

THE UTILITY REFORM NETWORK (TURN) DATA REQUEST
TURN-SDG&E-DR-04
SDG&E POWER YOUR DRIVE (PYD) 2.0 (A.19-10-012)
SDG&E RESPONSE
DATE RECEIVED: MARCH 2, 2020
DATE RESPONDED: MARCH 17, 2020

TURN DATA REQUEST

Question 1

Regarding the per site cost information provided in the Excel attachment to TURN-1, question 1, column M, please provide the following for each site in Excel using separate columns:

- a. Utility-side costs, separately for the following:
 - i. Transformer upgrade;
 - ii. Service Upgrade (separately for cable, duct, concrete work, excavation, and meter)
 - iii. Primary upgrade (separately for cable, duct, excavation, concrete work)
 - iv. Any additional Utility-side costs (please list).
- b. Customer-side costs:
 - i. Panel/Switchgear;
 - ii. Conduit and electric installation (separately for trenching and materials)
 - iii. ADA compliance
 - iv. Any additional customer-side costs (please list).

SDG&E Response

For the Power Your Drive (PYD) Pilot program, SDG&E did not track site costs based on which side of the utility meter the infrastructure is on. Additionally, the program did not require or track costs in any of the specific categories listed above. The table below provides the program-wide costs from the September 30, 2019 Power Your Drive Semi-Annual Report¹ that were allocated to each site in TURN-1, question 1, column M labeled “Total other costs”.

Cost Category	Inception-to-date as of 7/31/2019
Environmental Testing	\$ 639,257
Internal Labor	\$ 2,364,981
IT Billing System Upgrade	\$ 3,314,897
Third Party Project Support	\$ 6,432,784
Other	\$ 2,000,580
All Non-Direct Costs (AFUDC, Loaders)	\$ 6,990,253
	\$ 21,742,752

¹ <https://www.sdge.com/sites/default/files/regulatory/September%202019%20PYD%20Report%20FINAL.pdf>

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Question 2

Regarding question 1 and PYD site costs, please provide an overall percentage breakdown of the major cost drivers for PYD sites, if all information in question 1 was not tracked or provided. Please provide all supporting workpapers and calculations in Excel.

SDG&E Response

The table below from the September 2019 Power Your Drive Semi-Annual Report shows the program's major cost categories and their respective percentage of total program costs. Final site-level costs are subject to change as the program is closed out.

Cost Category	Inception-to-Date as of 7/31/2019	Percentage
Materials	13,788,582	20%
Construction	26,672,836	38%
Engineering Design	7,357,034	11%
Environmental Testing	639,257	1%
Internal Labor	2,364,981	3%
IT Billing System Upgrade ²	3,314,897	5%
Third Party Project Support	6,432,784	9%
Other	2,000,580	3%
Non-Direct Costs (AFUDC, Loaders)	6,990,253	10%
Total³	69,561,203	

² Excludes IT costs to develop enterprise functionality that supported various programs including Power Your Drive.

³ Costs as reported may not include credits and adjustments related to materials, construction, and non-direct costs pending final assessment after project completion.

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Question 3

Regarding SDG&E's Chapter 3 Excel workpapers, Tab "Summary Table," Row 5, "Engineering Design & Construction costs."

- a. Please explain what "engineering design" and "construction" costs entail, separately.
- b. Please explain and list sub-categories of what "overhead costs" entail (row 11).
- c. Please explain how AFUDC (row 19) is calculated, and why it is necessary.

SDG&E Response

- a. Engineering design cost estimates are for SDG&E internal engineering labor and third-party engineering design support for activities such as: site walks, topographical surveys, preliminary design, and civil engineering support. Construction costs estimates are for SDG&E field employee labor and third-party equipment and labor needed to build out and energize the physical assets. Activities include items such as: digging and trenching, concrete and asphalt work, installation of conduit, meter pedestals, and EVSE equipment, and testing and commissioning the sites.
- b. Overheads are allocations of costs that are directly associated with program costs and are used to account for costs that cannot be economically direct-charged, such as payroll taxes and administrative and general costs. Overhead costs are addressed in more detail in the testimony supporting the PYD Extension Application, Chapter 5 – Revenue Requirement testimony of Casey Butler at CWB-2.
- c. The calculation of AFUDC is also addressed in the testimony of Casey Butler supporting the PYD Extension application, Chapter 5 – Revenue Requirement testimony. Footnote 4 at CWB-3 of the testimony, copied below, explains how AFUDC is calculated:

4 Consistent with prior SDG&E rate case proceedings, SDG&E utilizes the AFUDC formula mandated by FERC's Uniform System of Accounts ("USofA") [18 Code of Federal Regulations ("CFR") Part 101, Electric Plant Instructions, Components of construction cost 3(A)17 and 18 CFR Part 201, Gas Plant Instructions, Components of construction cost 3(A)17.]. Consistent with prior SDG&E rate case proceedings before the CPUC, including Decision ("D.") 16-06-054, SDG&E typically uses its authorized Rate of Return as a reasonable proxy for estimating AFUDC applied to CWIP.

SDG&E is authorized to apply AFUDC rates on capital as it is spent and remains in Construction Work in Progress ("CWIP"). AFUDC is necessary to account for project financing costs.

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Question 4

Regarding SDG&E’s Chapter 3 Excel workpapers, Tab “Cost Estimate by Month:”

- a. Please explain the source of the cost information provided in this tab.
- b. Please explain what “direct labor” costs entail (row 5), including but not limited to whether these are for site construction or something else. Please quantify where possible (e.g. x% for site construction, x% for design, etc.).
- c. Please explain what Row 9, “Eng Design and Construction Ext Implementation” entails, if different than above.
- d. Please explain why “escalation” is included (row 35), what escalation factors are used, and the source of these escalation factors. Please provide all supporting sources and workpapers.

SDG&E Response

- a. The primary basis of the Power Your Drive (PYD) Extension cost estimates included in SDG&E’s Chapter 3 Excel workpapers is the actual cost information to date obtained from the construction of 254 PYD Pilot sites.
- b. Direct labor is the estimated direct costs for SDG&E employee labor for implementation of the PYD Extension Program. The tables below show these internal SDG&E labor categories with percentages added.

Excel Row	(Column C - Cost Estimate by Month Tab)	EAC Capital	% of SDG&E Labor	% of Implementation Capital Direct Costs
9	Engineering and Construction	1,738,000	57%	6%
10	IT Support	50,000	2%	0%
12	Program Management	1,243,500	41%	4%
5	Direct SDG&E Labor	3,031,500		
4	Capital Implementation Direct Costs	31,021,500		

Excel Row	(Column C - Cost Estimate by Month Tab)	EAC O&M	% of SDG&E Labor	% of Implementation O&M Direct Costs
6	Back Office Support	100,000	21%	2%
7	Rebate Administration	140,000	30%	2%
8	Data Collection, Analysis, & Reporting	150,000	32%	3%
11	ME&O Execution	84,000	18%	1%
5	Direct SDG&E Labor	474,000		
4	O&M Implementation Direct Costs	5,674,000		

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- c. Excel Row 9 - “Eng Design and Construction Ext Implementation” is a subsection of row 5 - “Direct Labor” and is the estimated internal SDG&E engineering and construction labor estimates for implementing the program.
- d. Escalation is applied to direct costs to properly account for inflation. SDG&E applied the indices published in IHS Global Insight’s 1st Quarter 2019 Utility Cost Forecast for this application.

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Question 5

Regarding SDG&E's Chapter 3 Excel workpapers, Tab "Assumptions," please explain and define numbers 9 through 11 separately. The includes but is not limited to the following:

- a. Definition and cost elements of "high side connection;"
- b. Definition and cost elements of "standby costs;"
- c. Definition and cost elements of "change order."

SDG&E Response

Per SDG&E's PYD Extension Program Testimony (Chapter 3 – Program costs testimony, JB-2):

- a. The high-side connection costs are an average per site obtained from the PYD Pilot and represent the cost to connect to the distribution grid from the utility transformer.
- b. Standby costs are an average per site obtained from the PYD Pilot, and are costs incurred by contractors at the construction site for idle time waiting to energize/de-energize/test facilities.
- c. Construction change order costs are an average per site obtained from the PYD Pilot and are caused by unknowns discovered once construction begins at a site that require a change order with the contractor.

In SDG&E's Chapter 3 Excel workpapers, high side connection and standby cost estimates are included on cost element "6220006 - SRV-CONSTRUCTION SERVICES DEPT ONLY." Construction contractor change order costs are included on cost element "6221000 - SRV-CONSTRUCTION-ELECTRIC."

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Question 6

Please explain the basis for a 10% contingency factor for site costs, including why this is necessary and reasonable.

SDG&E Response

Contingency represents an estimate for unforeseen work and subsequent costs that are within the program's scope. One of the primary unknown factors of the program will be the specific conditions at each site. Although SDG&E has a sample size of sites from the PYD Pilot to use a basis of estimate, the overall site mix of the PYD Extension Program may differ. Also, SDG&E has modified the PYD Pilot Program for the PYD Extension Application for customer ownership at workplace sites. This change makes additional coordination necessary for workplace sites and will likely add additional time from when an application is received to when construction commences. Given these program unknowns, 10% is a necessary and reasonable program contingency to cover potential unforeseen costs.

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Question 7

Re Table 3-6 on page JB-6:

- a. Please explain why property tax is “capitalized” and provide a GRC decision reference (Application and page number) that allowed for this type of treatment.
- b. The total amount shown is \$58.4 million. Is SDG&E requesting this amount to be authorized by the Commission or \$43.5 million? Please explain.
- c. Please explain whether SDG&E anticipates ongoing O&M costs past 2024 of around \$1.9 million as shown in the Table.
- d. Please explain and provide the percentage of ongoing O&M that relates to the following:
 - i. Utility-side infrastructure;
 - ii. Customer-side make-ready;
 - iii. EV charging stations.

SDG&E Response

- a. Capitalized property tax represents property tax incurred during the program development period prior to the program being placed in service.⁴ See D.13-05-010, SDG&E’s 2012 GRC decision at pages 900-901 for further information.
- b. SDG&E is requesting a total of \$58.4 million be authorized for the PYD Extension Program. \$58.4 million is the total estimated cost of the program and includes estimated direct costs, escalation, overheads, AFUDC, capitalized property tax and ongoing O&M costs until SDG&E’s next General Rate Case (GRC). \$43.5 million is only the estimated direct costs of the program.
- c. For ongoing PYD Extension O&M costs in SDG&E’s next GRC, SDG&E will likely update the anticipated costs past 2024 based on historical actual costs. Actual costs could be higher or lower than the Application annual estimate of approximately \$1.9 million.
- d. Ongoing O&M estimates included in the PYD Extension Application are related to the maintenance of the EV charging stations and their associated data maintenance fees and applications.
 - i. 0% - Utility-side infrastructure
 - ii. 0% - Customer-side make ready
 - iii. 100% - EV charging stations

⁴ PYD Extension Chapter 5 – Revenue Requirement direct testimony CWB-2, CWB-3

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Question 8

Based on SDG&E's experience in PYD and engineering expertise, please provide a range of the cost per site to deploy 10 Level 1 chargers at a multi-unit dwelling. Please include all supporting workpapers, calculations, and assumptions.

SDG&E Response

SDG&E does not have specific cost per site estimates related to deploying 10 Level 1 chargers at multi-unit dwelling sites. However, SDG&E estimates that the cost per site would be similar to the Application cost estimates of deploying 10 Level 2 chargers.

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Question 9

SDG&E's testimony, Chapter 1, p. BAS-1, lines 10-11, state "Installing charging ports in these market segments [workplaces and MuDs] removes barriers for those who lack access to home charging:"

- a. Please provide the percentage and total number of drivers who charged at a PYD workplace site during the pilot that did not have access to residential charging before the pilot. Please provide all sources/workpapers/calculations;
- b. Please provide the percentage and total number of drivers who charged at a PYD MuD site during the pilot that did not have any charging station access before PYD (including Level 1 charging).

SDG&E Response

- a. SDG&E did not perform a survey or analysis to determine how many PYD drivers charging at workplace sites did not have access to residential charging before the pilot.
- b. SDG&E did not perform a survey or analysis to determine how many PYD drivers charging at MuD sites did not have access to any charging before the pilot.

END OF RESPONSES