SDG&E Artesian 230 kV Substation Expansion Project (A.16-08-010)
Energy Division Data Request #1 Dated March 1, 2017 (Issued March 8, 2017)
SDG&E Response #1 (03/24/17)

Data Request Response for the SDG&E Artesian 230 Kilovolt Substation Expansion Project Application (A. 16-08-010)

REPORT OVERVIEW

On March 1, 2017 the CPUC deemed the application and PEA for the SDG&E Artesian 230 kV Substation Expansion Project complete. The Energy Division has required additional data to prepare a complete and adequate analysis of the potential environmental effects of the Project, in accordance with the requirements of CEQA.

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	Draft IS/MND	
N/A	Review and revise Draft IS/MND Project Description.	***PENDING*** - SDG&E will provide comments and suggested edits to the Draft IS/MND Project Description on Tuesday, March 28.
	Purpose and Need	
1	For 2016, SDG&E forecasted that approximately 82 percent of the Poway Area Load Pocket load would be supplied by the three 69kV power lines out of the Sycamore Canyon Substation (TL6920, TL6915, and TL6924)". If available please provide actual power supply numbers or advise when 2017 estimates will be available.	CAISO approved 2017 Grid Assessment cases will not be available until the end of May, 2017. SDG&E will provide updated usage rate for the 69kV power lines out of the Sycamore Canyon Substation at that time.
	Project Description	
2	Confirm the total area of proposed permanent and temporary project disturbance for each project component, in one table with all components listed, including: a. project components (Artesian, Bernardo, Rancho Carmel, detention basin) b. substation getaways c. reconductoring route d. all permanent and temporary staging and working areas	See attached Project Impacts Summary Table (Attachment ED01_Q2(a)) and associated GIS database (Attachment ED01_Q2(b)). SDG&E has segmented out temporary and permanent project impacts by project component (i.e., substations, substation getaways, reconductor, etc.). However, because many of the project component work areas overlap, SDG&E has also provided total temporary and permanent impacts area totals that account for all overlapping work space. The corresponding GIS data for these Project-wide merged work areas has been included within the attached GIS database (Attachment ED01_Q2(b)). In addition, the table below provides details specific to the Artesian Substation site and proposed expansion.

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	e. stringing and pulling sites f. poles installation work areas g. guard structure locations h. underground power lines i. roads (temporary and permanent) j. splice vault man holes k. any other areas that will be disturbed by the project. Please provide maximums if precise area is unknown Provide final maximum built project footprint for the expanded Artesian site including impervious surface area. (Although PEA Appendix 3A design was provided, the public version does not provide adequate detail to allow reader to understand specifics.)	**Table ED01 – Q2: Artesian Substation Metrics**

Substation Component	Temporary	Permanent
Substation Parcels		
Western Parcels	N/A	*2.71*
Eastern Parcels		*3.53*
Total		6.24
Final Substation Built Footprint [1]		
Western (existing)	N/A	*2.24* [2]
Eastern (expansion)		*2.46*
Total		4.70
Perimeter Roads	N/A	0.37
Widened Access Road	N/A	0.23
Detention Basin	N/A	0.69
Substation Landscaping (North & east borders)	0.47	0

Notes:
Table contents are not survey grade, and are based on preliminary engineering and are subject to change.
[1] Does not include roads or retention basin. Impervious surface area within the built footprint is approximately 1.91 acres.
[2] Note within the PEA "impacts" for the substation, facilities on the western parcel were considered to be zero as the Project would not change the use (i.e. substation) when compared to existing conditions.

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3	Provide a substation layout figure or plot plan to show approximate location, dimensions and layout of main substation components.	See Attachment ED01_Q3 – Artesian Substation Site Plan.
4	Explain which "different light types' would be used for wall/control shelters and deadend structures and why (PEA page 3-20).	Based on continuing engineering, the substation lighting is now composed of all 120 volt AC LED type lights. The size of the LED will be dependent upon the location and required wattage needed to obtain the lumens necessary to achieve approximately 0.5 foot-candles in walkway areas (i.e., a light on a 30-foot structure will have higher wattage than one closer to the ground).
5	Text refers to "the ultimate Artesian 230/69kV construction". Is this part of the proposed project or some future phase that is not being considered now? We request clarification regarding proposed construction phases. (Text in PEA says four phases for construction of expanded Artesian substation, PEA Appendix 3-F shows a different proposed schedule, consisting of 10 phases) (PEA page 3-20).	For the proposed 69/12kV and 230/69kV substation yards that will comprise the Expanded Artesian Substation, SDG&E has included an initial (Project) configuration and an ultimate (design) configuration. The initial configurations represent SDG&E's proposed substation to be constructed and operated pending issuance of the Permit to Construct (PTC) for the Artesian 230kV Substation Expansion Project. The ultimate configuration represents the full electrical design capacity of the Expanded Artesian 230/69/12kV Substation. The additional substation electrical components (e.g. 2nd 230kV transformer or connection to additional transmission or power lines) included within the ultimate configuration are not included within SDG&E's request for a PTC for the Artesian 230kV Substation Expansion Project. However, the Proposed Project would include the complete site development (i.e., physical substation footprint, grading, etc.) required for the ultimate configuration. The PEA Section 3.0, pages 3-40 and 3-41, includes a description of the site development phases (i.e., components) that would be required for construction of the expanded Artesian Substation. Whiles these descriptions include statements concerning general sequencing, they are not intended to convey actual overall Project construction schedule or detailed construction phasing. PEA Table 3-10 and Appendix 3-F include high-level and detailed approximate construction schedules, respectively. These construction schedules incorporate the Substation Site Development components as appropriate. For example, Artesian Substation site development phase 3 (as described on PEA pages 3-40 and 3-41) is included within the detailed construction schedule (PEA Appendix 3-F) as Construction Phase 2(c)). Revisions will be made to the Draft IS/MND Project Description (PENDING) in an attempt to clarify the Artesian Substation site development components with the potential overall Project construction schedule and phasing.
6	In order to be included in the project and the CEQA analysis at minimum staging yards must be identified by potential proposed location on project route map (Figure 2-	SDG&E plans to utilize the Carmel Valley Road Staging yard during construction of the Proposed Project (refer to PEA Appendix 3-B, page 8 of 10). The Carmel Valley Road staging yard would be located on an approximately 25 acre property (Property) owned by the Poway Unified School

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	7/PEA Appendix 3-B). Confirm if the 5-acre portion of Carmel Valley Road Staging Yard (PEA page 3-23) will be used.	District. SDG&E anticipated land requirements for this staging yard is approximately 5 acres. SDG&E has identified a preferred location/arrangement for the approximately 5 acre Carmel Valley Road Staging yard (refer to the GIS data in Attachment ED01_Q2(b)). However, during previous conversations with the property owner concerning use of the Property, SDG&E was informed that the property owner could not guarantee that the SDG&E-preferred 5-acre portion of the Property would be available for use at the time of construction, and that SDG&E might have to use a different 5-acre portion of the Property.
7	Clarify what BMPs would be used for staging yard surfacing (PEA 3-22) *"Gravel, class II base, or other BMPs may be used to line the ground at staging yards to avoid the creation of unsafe mud conditions and unnecessary sediment transport off site."*	BMPs that will be used on surface for unpaved staging yards include gravel, class II base, or other BMPs to line the ground at staging yards to avoid the creation of unsafe mud conditions and unnecessary sediment transport off site. Additional BMPs will include drip pans for vehicles to capture any vehicle fluid leaks. Secondary containment will be used for storage of material that requires spill control such as portable toilets. Lastly, spill response kits will be available at all staging yards.
8	Clarify or detail roles and providers of (construction) bio monitor and (post construction) habitat restoration specialist. PEA @ 3-31: *"Restoration activities shall occur under the direction of a Habitat Restoration Specialist."* PEA @ 3-25: *"The on-site biological monitor, as appropriate, will assist construction crews in locating pole work areas that avoid and minimize impacts to sensitive resources."*	The role for the biological monitor is to assist the construction workers in avoiding or minimizing sensitive natural resources. Biological monitors are responsible for educating the workers on how to stay in compliance with all applicable measures and the SDG&E NCCP. There will typically be one lead monitor that serves as the point of contact and a backup lead monitor. Monitors will also be responsible for any necessary reporting. The role of the habitat restoration specialist is to determine the best technique to restore areas that were temporarily impacted. Section 7.2 in the NCCP details the habitat enhancement measures, techniques, and success criteria. The habitat restoration specialist will also be responsible for quality assurance and monitoring the restoration sites after completion. At this time SDG&E does not know which provider will perform the biological monitoring or restoration. The eventual provider of these services will be selected from SDG&E's pool of qualified consultants.
9	PEA Page 3-25 Clarify why the expanded Artesian substation is described as "an exception"- this is within SDG&E property. Is a new ROW or zoning change required for the adjacent parcel? Provide more details as to what each of the tables (PEA Table 3-4 and 3-5) are intended to illustrate and explain details, e.g. what the two	The eastern Artesian Substation expansion parcel/site is the only project component/area that does not currently contain permanent work pads or access roads. The parcel is indeed SDG&E-owned land, and no zoning changes or new ROW is required. Specific, detailed information pertaining to the substation parcels and work/impact areas is provided in Table ED1 – Q2 above. Within the PEA, Table 3-4 summarizes temporary construction work areas whereas Table 3-5 describes new permanent impacts (work areas). In terms of the substation expansion, Table 5 only lists the acreage

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	different acreages given for the Artesian Substation expansion represent.	of the eastern parcel. As noted in the response to Q2 above, portions of the parcel will not be impacted at all, and other portions will only be subject to temporary construction impacts. Because the western parcel will, following project construction, be utilized for the same type of land use (electric substation) as it is under current conditions, it was not considered a permanent impact in the context of PEA Table 3-5.
10	Descriptions of work areas for roads, roads in general, and in the data provided in the PEA are unclear and somewhat confusing e.g. Distances given for access (PEA page 3-27) "Foot paths (0.07 mile), overland travel (0.12 mile), and existing access roads (4.0 miles)" cannot be reconciled with data provided in Table 3-6. Clarify acreage and distance numbers in Tables 3-5 and 3-6 and associated text. It is also not clear which roads are described in each section and/or table and whether these are new or existing and if the roads listed in one table are different from those listed in the other. Provide one table that lists all roads created/ impacted by the project and which includes relevant details for each road such as road type, size, area of disturbance, existing or new etc. If available please provided GIS data for temporary and permanent road impact areas. If this is not available provide instructions on how to calculate the areas to match the values in Table 3-5.	Attachment ED01_Q10 includes a description of access roads as requested, in a single table format. As applicable, refer also to GIS data provided in Attachment ED01_Q2(b). Values will also be updated within the Draft IS/MND Project Description (***PENDING***).
11	Please confirm if helicopter use is part of the project. If so provide details of location and hours of use. Confirm if helicopters would be used at night.	Helicopter use is not anticipated. But if they are utilized it would be during the stringing and pole installation operations along the Project alignment. Permits will dictate the hours of use, but helicopter work will not occur at night.
12	Is there an existing NPDES permit or link to appropriate permit for stormwater discharges associated with construction? If so, please provide this. Is there an applicable current, or likely application for a solid waste disposal permit?	There are currently no NPDES permits secured for this project. Prior to construction, SDG&E would acquire coverage under the General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit) from the SWRCB and would adhere to National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) requirements. The CGP applies to projects of one acre or more, and is meant to control the discharge of pollutants from point sources. The CGP requires the applicant develop a Storm Water Pollution Prevention Plan (SWPPP) which would detail project information, dewatering procedures, storm water runoff prevention

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		control procedures, monitoring and reporting procedures, and includes BMPs to control erosion and discharge of sediments. The BMPs included in the SWPPP must be monitored and revised throughout the construction process as needed. In addition, SDG&E would also implement their BMP Manual for Water Quality Construction and Operational Protocols (SDG&E, 2011). This manual includes BMPs that reduce impacts to soil loss and helps ensure BMP usage is consistent with applicable rules and regulations. The Project is not anticipated to require a solid waste disposal permit or other similar permit. Only clean, non-impacted soil from off-site sources will be considered acceptable for import fill. All project waste will be taken to an appropriately permitted facility.
13	Please advise the likely locations for soil disposal?	Non-hazardous waste is anticipate to be taken to the following facility: Otay Landfill 1700 Maxwell Road Chula Vista, California 91911 Hazardous waste (i.e. contaminated soil, if encountered) could be taken to either of the following facilities: Clean Harbors 2500 W. Lokern Buttonwillow, Ca Or WMI – Chemical Waste Management 35251 Old Skyline Rd. Kettleman Hills, CA
14	What are the specific fire break clearance requirements referred to in post construction section?	PRC 4292 requires a firebreak clearance around the base of all overhead electric poles that have non-exempt hardware. This clearance requires the removal of all flammable vegetation at the base of the pole in a 10 ft. radial circle. Additionally, all flammable vegetation above the ground up to 8 ft. from the ground is removed out to 10 ft. Finally, all dead tree limbs are removed out to 10 ft. from the pole from the ground to the top of the pole. <u>References:</u> PRC 4292 - CalFire 2008 POWER LINE FIRE PREVENTION FIELD GUIDE p. 1-29 Non-exempt Hardware - CalFire 2008 POWER LINE FIRE PREVENTION FIELD GUIDE p. 2-1

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		Firebreak Diagram - CalFire 2008 POWER LINE FIRE PREVENTION FIELD GUIDE p. 1-42
15	Describe what pole top removal activities would involve.	Pole top removals are not anticipated. But in the case that they are needed, transmission equipment and hardware such as conductors, insulators, and associated hardware will be removed from the pole. The pole will then be cut approximately 1 foot above the telecommunications level (or other underbuild) and re-tagged as a non-transmission pole.
16	Provide more details on what concrete piers are used for and which project components these relate to.	Concrete piers are used to anchor self-supporting structures with heavy angles. The engineered steel poles are bolted onto the concrete piers once the concrete strength is achieved.
17	Confirm any potential locations where blasting could be used.	The need for blasting in the substation yard is not anticipated given the available subsurface information, although there could be a need for heavy ripping during excavation. It is not currently anticipated that blasting would be required to complete construction of the transmission or power line structure foundations. However, in some locations where significant or dense rock is present, a micropile foundation may be required. Use of micropile foundations would replace the need for blasting. -
18	Provide more details about the construction of Artesian getaways. Specifically construction method and sequences and road/lane closure with respect to Camino Del Sur.	The underground trenches will be dug by an excavator with typically a 36-inch wide bucket. Areas with utility congestion may be hand dug. Traffic control plans will be established prior to construction and will need to be approved and stamped by the respective City or County agency. There are generally no road closures anticipated, and traffic flow will be maintained with signages, flaggers, and various approved methods by the respective agency.
19	Provide splice vault dimensions.	69kV splice vaults are typically 16 feet long, 8 feet wide, and 9.5 feet deep. The final surface area (manhole cover dimension) is typically 7 square feet.
20	PEA Appendix 3-D contains structure details including approximate heights of all proposed project features, please confirm that heights (listed as approximate) are maximum.	Confirmed, PEA Appendix 3-D describes the approximate maximum heights for Project structures.
Transportation and Traffic		
21	Traffic Data. There is an inconsistency in Table 5.16-9 for Rancho Bernardo from Camino San Bernardo to Matinal Road. Existing conditions in this table show LOS C,	Values in Table 5.16-9 should be LOS B to match the remainder of the Section and tables.

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	whereas it's noted as LOS B in the text and also in Table 5.16- 2.	
22	Traffic: Table 5.16-9 (Impacts, p. 19): Camino Del Sur between Four Gee Road and Rancho Bernardo Road is shown to be operating at LOS B for existing conditions and LOS C for Existing Plus Project conditions. This is inconsistent with the description in the text, where it is stated that the roadway segment operates at LOS A for existing conditions and LOS B for Existing Plus Project. Table 5.16-2 (Setting, p. 7) also states that this roadway segment operates at LOS A for existing conditions.	Values in Table 5.16-9 should be LOS A (Existing Conditions) and LOS B (Existing Plus Project) to match the remainder of the Section and tables.