The following questions relate to SDG&E-15, electric distribution operations and maintenance costs. "Workpapers" refer to the relevant workpapers for this chapter ("SDG&E-15-WP WSpeer").

1. Please provide all electronic workpapers that support SDG&E-15 in Excel with working cells/formulas.

SDG&E Response 01:

The workpaper exhibit does not exist as an Excel document with working formulas. Most GRC workpapers and tables that appear in testimony are not created from, nor do they originate as Excel spreadsheets. Most GRC workpapers and testimony tables are produced from a database system (known as GRID) which consists of many data tables that are dynamically linked to permit grouping of cost centers and budgets, editing of historical values, selection of a forecast methodology, adjustments to forecasts and the production of workpapers. The use of a database for this purpose does not involve spreadsheets, the workpapers are formatted 'reports' from that collection of tables and linking relationships that form the database. These are derived and produced directly as PDF documents, in the case of the main workpapers, or as Word tables in the case of the tables that appear in testimony. While these documents may appear in tabular format, they are not spreadsheets and do not contain formulae.

Notwithstanding the above response, SDG&E has attached a report showing the five years of adjusted-recorded historical spend and the three years of forecasts as "TURN-SEU-004-Q1.xlsx". This information is obtained as a specifically-created database extract for O&M and many capital budgets, and can be provided in tabular format as a spreadsheet, although as a report it consists of values and contains no formulae.

2. Regarding 4kV modernization, SDG&E states on page WHS-22, lines 15-17 that "The O&M to capital split is based on actuals from similar project SDG&E has completed." Please provide the underlying evidence and workpapers in Excel where possible that demonstrates the O&M component of 4kV modernization is around 5%.

SDG&E Response 02:

The O&M component of 4kV modernization was estimated as an average over the life of the program. The actual O&M component of 4kV modernization will depend on the job scope found for each circuit or substation after inspections. In general, for overhead 4kV modernization the O&M component will be around 3%, due to pole replacement costs consisting mostly of capital. For underground 4kV modernization, the O&M component will be around 7%, as underground transformers, cables, and substructures may not need to be replaced, but rather reconfigured. The O&M component for the program was chosen as 5% to average the overhead and underground components of the program.

- 3. Regarding the Table on page 2 of the workpapers:
 - a. Please explain what the term "adjusted" means.

SDG&E Response 03a:

In this context, the term "adjusted" refers to the fact labor and/or non-labor costs for certain activities have been added or subtracted from the identified totals. This is done for primarily one of two reasons; to remove one-time costs that should not be considered when establishing baseline historical costs, or to move costs that are now captured in another area/workpaper to consolidate cost assignments and more accurately represent spending trends. Additionally, it should be noted the dollars in the referenced Table have been normalized to represent spend in 2016 dollars.

b. Please provide the Table in Excel with working formulas. Please also include annual 2010-2015 recorded costs for each category listed.

SDG&E Response 03b:

Please see "TURN-SEU-004-Q3b.xlsx" for the excel file of the Summary of Non-Shared Services Workpaper, although as a report it consists of values and contains no formulae. For the adjusted-recorded historical spend please refer to our response for question 1.

c. Please provide an Excel version with the the *authorized* annual spending for 2010-2018 for each category in the Table.

SDG&E Response 03e:

Please see "TURN-SEU-004-Q3c.xlsx" for the excel file of the annual spending amount authorized as part of the 2012 and 2016 GRC decisions. The 2010 and 2011 revenue requirement was the product of settlement negotiations in SDG&E's 2008 GRC, A.06-12-009/D.08-07-046, of which TURN was a participant. That settlement provided authorized values at an aggregate level for Electric Distribution and Gas Distribution as a whole, and not at a lower level of detail where precise values are identified.

4. Please provide annual 2010-2016 recorded costs and the annual 2017-2019 forecast separately for each cost category listed in Appendix A of the workpapers beginning at page 328.

SDG&E Response 04:

SDG&E objects to this request under Rule 10.1 on the grounds that it seeks information that may be outside the scope of the TY 2019 GRC proceeding, is burdensome to produce or is unlikely to lead to the discovery of admissible evidence. Subject to and without waiving this objection, SDG&E responds as follows: The requested information is outside the scope of the standard requirements described in the Rate Case Plan and is not available in an adjusted format that would allow for a like-kind comparison in this proceeding. SDG&E's testimony and workpapers contain five years of historical data, 2012 through and including 2016, that has been reviewed and adjusted according to Rate Case Plan requirements. Additional years prior to 2012 have not undergone similar review and adjustment and would be burdensome to create.

The GRC forecasts are prepared for groups of related or like-kind cost centers, which appear in 'workpaper_groups.' Each of these workpaper_groups contain one or more cost centers. Thus, forecasts for individual cost centers that have been aggregated into workpaper_groups cannot be shown. The information requested above can be found in workpapers for each of the cost categories listed by workpaper_group. For convenience, the table found in the accompanying file "TURN-SEU-004-Q4.xlsx" recreates that information found in workpapers:

5. Please explain how "fueling our future efficiencies" result in positive incremental forecast costs for 2017-2019 (see page 34 of workpapers).

SDG&E Response 05:

The particular referenced adjustments are additional O&M expenses that will result in capital savings.

6. Please provide the Table on page 36 of the workpapers in Excel and include all supporting workpapers and support.

SDG&E Response 06:

Please see the accompanying file "TURN-SEU-004-Q6.xlsx".

7. Please provide the 3-YR linear forecast calculation for Electric Distribution Operations (WP p. 50) and an accompanying explanation of the methodology. Please explain why this was used rather than historical costs.

SDG&E Response 07:

Calculations such as the 3 year linear forecast calculation are handled by procedure calls to the Microsoft SQL Server GRC database used to generate the information for workpapers. Those functions are built-in and are similar to common functions available in Excel, Visual Basic, and VBA.

As discussed in testimony and workpapers, labor and non-labor costs are based on a three-year linear trend forecast. The non-labor costs associated with Electric Distribution Operations have been trending upwards over the most recent three years. Non-labor costs include increasing maintenance costs for hardware, software, and exempt materials. These costs increase as the company completes more projects, and additional hardware and new equipment is installed in the field. For example, Supervisory Control and Data Acquisition (SCADA) devices, which enhance security and reliability, and reduce the risk of fires, have been installed in greater numbers to assist our operators with monitoring and operating the electric distribution system. The servers that manage and collect the data for these devices will also need upgrading and/or replacing. The 'exempt materials' are the largest portion of non-labor in this workgroup. Exempt materials are low-value material items that are replenished as "truck stock." They consist of bulk type materials that are not individually inventoried or managed by the district warehouses. These materials include items like nuts, bolts, washers, connectors, electrical tape, and brief-relief kits, and are restocked onto service trucks as needed and are not directly charged to the O&M account or Capital Budgets on which they are used. This account represents the collector pool for all of the exempt material costs that are then allocated to the appropriate gas and electric O&M accounts and Capital Budgets as indirect charges. As construction projects increase, so too do the amount of exempt materials required. We understand that linear projections are not realistic into perpetuity. However, a threeyear linear trend for this period will address the expanding needs and provide for increasing costs until a steady state is achieved.

- 8. Please provide the Excel workpapers, all underlying data/calculations, and sources for the following:
 - a. Table WS-33 (p. WHS-93);
 - b. Figure WS-1 (p. WHS-93);
 - c. Figure WS-1 (p. WHS-94).

SDG&E Response 08:

The supporting documentation can be found in SCE, PG&E, and SDG&E's 2016 annual reliability reports found at the link below:

http://www.cpuc.ca.gov/General.aspx?id=4529

9. Regarding "Performance Based Ratemaking" (PBR) discussed starting at page WHS-92, please explain what PBR mechanism is currently in place, how it functions including how SAIDI and SAIFI are measured, and the Decision and proceeding that authorized the mechanism.

SDG&E Response 09:

The currently effective PBR mechanism was a result of CPUC A.14-11-003/D.16-06-054, as clarified by D.17-09-005. The functioning of the current PBR mechanism has evolved over time, through various decisions including D.08-07-046 and D.13-05-010, as modified by D.14-09-005. Please see SDG&E's tariff sheets outlining the details of the PBR mechanism, available at http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-PRELIM_EPBR.pdf.

SDG&E measures SAIDI and SAIFI in accordance with D.16-01-008, with certain exemptions as provided by the applicable PBR decisions.

10. Regarding SDG&E's statement on page WHS-95, lines 8-10, that "SDG&E's historically consistent best in class reliability history has created target SAIDI and SAIFI values for 2016-2019 that have become increasingly difficult to meet," please provide the target SAIDI and SAIFI values for 2016-2019.

SDG&E Response 10:

The System SAIDI/SAIFI PBR targets are set forth in D.17-09-005 (and shown in SDG&E's tariff sheets), as follows:

- 2016 62 SAIDI min; 0.53 SAIFI
- 2017 62 SAIDI min; 0.53 SAIFI
- 2018 61 SAIDI min; 0.52 SAIFI

There are no 2019 PBR target values.

11. Related to SDG&E's comparison of the three major IOU's in California in Table WS-33 on page WHS-93, please provide the number of distribution circuit miles for SDG&E, SCE, and PG&E respectively.

SDG&E Response 11:

SDG&E objects to this request, to the extent that it requests information that is outside of SDG&E's knowledge and possession. Subject to and without waiving this objection, SDG&E states as follows: SDG&E currently has 17,125 distribution circuit miles. SDG&E cannot provide circuit mile information for other utilities.