C. Mitigation Monitoring Plan

San Diego Gas & Electric (SDG&E) proposes to construct and operate the Vine Substation Project ("Proposed Project"). An Initial Study was prepared to assess the Proposed Project's potential environmental effects. The Initial Study was prepared based on information in the Proponent's Environmental Assessment (PEA), project site visits, and supplemental research. The majority of the Proposed Project's impacts would occur during construction. Within SDG&E's application, Applicant Proposed Measures (APMs) were proposed to reduce potentially significant adverse impacts related to construction and operation.

The purpose of this Mitigation Monitoring Plan is to ensure effective implementation of each APM, as well as the mitigation measures identified by the Initial Study and imposed by the California Public Utilities Commission (CPUC) as part of Project approval.

This Mitigation Monitoring Plan includes:

- The Applicant Proposed Measures and mitigation measures that SDG&E must implement as part of the Proposed Project;
- The actions required to implement these measures;
- The monitoring requirements; and
- The timing of implementation for each measure.

A CPUC-designated environmental monitor will carry out all construction field monitoring to ensure full implementation of all measures. If a non-compliance were to occur, the CPUC will issue a warning to SDG&E's contract administrator or lead environmental monitor and SDG&E's project manager. Continued non-compliance shall be reported to the CPUC's designated project manager. Any decisions to halt work due to non-compliance will be made by the CPUC. The CPUC's designated environmental monitor will keep a record of any incidents of non-compliance with mitigation measures, APMs, or other conditions of project approval. Copies of these documents shall be supplied to SDG&E and the CPUC.

Minor Project Changes or Variances. The CPUC along with its environmental monitors will ensure that any minor project change that may be necessary due to final engineering or project variance or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no minor project changes or variances will be approved by the CPUC if they are located outside of the geographic boundary of the project study area or create new or substantially more severe significant impacts. A variance should be strictly limited to minor project changes that will not trigger other permit requirements unless the appropriate agency has approved the change, that does not increase the severity of an impact or create a new impact without appropriate agency approval, and that clearly and strictly complies with the intent of the mitigation measure or applicable law or policy. SDG&E shall seek any other project refinements by a petition to modify.

If a proposed change to the project has the potential for creating significant environmental effects, it will be evaluated to determine whether a petition to modify and/or supplemental CEQA review is required. Any proposed deviation from the approved project, adopted mitigation measures, and APMs, and correction of such deviation, shall be reported immediately to the CPUC and the environmental monitor assigned to the construction spread for their review and approval. The CPUC and the environmental monitor will review the variance request to ensure that all of the information required to process the minor project

change is included. The CPUC may request a site visit, or may need additional information to process the variance. In some cases, project refinements may also require approval by another agency. Requests for staff approval of a refinement must be made in writing and should include the following:

- A detailed description of the proposed refinements, including an explanation of why the refinements are necessary.
- Identification of the mitigation measures, APMs, project parameter, or other project stipulation for which the refinements are being requested, and a reference to the approved documents.
- Photos, maps, and other supporting documentation illustrating the difference between: the existing conditions in the area, the approved project, and the proposed refinements.
- The potential impacts of the proposed refinements, including a discussion of each environmental issue area that could be affected by the refinements with accompanying verification that there will be no substantial increase in significant impacts to resources affected by the project and no new significant impacts, after application of previously adopted mitigation.
- Whether the refinements conflict with any APMs or mitigation measures.
- Whether the refinements conflict with any applicable guideline, ordinance, code, rule, regulation, order, decision, statute or policy.
- Water/wetland/storm water related resource information if the refinements would result in any additional land disturbance, road distance or width, changes to impacts on jurisdictional waters, or changes to water protection best management practices.
- Date of expected construction at the refined project area.

Dispute Resolution. It is expected that the Mitigation Monitoring Plan will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur.

Issues should be first addressed at the field level informally between the CPUC-designated environmental monitor(s) and SDG&E's environmental monitor(s) at the regular progress meetings. Questions may be raised to the SDG&E Project Environmental Manager or SDG&E Project Construction Manager. Should the issue persist or not be resolved at these levels, the following procedure will be observed:

- Step 1. Disputes unresolved in the field and complaints (including those from the public) should be directed first to the CPUC-designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute informally. Should this informal process fail, the CPUC Project Manager will inform SDG&E prior to initiating Step 2.
- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring Plan.
- Step 3. If a dispute or complaint regarding the implementation or evaluation of the Mitigation Monitoring Plan cannot be resolved informally or through enforcement or compliance action by the CPUC and any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

Step 4. If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the CPUC Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the foregoing procedure.

	gation Monitoring Plan	Manitoring Deguirement	Timing of Action
Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	Air Quality		
Construction- Phase Air Quality	AQ-1 Control Off-road Equipment Emissions. Off-road equipment with engines larger than 50 horsepower shall have engines that meet or exceed U.S. Environmental Protection Agency/California Air Resources Board Tier 3 Emissions Standards. Exceptions will be allowed only on a case-by-case basis for two specific situations: (1) an off-road equipment item that is a specialty, or unique, piece of equipment that cannot be found with a Tier 3 or better engine after a due diligence search; and/or (2) an off-road equipment item that will be used for a total of no more than 10 days. Additionally, off-road equipment engine idling shall not exceed five (5) minutes unless required for proper operation and all engines shall be maintained in good operating condition and in tune per manufacturers' specification.	Perform on-site inspections during construction to ensure control measures are properly implemented.	During construction
Construction- Phase Air Quality	AQ-2 Control On-road Equipment Emissions . All construction on-road vehicle engines, with the exception of personal vehicles, shall be turned off when not in use. Engine idling shall not exceed five (5) minutes, unless required for proper operation or personnel health and safety (e.g., shelter from the elements). All construction on-road vehicle engines, with the exception of personal vehicles, shall be maintained in good operating condition and in tune per manufacturers' specification.	Perform on-site inspections during construction to ensure control measures are properly implemented.	During construction
Construction- Phase Air Quality	 AQ-3 Implement Fugitive Dust Control Plan for the Vine Substation. The Applicant shall develop a Fugitive Dust Control Plan to reduce Particulate Matter (PM) 10 and PM2.5 emissions during construction of the Vine Substation. The implementation of this Plan shall be considered complete when the Vine Substation's final surfacing, as required in part c.viii below, is done. The Fugitive Dust Control Plan shall include: a.Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the Plan; b.Listing of all fugitive dust emissions sources included in the construction of the substation. c. The following on-site dust control measures, and any other proposed control measures, that will be implemented: i. All on-site unpaved areas used by on-road vehicles shall be watered or stabilized with an Air Resources Board-certified soil stabilizer at a sufficient frequency such that no visible dust emissions site. ii. All material excavated or graded shall be sufficiently watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. Excavated soil piles shall be watered as needed and in compliance with San Diego Air Pollution Control District (SDAPCD) Rule 55 requirements for the duration of construction or covered with temporary 	Perform on-site inspections during construction to ensure control measures are properly implemented.	Submit Fugitive Dust Control Plan at least 30 days prior to construction to CPUC for review and approval; Implement during construction.

Impact	Aitigation Monitoring Plan Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Impact	 Applicant Proposed Measure (APM) or Mitigation Measure coverings. iii. Construction activities, but not dust control activities, which occur on unpaved surfaces shall be discontinued during windy conditions when those activities cause visible dust plumes that extend beyond the substation fence line, or in violation with SDAPCD Rule 55 requirements. iv. Track-out shall be removed at the conclusion of each workday. v. Shaker plates and gravel beds, or equivalently or more effective track-out control, shall be used and maintained throughout the construction period until the site is paved to remove bulk material from tires and vehicle undercarriages before vehicles exit the Vine Substation property. vi. All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions) or watered, and shall maintain at least two feet of freeboard to reduce spillage from the haul truck. vii. Traffic speeds for on-road vehicles and off-road equipment on unpaved areas/temporary roads shall be limited to 15 miles per hour. viii. The substation's interior asphalt access road shall be paved as soon as practical during construction. The remaining surface of the substation site shall consist of concrete pads or be graveled, so that there are no open soil areas other than those that are within any vegetated professionally landscaped areas of the site. Concrete and gravel surfaces shall be completed as soon as practical during construction. 	Monitoring Requirement	
	ix. Other fugitive dust control measures as necessary to comply with SDAPCD Rule 55 requirements.		
	Biological Resources		
APM BIO-1	 A nighttime emergent bat survey will be conducted no more than five days prior to the removal of the palm trees located on the proposed Vine Substation Site. During This survey, an AnaBat System will be used to detect bat activity in the vicinity of the trees, and the trees will be visually monitored for the emergence of bats. This survey will be conducted from 30 minutes prior to sunset to 90 minutes after sunset. Following the survey, the tree removal will proceed as follows: If no bats are detected during the emergent survey, the trees will be removed within five days. If the trees are not removed within five days, the emergent survey will be repeated. If bats are detected in the trees outside of the pupping season (typically April through July), emergent surveys will be repeated. If no bats are detected for two consecutive nights, the trees will be removed within five days. If the trees are not removed within five days. If the trees are not removed within five days. If the trees are not removed within five days. If the trees are not removed within five days. If the trees are not removed within five days. If the trees are not removed within five days. If the trees are not removed within five days. If the trees are not removed within five days, the trees are not removed within five days. 	Review bat survey results and ensure recommendations are implemented	Prior to construction

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	 If bats are detected in the trees during the pupping season, tree removal will wait until the end of pupping season and the emergent surveys will be repeated. In addition to the above pre-construction survey San Diego Gas & Electric will perform quarterly day/night emergent surveys (one night each quarter) between now and the start of construction to confirm presence/absence of bats at each palm tree. 		
	Cultural Resources		
APM CUL-01	An archaeological monitor(s) familiar with the types of prehistoric and historic resources that could be encountered within the Project area will be present during initial ground-disturbing activities associated with the Vine Substation. In addition, an archaeological monitor(s) will be present during all trenching activities associated with the underground 12-kilovolt lines along Ketner Boulevard. In the event that cultural resources are discovered, the archaeological monitor will have the authority to divert or temporarily halt ground disturbance to allow evaluation of the potentially significant cultural resources. The archaeological monitor will contact San Diego Gas & Electric's (SDG&E's) Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The archaeological monitor, in consultation with SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities in the vicinity of the discovery are allowed to resume. For significant cultural resources, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts. All collected cultural remains will be cleaned, cataloged, and permanently curated with an appropriate institution. All artifacts will be analyzed to identify function and chronology as they relate to the history of the area. Faunal material will be identified to the species level. If locomotive and/or electric rails are discovered during construction and fall within a recommended period of significance, and cannot be preserved in place, they will be immediately documented using standard documentation. All materials that cannot be preserved in place, they will be immediately documented using standard documentation. All materials in a Department of Parks and Recreation (DPR 523) form that will be submitted to the South Coastal Information Center (SCIC). A monitoring results report—which includes appropriate graphics and describes the results,	On-site archaeologist monitors during construction	During construction

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
APM CUL-02	A paleontological monitor will be on site to observe excavation operations that involve the original cutting of deposits with high paleontological resource sensitivity (i.e., Bay Point Formation) to depths greater than 3.5 feet. In the event that fossils are encountered, the paleontological monitor will have the authority to divert or temporarily halt construction activities in the area of discovery to allow the recovery of fossil remains. The paleontological monitor will contact San Diego Gas & Electric's (SDG&E's) Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist, will determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities are allowed to resume. When fossils are discovered, a paleontologist (or the paleontological monitor) will recover them, along with pertinent stratigraphic data. Fossil remains collected during monitoring and salvage would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.	Monitoring by Paleontologic Resource Specialist during construction excavations	During construction
Paleontological Resources	C-1 Paleontological Resource Mitigation Plan. A Paleontological Resource Mitigation Plan (PRMP) shall be prepared by a Qualified Paleontologist in accordance with Society of Vertebrate Paleontology Guidelines (2010). The PRMP shall identify construction impact areas with the potential of encountering significant resources and the approximate depths at which those resources are likely to be encountered. The PRMP shall outline a coordination strategy to ensure that one or more qualified paleontological monitors will conduct full-time monitoring of all ground disturbance in sediments determined to have a high to moderate sensitivity (i.e., the Bay Point Formation, and the underlying Lindavista and San Diego Formations, if encountered). The PRMP shall detail the significance criteria to be used to determine which resources will be avoided or recovered for their data potential. The PRMP shall also detail methods of recovery, preparation and analysis of specimens, final curation of specimens at an accredited repository, data analysis, and reporting. The PRMP shall be submitted to the CPUC for review and approval at least 30 days before the start of construction.	Review plan and monitor implementation during construction	Submit PRMP at least 30 days prior to construction to CPUC for review and approval
	C-2 Train Construction Personnel. Prior to the start of construction, all field personnel shall receive a worker's environmental awareness training module on paleontological resources. The training shall provide a description of the fossil resources that may be encountered in the Project area, outline steps to follow in the event that a fossil discovery is made, and provide contact information for the Qualified Paleontologist and onsite monitor(s). The training shall be developed by the Qualified Paleontologist and may be conducted concurrent with other environmental training (e.g., cultural and natural resources awareness training, safety training, etc.). The training may also be videotaped or presented in an informational brochure for future use by field personnel not present at the start of the Project.	Training provided by Qualified Paleontologist	Prior to construction

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	C-3 Monitor Construction for Paleontological Resources. Consistent with Mitigation Measure C-1 (Paleontological Resource Mitigation Plan), full-time construction monitoring shall be conducted by the qualified paleontological monitor(s) within previously undisturbed sediments in areas determined to have high to moderate sensitivity (i.e., the Bay Point Formation, and the underlying Lindavista and San Diego Formations, if encountered). Monitoring shall entail the visual inspection of excavated or graded areas and trench sidewalls. The monitor may also screen sediments to check for the presence of microvertebrates, if they are believed to be present. In the event that a paleontological resource is discovered, the monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance, and collected.	Monitoring by Paleontologic Resource Specialist during construction excavations	During construction
Human Remains	 C-4 Treatment of Human Remains. If human remains are unearthed during construction activities, construction work in the immediate area of the discovery shall be halted and directed away from the discovery until the county coroner can determine whether the remains are those of a Native American. If they are those of a Native American, the following would apply: a. The coroner shall contact the Native American Heritage Commission. b. If discovered human remains are determined to be Native American remains, and are released by the coroner, these remains shall be left in situ and covered by fabric or other temporary barriers. c. The human remains shall be protected until SDG&E and the Most Likely Descendant, as designated by the Native American Heritage Commission, come to a decision on the final disposition of the remains. According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052). 	Any discovered human remains are treated according to agency- approved mitigation and in compliance with State and federal regulations.	During construction
	Hazards and Hazardous Materials		
APM HAZ-01	 Prior to approval of the final construction plans for the Proposed Project, a project-specific Hazardous Materials and Waste Management Plan will be prepared for the construction phase of the Proposed Project to ensure compliance with all applicable federal, state, and local regulations. The Hazardous Materials and Waste Management Plan will reduce or avoid the use of potentially hazardous materials for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials. The plan will include the following information related to hazardous materials and waste, as applicable: A list of the hazardous materials that will be present on site during construction, including information regarding their storage, use, and transportation; Any secondary containment and countermeasures that will be required for onsite hazardous materials, as well as the required responses for different quantities of 	Review plan and monitor implementation during construction.	During construction

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	 potential spills; A list of spill response materials and the locations of such materials at the Proposed Project site during construction; A list of the adequate safety and fire suppression devices for construction activities involving toxic, flammable, or exposure materials; A description of the waste-specific management and disposal procedures that will be conducted for any hazardous materials that will be used or are discovered during construction of the Project; and A description of the waste minimization procedures to be implemented during construction of the Project. 		
Emergency Access	T-1 Construction Traffic Control Plan (see full text of measure below under Traffic/Transportation)	Review Traffic Control Plan; monitor requirements of the plan	During construction
	Noise		
Construction Noise	 N-1 Municipal Code Non-Compliance Approval or Prepare Construction Noise Control Plan. Prior to a Notice to Proceed, SDG&E shall complete one of the following (a) or (b): (a) Obtain written authorization(s) from the City of San Diego allowing construction of the Project to exceed the noise performance standards identified in Municipal Code Chapter 5, Article 9.5, Division 4, Section 59.5.0404(b). Official copies of the written authorization(s) shall be submitted to the CPUC. (b) Prepare a detailed Construction Noise Control Plan (Plan) for review by the CPUC and City of San Diego. The Plan is intended to minimize noise from construction activities to the maximum extent feasible at work areas within 130 feet of residences. The Plan must include, but not be limited to: Methods to reduce mobile and stationary construction noise levels, to the maximum extent feasible, occurring within 200 feet of sensitive receptors (i.e., residences) or expected to exceed 75 A-Weighted sound level (dBA) during the 12-hour period from 7:00 a.m. to 7:00 p.m. Methods to reduce mobile and stationary construction noise levels, to the maximum extent feasible, occurring outside the 12-hour period from 7:00 a.m. to 7:00 p.m. assuming the requirements of Mitigation Measure N-2 are met. Any conditions or performance standards required by the City of San Diego or CPUC through the implementation of Mitigation Measure N-2 shall be met. Identification of heavy truck trip routes accessing the Vine Substation site, construction staging yards, 12-kilovolt distribution circuits, and telecommunication 	Review City of San Diego authorization(s) or Construction Noise Control Plan; monitor requirements of the authorization(s) or plan; Review public complaints logs monthly	During construction

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	 routes to reduce travel on residential streets and avoid noise sensitive receptors to the maximum extent feasible. The Plan shall detail how SDG&E and its contractor(s) will respond to noise complaints, and how to document the resolution of those complaints. 		
	In addition to completing either (a) or (b) above, SDG&E shall:		
	 Establish a telephone number for use by the public to report any nuisance noise conditions associated with construction activities. SDG&E shall ensure that a public liaison is assigned to respond to all public construction complaints in a timely manner, and either (a) the telephone number is staffed by the public liaison during construction hours; or (b) the phone number is connected to an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. Public complaints shall be forwarded to the CPUC within 48 hours. This telephone number shall be posted at entrances to work areas and construction yards in a manner visible to passersby. SDG&E and its contractor(s) shall respond to public complaints and document the resolution of those complaints. Methods for conflict resolution shall be documented in the event a noise complaint cannot be resolved. A log of all complaints and the current status shall be provided to the CPUC monthly. 		
	 N-2 Construction Work Hours Authorization. Construction activities shall not occur during the following hours and days without obtaining all necessary authorization(s) from the City of San Diego allowing for construction to occur outside the hours allowable within Municipal Code Chapter 5, Article 9.5, Division 4, Section 59.5.0404(a). SDG&E shall provide copies of City authorizations to the CPUC for review. Between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, on legal holidays as specified in Section 21.04 of the City of San Diego Municipal Code, or on Sundays. 	On-site monitoring	During construction
	Traffic/Transportation		
Construction Traffic and Emergency Response	 T-1 Construction Traffic Control Plan. Prior to the start of construction, SDG&E shall prepare and submit a Construction Traffic Control Plan for review and/or approval to the CPUC and all agencies with jurisdiction over public roads and transportation facilities that would be directly affected by the construction activities and/or would require permits and approvals. The Construction Traffic Control Plan shall include, but not be limited to: The locations and use of flaggers, warning signs, lights, barricades, delineators, 	Review Traffic Control Plan; monitor requirements of the plan	Prior to and during construction

npact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	cones, arrow boards, etc. according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices, the Standard Specifications for Public Works Construction, and/or the California Joint Utility Traffic Control Manual.		
	 Additional methods to reduce temporary traffic delays to the maximum extent feasible. 		
	 Defining methods to coordinate with all agencies responsible for encroachment 		
	permits throughout construction to minimize cumulative lane disruption impacts		
	should simultaneous construction projects affect shared segments/portions of the		
	circulation system.Prior to the start of construction, provide (or identify the timing to provide) copies of		
	all approved permits and agreements to the CPUC and methods to comply with all		
	specified requirements, including but not limited to:		
	— Public Right-of-Way Permit from the City of San Diego.		
	— Right-of-Entry Permit(s) from the North County Transit District (NCTD) and San		
	Diego Metropolitan Transit System (MTS).		
	 License Agreement from the MTS. 		
	 Temporary Occupancy Agreement and a Utility Agreement License from Burlington Northern Santa Fe Railway. 		
	Plans to coordinate in advance with emergency service providers to avoid restricting		
	the movements of emergency vehicles. Police departments and fire departments		
	shall be notified in advance by SDG&E of the proposed locations, nature, timing, and		
	duration of any roadway disruptions, and shall be advised of any access restrictions that could impact their effectiveness. At locations where roads will be blocked,		
	provisions shall be ready at all times to accommodate emergency vehicles, such as		
	immediately stopping work for emergency vehicle passage, providing short detours,		
	and developing alternate routes in conjunction with the public agencies.		
	Documentation of the coordination with police and fire departments shall be provided		
	to the CPUC prior to the start of construction.		
	 Provisions for ensuring detours or safe movement through all affected pedestrian and bicycle facilities. 		
	• Plans to coordinate with affected bus transit agencies (where applicable) at least one		
	month prior to construction to minimize the impacts associated with the interruption		
	of bus transit service. Documentation of the coordination with bus transit companies		
	shall be provided to the CPUC prior to the start of construction.		

Note: Applicant Proposed Measures (APMs) appear in the Proponent's Environmental Assessment (A.14-05-021), with the exception of APM-BIO-01 which was provided by SDG&E in response to Energy Division Deficiency Request 01 dated February 2, 2015. APM CUL-01 was revised by SDG&E September 4, 2015.