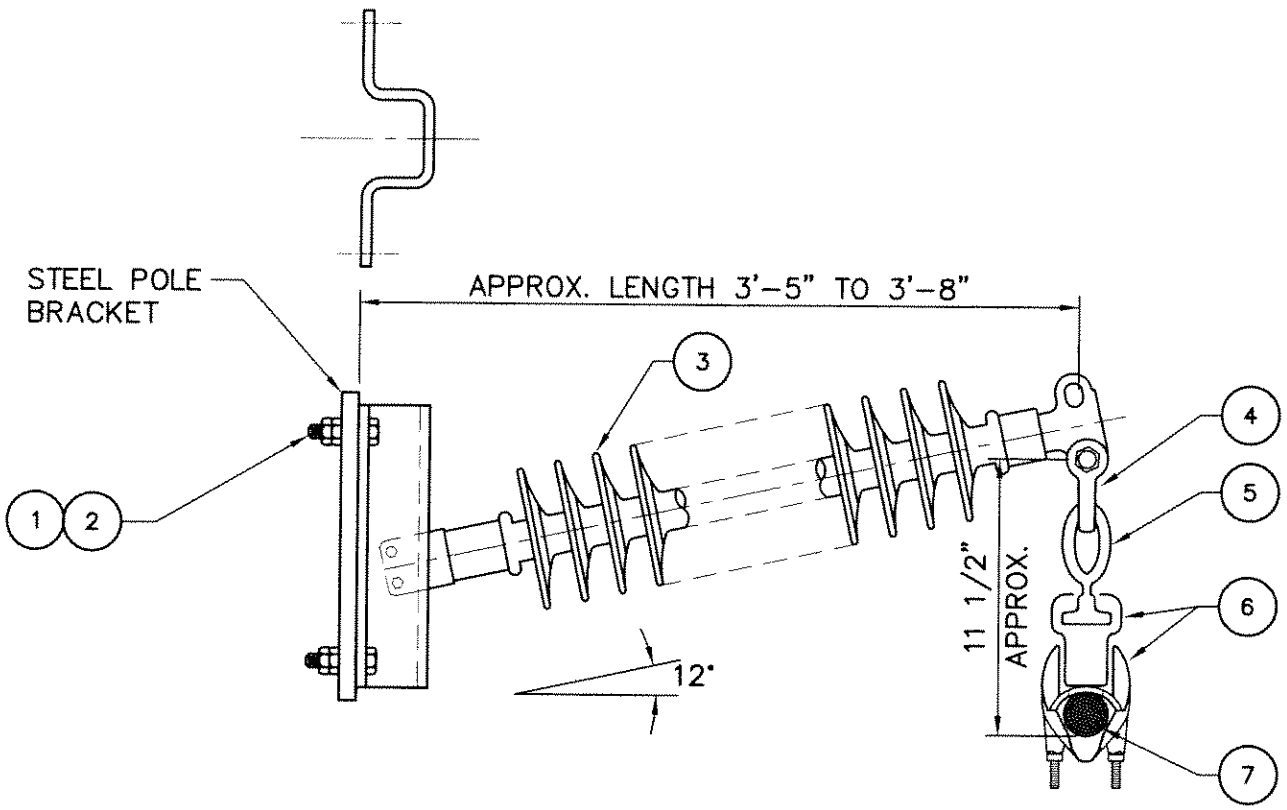
[1] No 230kV electric conductor is proposed as part of this Project. However, a new 138kV cable pole built to 230kV standards will be installed with 138kV conductor.

Project overhead transmission structure minimum phase separation:

- 138kV: 390-in vertical spacing, 184.5-in horizontal spacing
- 69kV (steel pole): 132-in vertical spacing, 96-in horizontal spacing
- 69kV (wood pole): 72-in vertical spacing, greater than 82-in vertical spacing

Conclusion

Project design for new or replaced transmission structures complies with APLIC 2006 design recommendations as shown above. The Project overhead transmission structure minimum phase separation for both horizontal as well as vertical spacing meets or exceeds the minimum as recommended by APLIC.



ELEVATION

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
A	ADDED ITEMS 4 & 5	SDF	DRB	WPH	2/1/00	C	REVISED LINE GUARD STOCK NO. FOR CANARY	PM	WPH	WR	5/3/05
–	ORIGINAL ISSUE	AJS	DRB	WPH	7/15/99	B	ADD ACSS CONDUCTORS	WDF	SFO/WPH	WVT	2/20/03

SDGE

TRANSMISSION ENGINEERING

POLYMER POST (BLADE) INSULATOR 69kV STEEL POLE

SCALE: NONE

DWG. NO.	SHT. NO.
19215	1of2

19215C01

BILL OF MATERIAL (FOR ONE ASSEMBLY)

ITEM	QTY.	STOCK NO. OR *STD. NO.*	DESCRIPTION	ACCT NO.
1	4	153792	BOLT , 3/4" x 3" WITH NUT	356
2	4	504576	LOCK NUT, 3/4"	356
3	1	429330	INSULATOR, POST, POLYMER, 41–44" LONG, BENDABLE BASE AND BLADE TOP, 4,000 LBS. CANTILEVER BREAKING LOAD.	356
4	1	636436	SHACKLE, ANCHOR, 30K	356
5	1	337542	EYE OVAL BALL, 30K	356
6	1	232192	CLAMP, SUSPENSION, ALUM. ALLOY, WITH SOCKET EYE, RANGE 1.25" TO 1.82", 25K	356
7		SEE TABLE A	GUARD, LINE	356

TABLE A

			636 ACSR/AW OR ACSS/AW 24/7 (ROOK/AW)	
7	1 SET	397728	GUARD, LINE, LENGTH 45", O.D. 1.342"	356
			900 ACSS/AW 54/7 (CANARY/AW)	
7	1 SET	397740	GUARD, LINE, LENGTH 53", O.D. 1.662"	356
			1033.5 ASCR/AW OR ACSS/AW 45/7 (ORTOLAN/AW)	
7	1 SET	397760	GUARD, LINE, LENGTH 53", O.D. 1.712"	356

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
A	ADDED ITEMS 4 & 5	SDF	DRB	WPH	2/1/00	C	REVISED LINE GUARD STOCK NO. FOR CANARY	PM	WPH	WVT	5/3/05
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SDGE

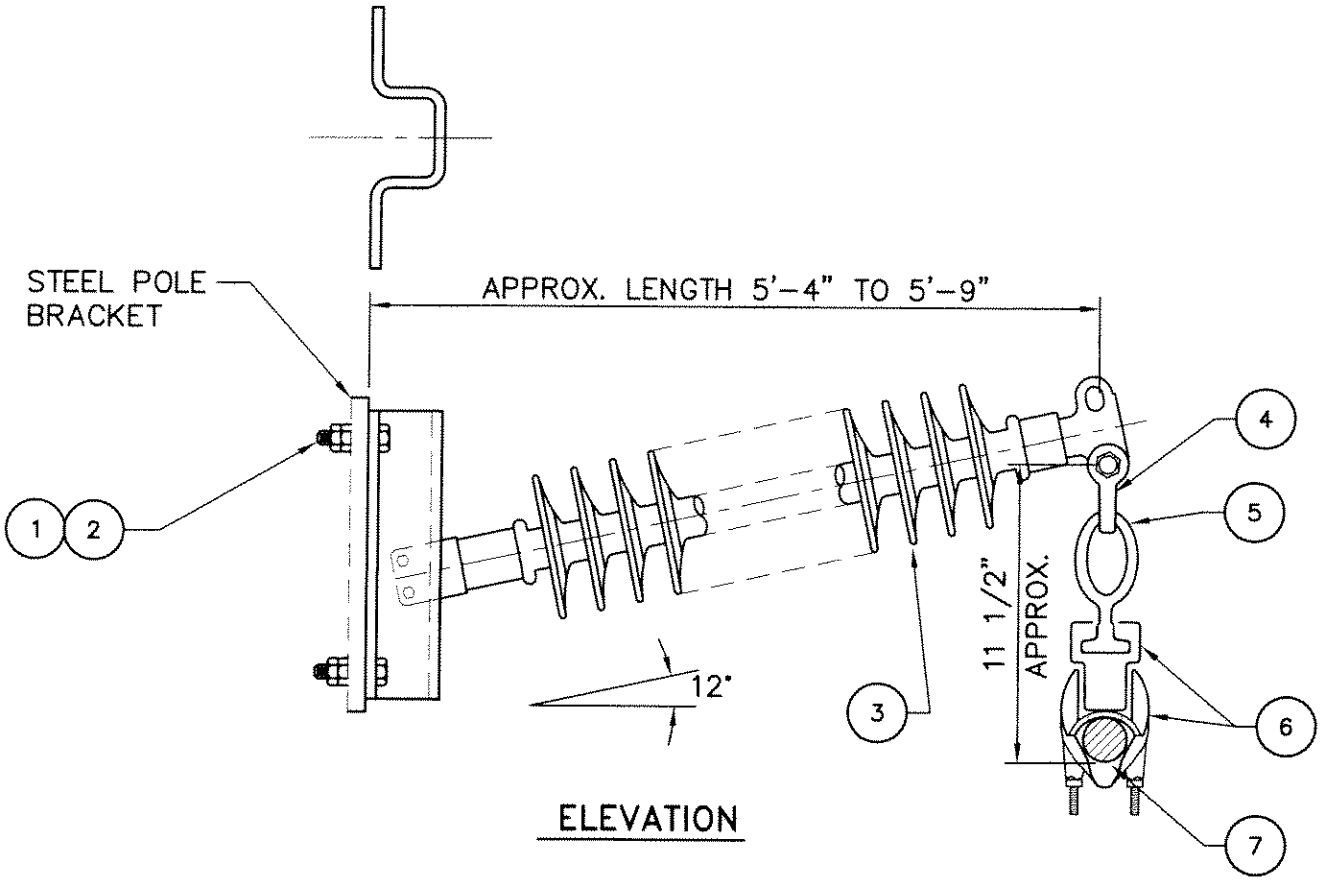
TRANSMISSION ENGINEERING

POLYMER POST (BLADE) INSULATOR
69kV STEEL POLE

SCALE: NONE

DWG. NO.	*SHT. NO.*
19215	2of2

19215C01



ELEVATION

BILL OF MATERIAL (FOR ONE ASSEMBLY)

ITEM	QTY.	STOCK NO. OR *STD. NO.*	DESCRIPTION	ACCT NO.
1	4	153792	BOLT , 3/4" x 3" WITH NUT	356
2	4	504576	NUT, M/F, LOCK, 3/4"	356
3	1	429334	INSULATOR, POST, POLYMER, 64-69" LONG, BENDABLE, BASE AND BLADE TOP, 2,600 LBS. CANTILEVER BREAKING LOAD.	356
4	1	636436	SHACLE, ANCHOR, 30K	356
5	1	337542	EYE OVAL BALL, 30K	356
6	1	232192	CLAMP, SUSPENSION, ALUM. ALLOY, WITH SOCKET EYE RANGE 1.25" TO 1.82", 25K	356
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7	1 SET	397760	GUARD, LINE, LENGTH 53", O.D. 1.712"	356

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
A	CHANGED NOTE	WDF	WPH	mf	4/25/02	C	REVISED LINE GUARD STOCK NO. FOR CANARY	PM	WDH	WVT	5/03/05
–	ORIGINAL ISSUE	FJP	DRB	WPH	3/23/00	B	ADD ACSS CONDUCTORS	WDF	SFO/WPH	WVT	2/20/03

TRANSMISSION ENGINEERING

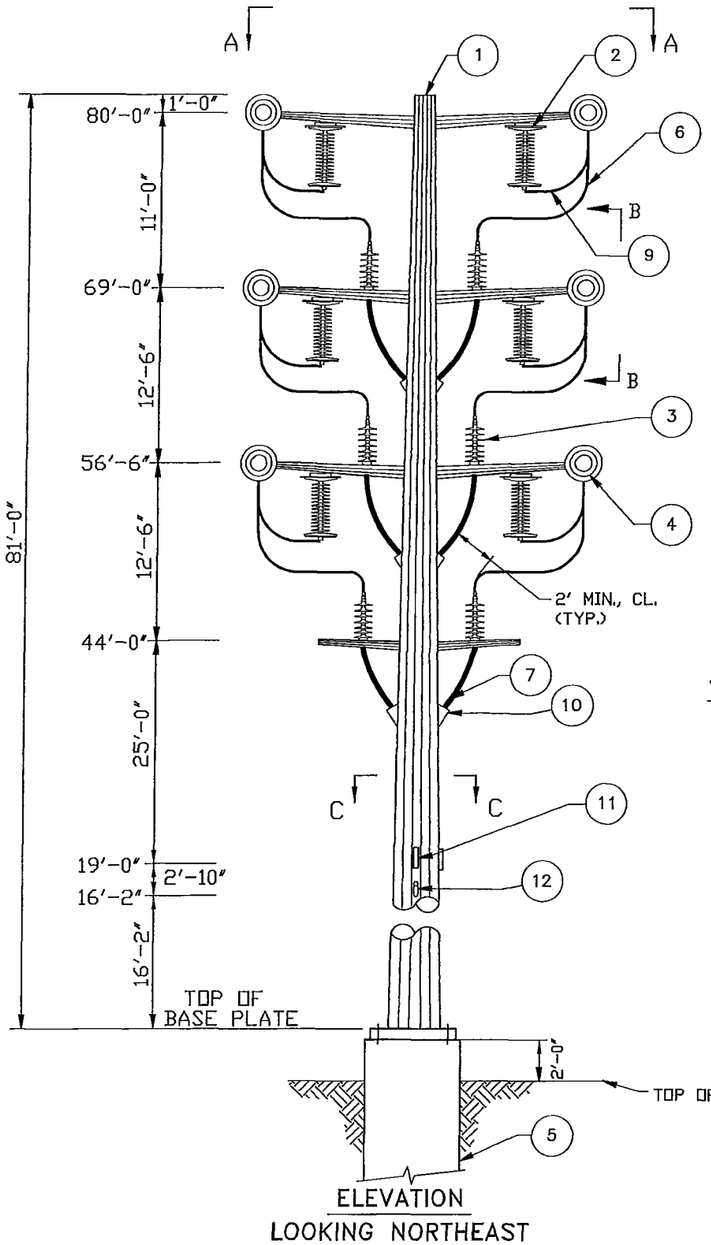
SDGE

POLYMER POST (BLADE) INSULATOR 138kV STEEL POLE

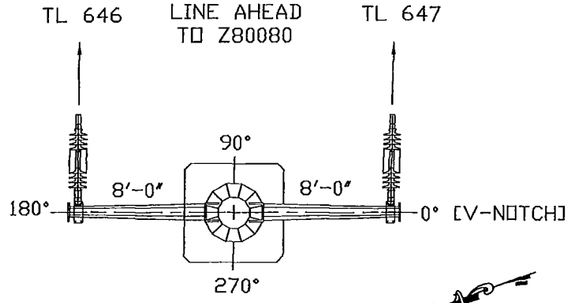
SCALE: NONE

DWG. NO.	*SHT. NO.*
19315	1of1

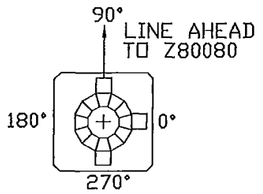
19315C01



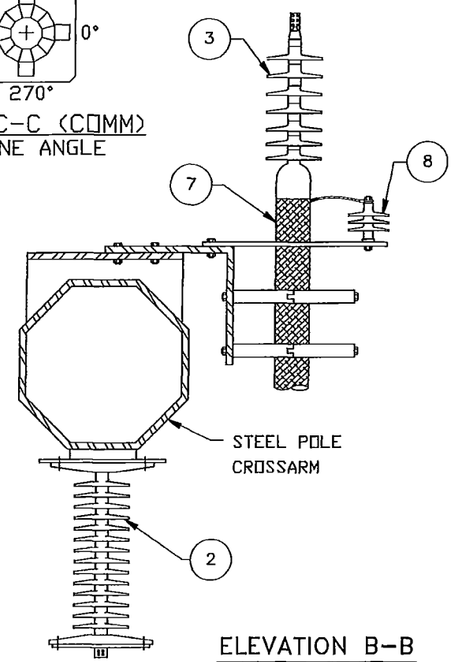
ELEVATION
LOOKING NORTHEAST



VIEW A-A (69 kV)
0 degree line angle



VIEW C-C (COMM)
0° LINE ANGLE



ELEVATION B-B

BILL OF MATERIAL			
ITEM	QTY.	STOCK NO. OR *STD. NO.*	DESCRIPTION
1	1	***35205, SHT. 2***	STEEL CABLE POLE
2	3 PER CIRCUIT	***39010***	ARRESTER, 69kV LIGHTNING
3	3 PER CIRCUIT	***39005***	TERMINATOR, 69kV
4	AS REQ'D	***19240***	69kV DEADEND INSULATOR ASSEMBLY
5	1	REF. JOB. PACKAGE	FOUNDATION
6	AS REQ'D	***39005***	WIRE, 750 MCM B.S. CU., B.S.
7	AS REQ'D	REF. JOB PACKAGE	CABLE, 69kV UNDERGROUND
8	3 PER CIRCUIT	***39005***	3kV SURGE VOLTAGE LIMITER
9	AS REQ'D	***39010***	WIRE, 4/0 CU., B.S.
10	3 PER CIRCUIT	392414	GRIP, CABLE SUPPORT, HOOKED ENDS
11	3	35205-06	COMMUNICATION VANG (3 SIDES) - DETAIL B
12	1	35205-06	FIBER OPTIC RISER/HANDHOLE DETAIL

NOTES:

1. REFER TO DRAWINGS 62221-01 & 02 FOR LOAD REQUIREMENTS.
2. THE PATH FROM OH CONDUCTOR TO ARRESTOR MUST BE SHORTER THAN THE PATH FROM OH CONDUCTOR TO TERMINATOR.
3. SEE DRAWING 62220-02 FOR CONDUCTOR INFORMATION.
4. USE SAGEM STANDOFF CLAMP OR APPROVED EQUIV. REFER TO SAGEM DWGS. 671-4 (FIXED BASE) 681-4 (SWIVEL BASE) AND 631-4 (CLAMP) FOR DETAILS. FIELD CUT STANDOFF ROD AS NEEDED.

REV	BUDGET	CONST ORDER	CHANGE	DWN	CHKD	APPV	DATE
C							
B							
A							
		2986346	ORIGINAL	RA	AC	RR	1/15/15

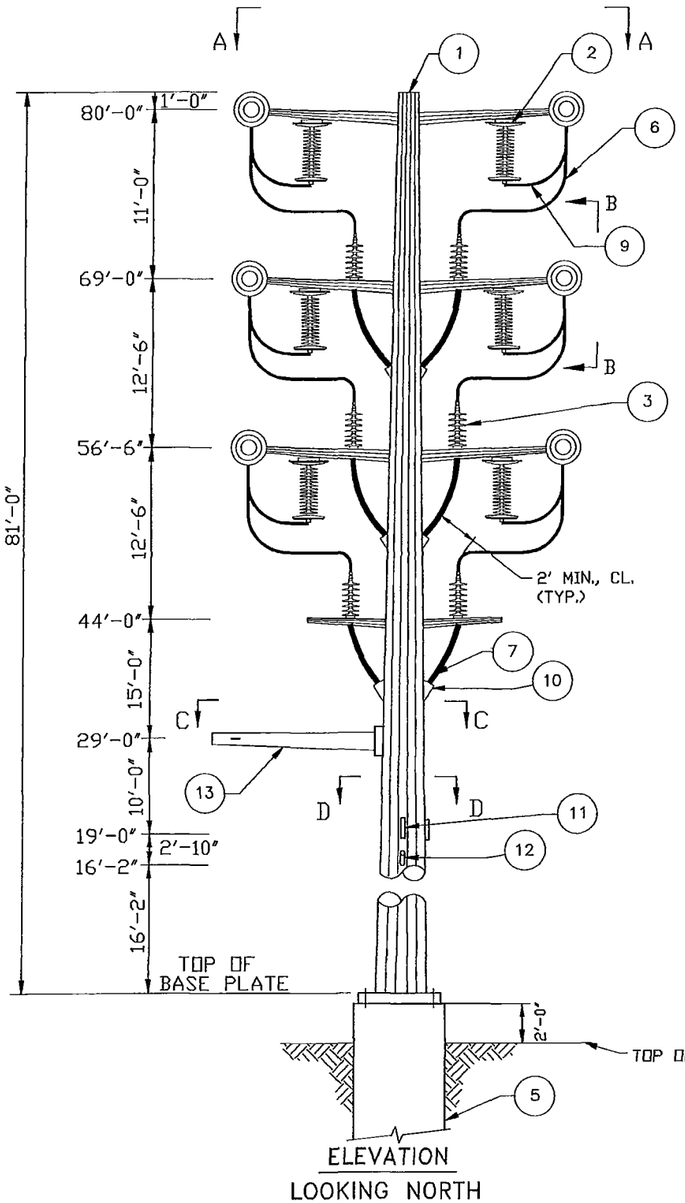
SDGE *SAN DIEGO GAS & ELECTRIC*
TRANSMISSION ENGINEERING

TL 646/647 81' CABLE POLE

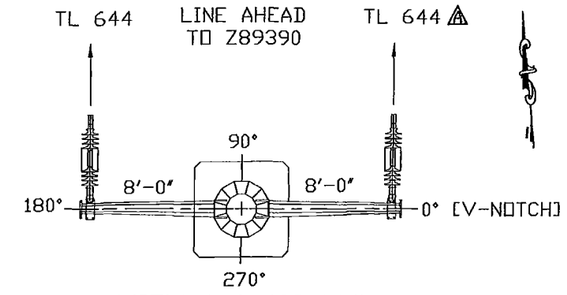
SCALE NONE SHEET 1 OF 2

GENERAL ARRANGEMENT
69KV 81' STEEL CABLE POLE
SP-1551, Z253126

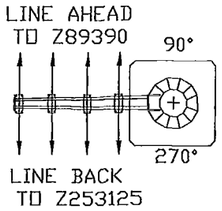
DRAWING NUMBER
62220-01



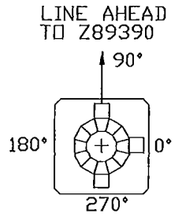
ELEVATION
LOOKING NORTH



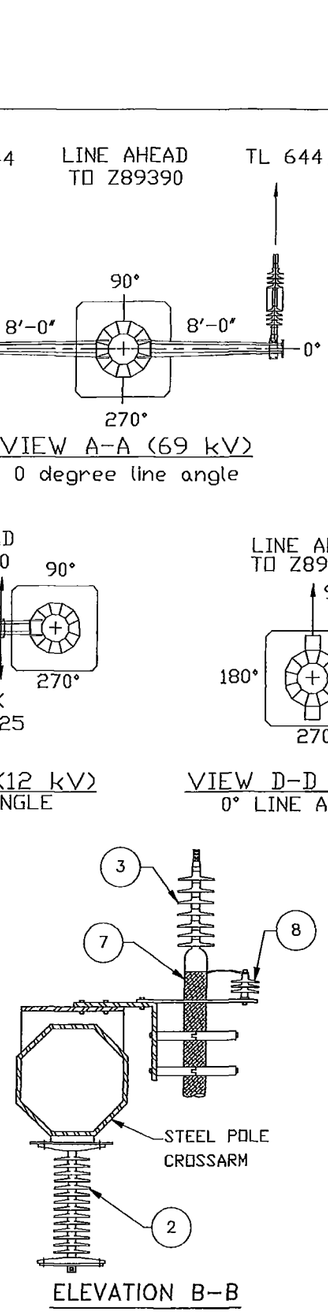
VIEW A-A (69 kV)
0 degree line angle



VIEW C-C (12 kV)
0° LINE ANGLE



VIEW D-D (COMM)
0° LINE ANGLE



ELEVATION B-B

BILL OF MATERIAL

ITEM	QTY.	STOCK NO. OR *STD. NO.*	DESCRIPTION
1	1	***35205, SHT. 2***	STEEL CABLE POLE
2	3 PER CIRCUIT	***39010***	ARRESTER, 69kV LIGHTNING
3	3 PER CIRCUIT	***39005***	TERMINATOR, 69kV
4	AS REQ'D	***19240***	69kV DEADEND INSULATOR ASSEMBLY
5	1	REF. JOB. PACKAGE	FOUNDATION
6	AS REQ'D	***39005***	WIRE, 750 MCM B.S. CU., B.S.
7	AS REQ'D	REF. JOB PACKAGE	CABLE, 69kV UNDERGROUND
8	3 PER CIRCUIT	***39005***	3kV SURGE VOLTAGE LIMITER
9	AS REQ'D	***39010***	WIRE, 4/0 CU., B.S.
10	3 PER CIRCUIT	392414	GRIP, CABLE SUPPORT, HOOKED ENDS
11	3	35205-06	COMMUNICATION VANG (3 SIDES) - DETAIL B
12	1	35205-06	FIBER OPTIC RISER/HANDHOLE DETAIL
13	1	17150-01	DISTRIBUTION E10 ALLEY ARM

NOTES:

1. REFER TO DRAWINGS 62227-01 & 02 FOR LOAD REQUIREMENTS.
2. THE PATH FROM OH CONDUCTOR TO ARRESTOR MUST BE SHORTER THAN THE PATH FROM OH CONDUCTOR TO TERMINATOR.
3. SEE DRAWING 62226-02 FOR CONDUCTOR INFORMATION.
4. USE SAGEM STANDOFF CLAMP OR APPROVED EQUIV. REFER TO SAGEM DWGS. 671-4 (FIXED BASE) 681-4 (SWIVEL BASE) AND 631-4 (CLAMP) FOR DETAILS. FIELD CUT STANDOFF ROD AS NEEDED.

REV	BUDGET	CONST ORDER	CHANGE	DWN	CHKD	APPV	DATE
C							
B							
A			REVISED TL# TO TL644 ON EAST CIRCUIT IN PLAN VIEW A-A	RA	AC	RR	3/25/15
		2986344	ORIGINAL	RA	AC	RR	1/15/15

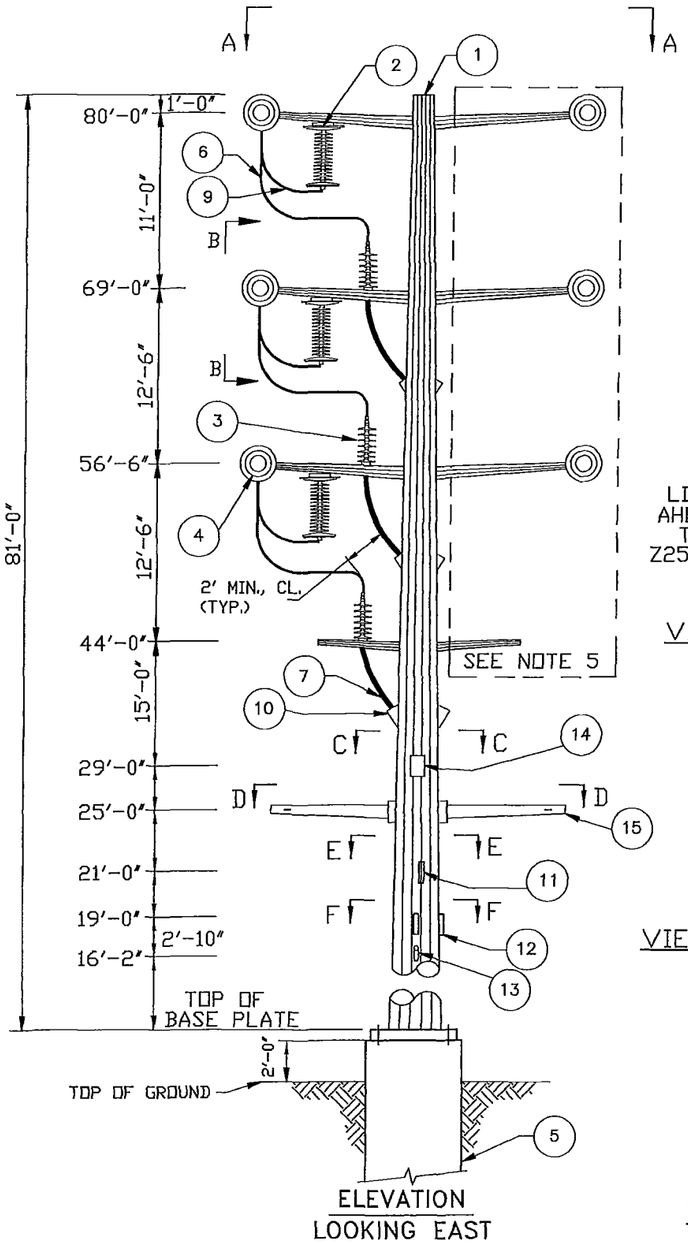
SDGE SAN DIEGO GAS & ELECTRIC
TRANSMISSION ENGINEERING

TL 644 81' CABLE POLE

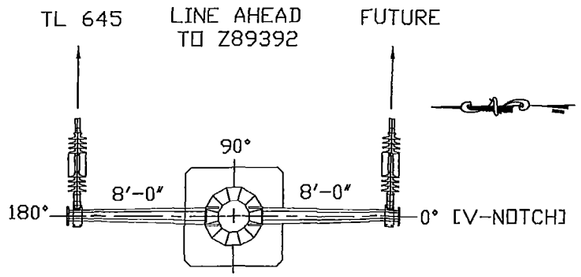
SCALE NONE SHEET 1 OF 2

GENERAL ARRANGEMENT
69KV 81' STEEL CABLE POLE
SP-1553, Z253124

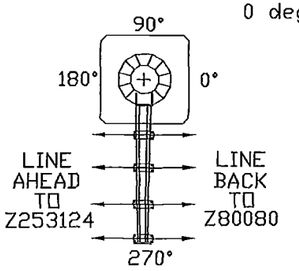
DRAWING NUMBER
62226-01



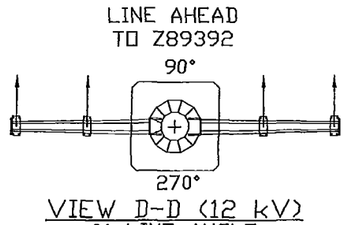
ELEVATION
LOOKING EAST



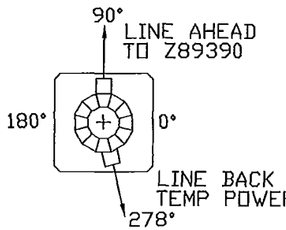
VIEW A-A (69 kV)
0 degree line angle



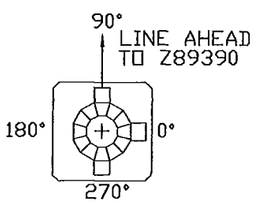
VIEW C-C (12 kV)
0° LINE ANGLE



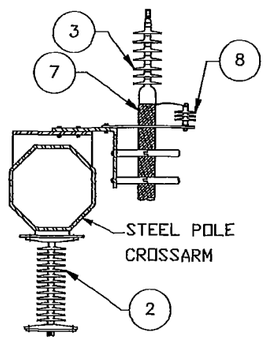
VIEW D-D (12 kV)
0° LINE ANGLE



VIEW E-E (SECONDARY)
8° LINE ANGLE



VIEW F-F (COMM)
0° LINE ANGLE



ELEVATION B-B

BILL OF MATERIAL

ITEM	QTY.	STOCK NO. OR *STD. NO.*	DESCRIPTION
1	1	***35205, SHT. 2***	STEEL CABLE POLE
2	3 PER CIRCUIT	***39010***	ARRESTER, 69kV LIGHTNING
3	3 PER CIRCUIT	***39005***	TERMINATOR, 69kV
4	AS REQ'D	***19240***	69kV DEADEND INSULATOR ASSEMBLY
5	1	REF. JOB. PACKAGE	FOUNDATION
6	AS REQ'D	***39005***	WIRE, 750 MCM B.S. CU., B.S.
7	AS REQ'D	REF. JOB PACKAGE	CABLE, 69kV UNDERGROUND
8	3 PER CIRCUIT	***39005***	3kV SURGE VOLTAGE LIMITER
9	AS REQ'D	***39010***	WIRE, 4/0 CU., B.S.
10	3 PER CIRCUIT	392414	GRIP, CABLE SUPPORT, HOOKED ENDS
11	2	35205-06	VANG (2 SIDES) - DETAIL B
12	3	35205-06	COMMUNICATION VANG (3 SIDES) - DETAIL B
13	1	35205-06	FIBER OPTIC RISER/HANDHOLE DETAIL
14	1	17150-01	DISTRIBUTION E10 ALLEY ARM
15	2	17150-01	DISTRIBUTION C8 CROSSARM

NOTES:

1. REFER TO DRAWINGS 62230-01 & 02 FOR LOAD REQUIREMENTS.
2. THE PATH FROM OH CONDUCTOR TO ARRESTOR MUST BE SHORTER THAN THE PATH FROM OH CONDUCTOR TO TERMINATOR.
3. SEE DRAWING 62229-02 FOR CONDUCTOR INFORMATION.
4. USE SAGEM STANDOFF CLAMP OR APPROVED EQUIV. REFER TO SAGEM DWGS. 671-4 (FIXED BASE) 681-4 (SWIVEL BASE) AND 631-4 (CLAMP) FOR DETAILS. FIELD CUT STANDOFF ROD AS NEEDED.
5. THE CABLE POLE IS DESIGNED TO ACCOMMODATE FUTURE DOUBLE CIRCUIT INSTALLATION. REFER TO JOB PACKAGE FOR NUMBER OF CIRCUITS TO BE INSTALLED.

REV	BUDGET	CONST ORDER	CHANGE	DWN	CHKD	APPV	DATE
C							
B							
A							
		2986345	ORIGINAL	RA	AC	RR	1/15/15

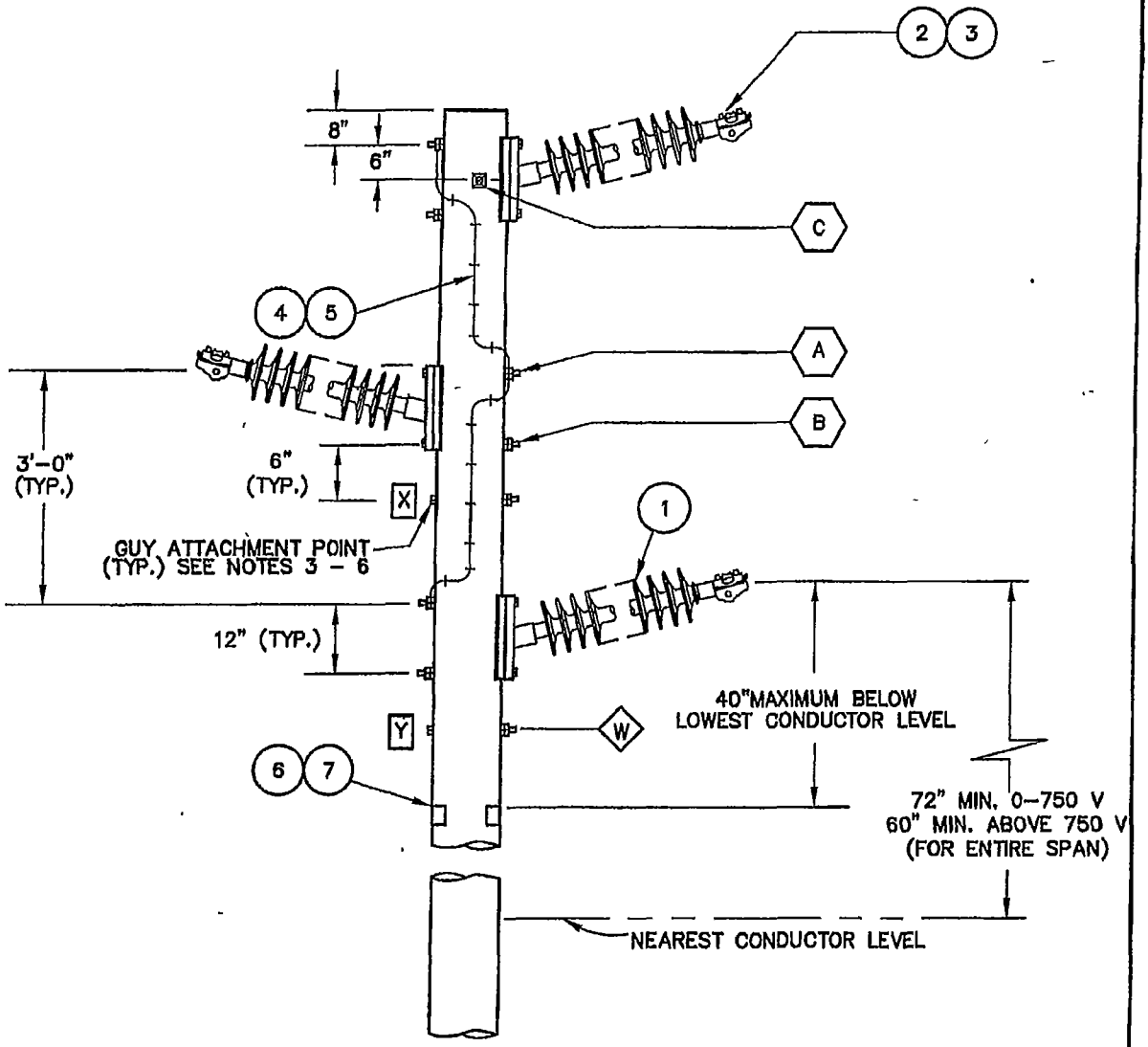
SDGE *SAN DIEGO GAS & ELECTRIC*
TRANSMISSION ENGINEERING

TL 645 81' CABLE POLE

SCALE NONE SHEET 1 OF 2

GENERAL ARRANGEMENT
69KV 81' STEEL CABLE POLE
SP-1554, Z253125

DRAWING NUMBER
62229-01



NOTES:

1. LINE ANGLE NOT TO EXCEED 15 DEGREES.
2. VERTICAL LOAD ON POST INSULATOR NOT TO EXCEED 1250 LBS. WITHOUT PRIOR APPROVAL.
3. FOR GUYING, INSTALL IN ORDER [X][Y] .
4. FOR WIND LOAD, GUY ATTACHMENT MUST BE AT OR BELOW POINT ◇W◇.
5. SEE SECTION ***16000*** FOR GUY DETAILS.
6. SEE JOB PACKAGE FOR GUYING REQUIREMENTS.

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
A	NOTE CHANGES	SDF	DRB	WPH	3/23/00	C	REV. SHT. 3	WDF	GV/WPH	WVT	6/1/04
–	ORIGINAL ISSUE	KSM	GV	WPH	8/1/97	B	ADDED ACSS	WDF	SFO/WPH	WVT	8/1/03

SDGE

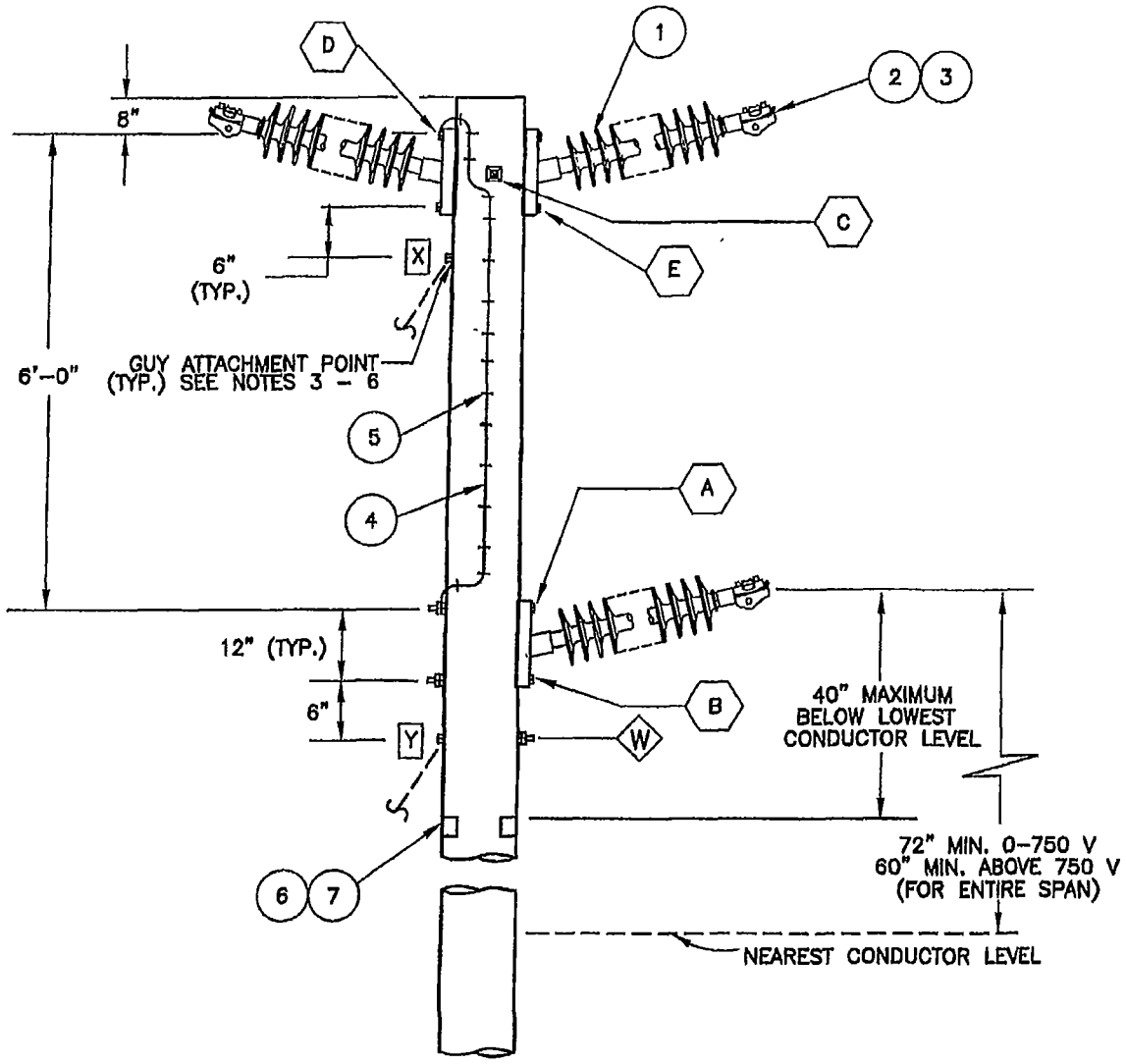
TRANSMISSION ENGINEERING

POLE TOP ARRANGEMENT TYPE WPI SINGLE CIRCUIT 69kV WOOD POLE

SCALE: NONE

DWG. NO.	SHT. NO.
13100	1of3

13100C01



NOTES:

1. LINE ANGLE NOT TO EXCEED 15 DEGREES.
2. VERTICAL LOAD ON POST INSULATOR NOT TO EXCEED 1250 LBS. WITHOUT PRIOR APPROVAL.
3. FOR GUYING INSTALL IN ORDER [X][Y].
4. FOR WIND LOAD, GUY ATTACHMENT MUST BE AT OR BELOW POINT (W).
5. SEE SECTION *15000* FOR GUY DETAILS.
6. SEE JOB PACKAGE FOR GUYING REQUIREMENTS.

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
A	ADDED ACSS	WDF	SFO/WPH	WVT	8/1/03	C					
–	ORIGINAL ISSUE	WDF	WPH	WVT	4/25/02	B	REV. SHT. 3	WDF	CV/WPH	WVT	6/1/04

SDGE

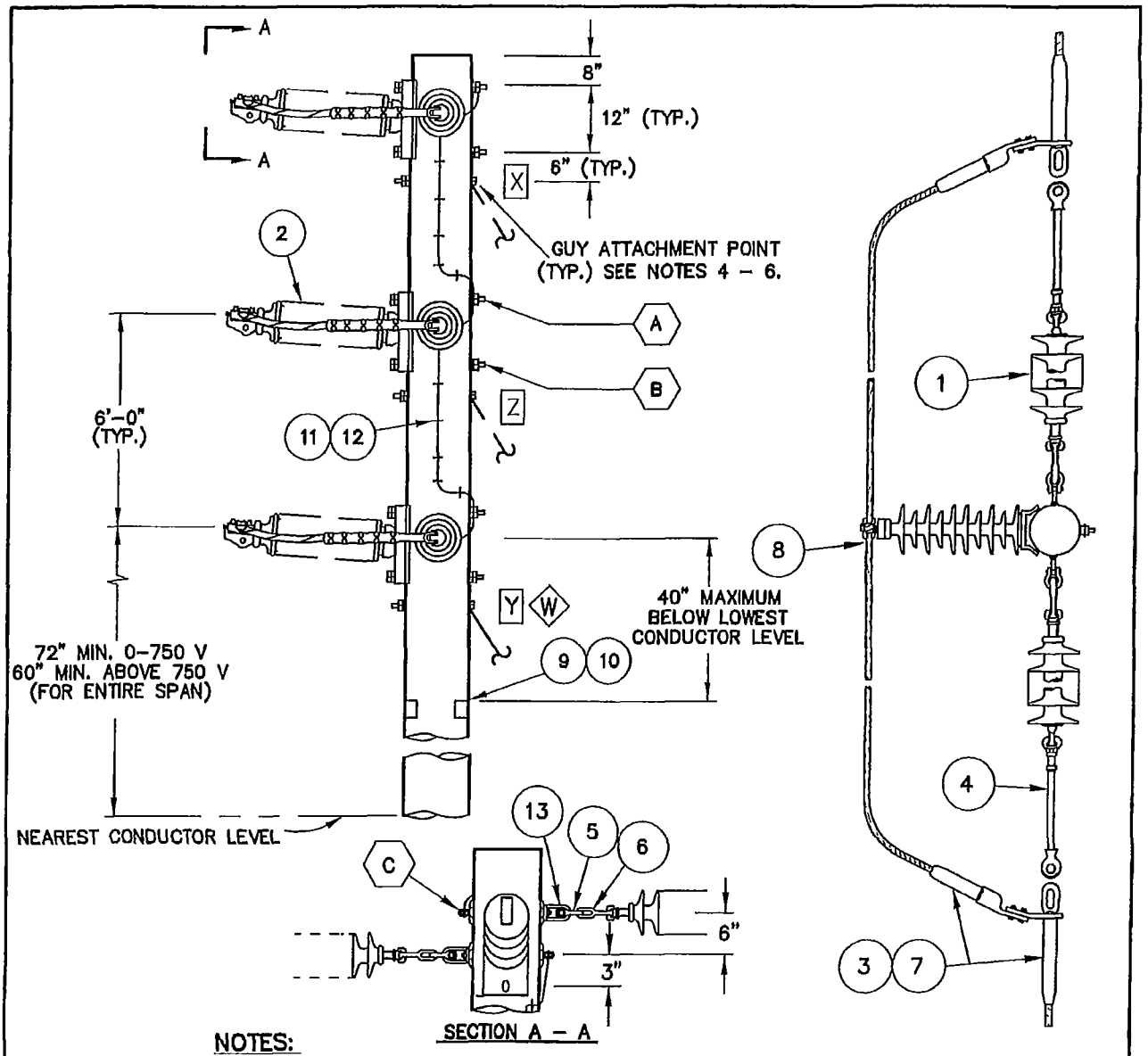
TRANSMISSION ENGINEERING

POLE TOP ARRANGEMENT
TYPE 2/1 WPI SINGLE CIRCUIT
69kV WOOD POLE

SCALE: NONE

DWG. NO.	*SHT. NO.*
13103	1of3

13103B01



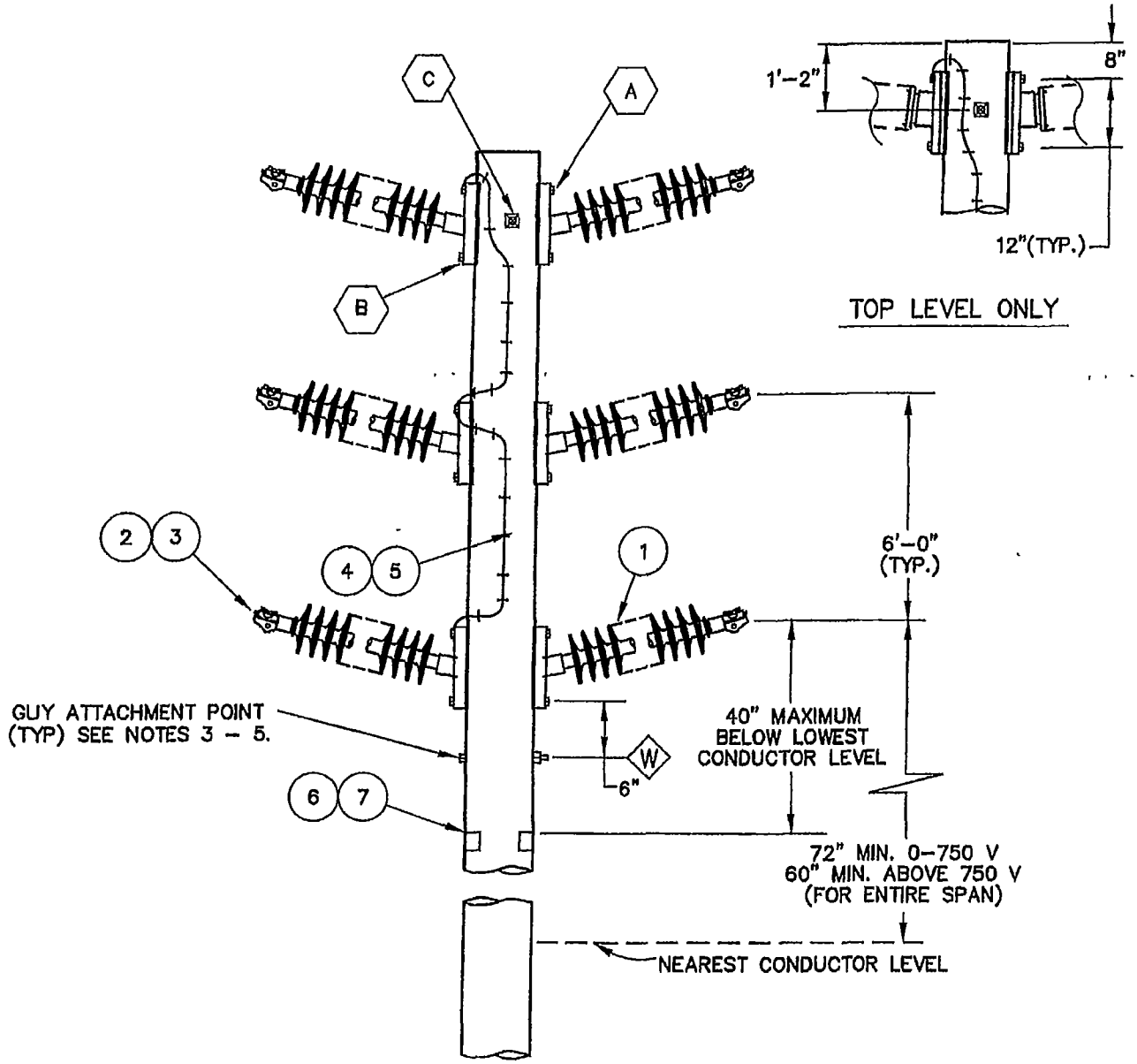
NOTES:

1. CAUTION: DO NOT ATTEMPT TO ALIGN STRAIN CLAMP WITH WIRE UNDER TENSION – TWISTING MAY CAUSE FAILURE OF INSULATOR ROD.
2. LINE ANGLE 0 TO 75 DEGREES.
3. MAXIMUM CONDUCTOR DESIGN TENSION NOT TO EXCEED 4000 LBS.
4. FOR WIND LOAD, GUY ATTACHMENT MUST BE AT OR BELOW POINT (W).
5. FOR GUYING INSTALL IN ORDER X Y Z SEE SECTION *15000* FOR GUY DETAILS.
6. SEE JOB PACKAGE FOR GUYING REQUIREMENTS.

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
B						E					
A	CORRECTED SHT 3	PM	WPH	WV	7/21/06	D					
	ORIGINAL	WDF	SFO WPH	WVT	8/1/03	C					

TRANSMISSION ENGINEERING		SCALE: NONE	
SDGE	POLE TOP ARRANGEMENT TYPE YPI SINGLE CIRCUIT–ACSS 69kV WOOD POLE	DWG. NO. 13121	SHT. NO. 1 of 3

13121A01



NOTES:

1. LINE ANGLE NOT TO EXCEED 3 DEGREES.
2. VERTICAL LOAD ON POST INSULATOR NOT TO EXCEED 1250 LBS. WITHOUT PRIOR APPROVAL.
3. GUY ATTACHMENT MUST BE AT OR BELOW POINT (W).
4. SEE SECTION *15000* FOR GUY DETAILS.
5. SEE JOB PACKAGE FOR GUYING REQUIREMENTS.

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
A	ADDED SHEET 3	WDF	WPH	WVT	4/25/02	C	REV. SHT. 3	WDF	GV/WPH	WVT	6/1/04
–	ORIGINAL ISSUE	KSM	GV	WPH	8/01/97	B	ADDED ACSS	WDF	SFO/WPH	WVT	8/1/03

SDGE

TRANSMISSION ENGINEERING

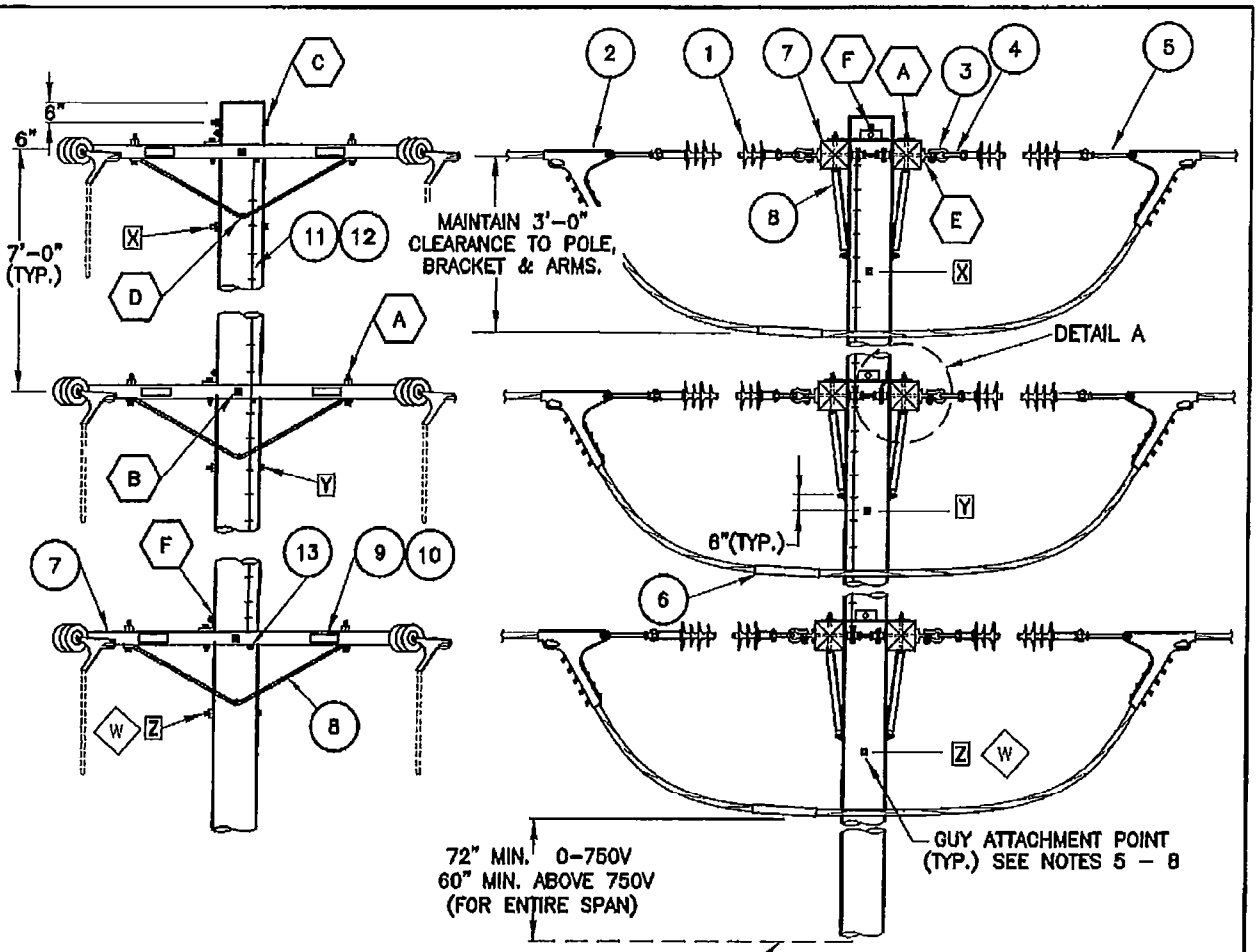
POLE TOP ARRANGEMENT
TYPE DC–WPI DOUBLE CIRCUIT
69kV WOOD POLE

SCALE: NONE

DWG. NO. 13165

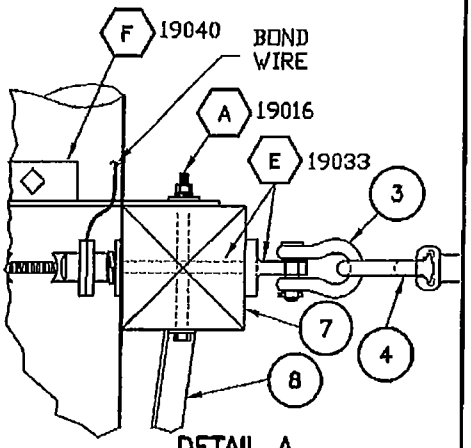
SHT. NO. 1of3

13165C01



NOTES:

1. **CAUTION:** DO NOT ATTEMPT TO ALIGN STRAIN CLAMP WITH WIRE UNDER TENSION – TWISTING MAY CAUSE FAILURE OF INSULATOR ROD.
2. **CAUTION:** WHEN USED IN ANGLE CONFIGURATION, GUY ARRANGEMENT MUST MEET THE GO-95 REQUIREMENTS FOR SEPARATION BETWEEN CONDUCTORS AND GUYS.
3. LINE ANGLE 0– 3 DEGREES.
4. MAXIMUM CONDUCTOR DESIGN TENSION NOT TO EXCEED 4000 LBS.
5. FOR GUYING INSTALL IN ORDER [X][Y][Z] SEE SECTION ***15000*** FOR GUY ATTACHMENT DETAILS.
6. USE FIBERGLASS LINK ***15309*** IN VICINITY OF JUMPER LOOPS.
7. FOR WIND LOAD, GUY ATTACHMENT MUST BE AT OR BELOW POINT ◇W.
8. SEE JOB PACKAGE FOR GUY REQUIREMENTS.



DETAIL A

REV	CHANGE	BY	CHKD	APPV	DATE	REV	CHANGE	BY	CHKD	APPV	DATE
B	CHANGED TITLE	WDF	SFO/WPH	WVT	8/1/03	E					
A	UPDATED DRAWING	WDF	WPH	WVT	4/25/02	D	ADDED DETAIL	PM	WPH		9/6/02
	ORIGINAL	SDF	DRB	WPH	3/23/00	C	ADDED REF.	WDF	GV/WPH	WVT	6/1/04

TRANSMISSION ENGINEERING

SCALE: NONE

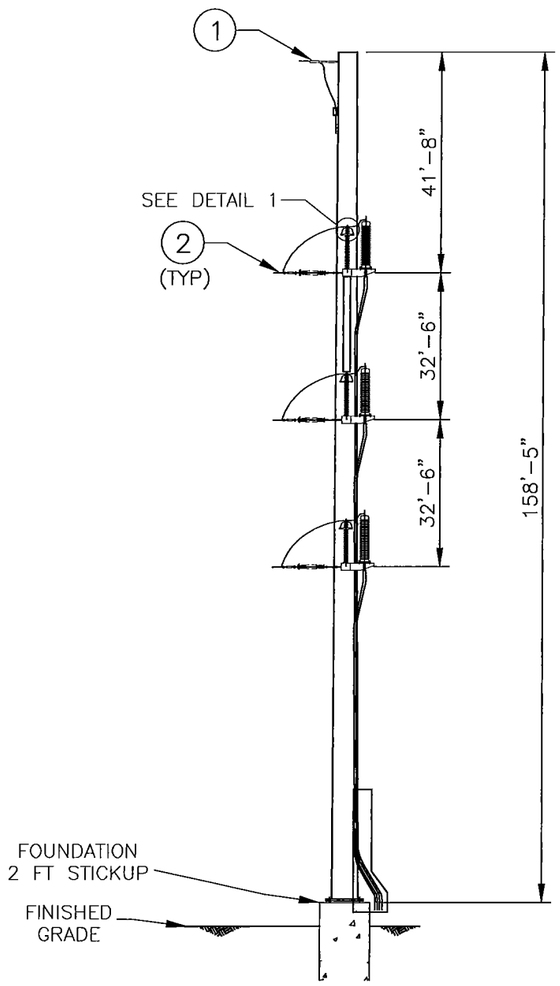
SDGE

POLE TOP ARRANGEMENT
TYPE DC-X30 DOUBLE CIRCUIT-ACSR
69kV WOOD POLE

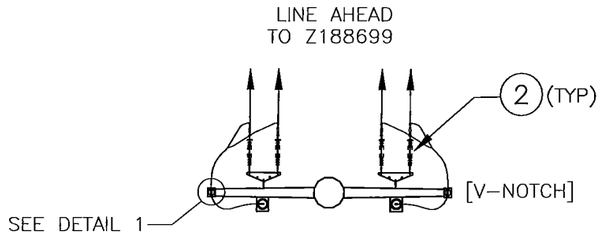
DWG. NO.	SHT. NO.
13176	1 of 3

13176D01

D:\ACAD FILES\TRANS STANDARDS\ELECTRIC TRANSMISSION STANDARDS\13000 POLE TOP ARRANGEMENTS-WOOD\13176\13176DR



TRANSVERSE FACE
LOOKING SOUTHWEST



CONDUCTOR PLAN VIEW

DETAIL 1
CONNECTION TO SURGE ARRESTER
(6 PLACES)

BILL OF MATERIAL			
ITEM	QTY.	STOCK NO or ***STD. NO.***	DESCRIPTION
1	1	–	FIBER OPTIC WIRE DEAD END ASSEMBLY
2	6	19358–01	138kV DEADEND INSULATOR BUNDLED CONDUCTOR ASSEMBLY
3	6	–	TERMINAL CONNECTOR, COMP. 4 HOLE PAD
4	AS REQ'D	–	FILLER COMPOUND

NOTES:

1 REFERENCE THE UNDERGROUND TRANSMISSION LINE DRAWING PACKAGE FOR STEEL POLE DETAILS

2. REFERENCE THE FOLLOWING DRAWINGS FOR OH TRANSMISSION DETAILS:

DRAWING NUMBER	TITLE
36045–01	GROUNDING DETAILS
62467–01	LOADING DETAILS
62468–01	FOUNDATION DETAILS

3. 138 kV CONDUCTOR.

636 kcmil 24/7 ACSR/AW BUNDLED "ROOK", 5000 LB INITIAL TENSION PER SUBCONDUCTOR

FUTURE 230 kV CABLE POLE:
900 kcmil 54/7 ACSS/AW SPLIT–PHASE "CANARY", 5500 LB INITIAL TENSION

4. OPGW SHIELD WIRE:

7–#10 ALUMOWELD, 3000 LB INITIAL TENSION

REV	BUDGET	CONST ORDER	CHANGE	DWN	CHKD	APPV	DATE
		2986341	ORIGINAL	RA			

SAN DIEGO GAS & ELECTRIC
TRANSMISSION ENGINEERING

230KV POLE ARRANGEMENT
TL13815

SCALE NONE SHEET 1 OF 1

BAY BOULEVARD
Z253128 SP–1555
230KV DEADEND CABLE POLE

DRAWING NUMBER
62466–01

ATTACHMENT E: CONTRACTOR COMMITMENTS

34.4 Environmental Mitigation Measures

Contractor represents and warrants that Contractor has reviewed and understands the Environmental Mitigation Measures to the fullest extent Contractor deems necessary for Contractor's purposes and that Contractor is familiar with, and has satisfied itself that it can fully comply with the Environmental Mitigation Measures. Contractor acknowledges that the Environmental Mitigation Measures have been accounted for in Contractor's ability to perform the Work in accordance with the terms and conditions of this Contract and the Work Schedule. Contractor and all Subcontractors shall perform the Work in accordance with all requirements of the Environmental Mitigation Measures (including, for purposes of clarity, all Additional Mitigation Measures).