Company: San Diego Gas & Electric Company (U 902 M)

Proceeding: 2019 General Rate Case

Application: A.17-10-007 Exhibit: SDG&E-224

SDG&E

REBUTTAL TESTIMONY OF CHRISTOPHER R. OLMSTED

(INFORMATION TECHNOLOGY)

JUNE 18, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



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SDG&E REBUTTAL TESTIMONY OF CHRISTOPHER R. OLMSTED (INFORMATION TECHNOLOGY)

I. SUMMARY OF DIFFERENCES

TOTAL O&M - Constant 2016 (\$000)					
	Base Year Test Year 2016 2019		Change		
SDG&E	73,378	88,449	15,701		
ORA	73,378	76,398	3,020		
UCAN	73,378	75,182 ¹	1,804		

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TOTAL CAPITAL - Constant 2016 (\$000)						
	2017	2018	2019	Total	Variance	
SDG&						
Е	119,566	130,371	139,777	389,714	N/A	
ORA	121,072	105,724	121,756	348,552	(41,162)	
					2019	
					Variance	
	No	No				
UCAN	Recommendation	Recommendation	127,638 ²	127,638	(12,139)	
	No	No				
CFC	Recommendation	Recommendation	109,577	109,577	(30,200)	

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II. INTRODUCTION

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This rebuttal testimony regarding San Diego Gas and Electric Company's (SDG&E) request for Information Technology (IT) costs addresses the following testimony from other parties:

¹ The Utility Consumers' Action Network (UCAN) did not provide a TY 2019 Operations and Maintenance (O&M) amount in testimony; figure is derived based on 15% reduction recommendation.

² UCAN did not provide a TY 2019 Capital amount in testimony; figure is derived based on 15% reduction recommendation. Also, UCAN recommends that SDG&E's IT LTE (Long Term Evolution) project be "levelized over entire rate case cycle so that SDG&E's incremental additions to its rate base would be limited to \$34.1 million for the TY and 2020." May 14, 2018, Prepared Testimony of Jason Zeller On Behalf of the Utility Consumer's Action Network Concerning San Diego Gas & Electric Company's Proposed Information Technology Expenditures For Their 2019 General Rate Case Phase 1 Application, Ex. UCAN-A.17-10-007 (Ex. UCAN-A.17-10-007 (Zeller)) at 2. This is not reflected in the amount shown as 2020 and is not in scope of the TY 2019 GRC.

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- The Office of Ratepayer Advocates (ORA), as submitted by Mr. Mark Loy.³
- The Utility Consumers' Action Network (UCAN), as submitted by Mr.
 Jason Zeller.⁴
- The Consumer Federation of California Foundation (CFC), as submitted by Mr. Tony Roberts.⁵

As a preliminary matter, the fact that this rebuttal testimony may not have responded to every issue raised by others does not mean or imply that SDG&E agrees with the proposal or contention made by these or other parties. The forecasts contained in SDG&E's direct testimony, performed at the project level, are based on sound estimates of its revenue requirements at the time of testimony preparation.

A. ORA

The following is a summary of ORA's position(s):

- A forecast of \$19.235 million for non-shared O&M expenses, a reduction of \$10.506 million from SDG&E's forecast of \$29.741 million.⁶
- A forecast of \$57.163 million for shared O&M expenses, a reduction of \$1.555 million from SDG&E's forecast of \$58.718 million.⁷
- A forecast of \$121.072 million for 2017 capital expenditures, a reduction of \$1.506 million from SDG&E's forecast of \$119.566 million.⁸
- A forecast of \$105.724 million for 2018 capital expenditures, a reduction of \$24.674 million from SDG&E's forecast of \$130.371 million.⁹

³ April 13, 2018, Prepared Direct Testimony of Mark Loy, Information Technology and Cybersecurity, Ex. ORA-20 (Ex. ORA-20 (Loy)).

⁴ Ex. UCAN-A.17-10-007 (Zeller).

⁵ May 14, 2018, Prepared Direct Testimony of Tony Roberts, Information Technology, Ex. CFC-02 (Ex. CFC-02 (Roberts)).

⁶ Ex. ORA-20 (Loy) at 2:13-14.

⁷ Ex. ORA-20 (Loy) at 2:16-17.

⁸ Ex. ORA-20 (Loy) at 3:2-4.

⁹ Ex. ORA-20 (Lov) at 3:5-8.

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A forecast of \$121.756 million for 2019 capital expenditures, a reduction of \$18.018 million from SDG&E's forecast of \$139.777 million. 10

В. **UCAN**

The following is a summary of UCAN's position(s):

- A reduction of TY2019 O&M and capital expenses by 15%. 11
- Capital expenditures associated with SDG&E's IT LTE project be levelized over the entire rate case cycle so that SDG&E's incremental additions to its rate base would be limited to \$34.1 million for the TY and $2020.^{12}$

C. **CFC**

Α.

The following is a summary of CFC's position(s):

A reduction of \$30.2 million for 2019 capital expenditures. 13

III. REBUTTAL TO PARTIES' O&M PROPOSALS

Parties do not challenge SDG&E's forecasting approach, just the outcome SDG&E provided in-depth background on its forecasting methodology that was used consistently throughout testimony. ORA and UCAN's rebuttal testimonies did not dispute SDG&E's approach, yet ORA and UCAN chose methods that differed from SDG&E's. The following sections identify these differences and describe why the California Public Utilities

Commission (CPUC or Commission) should reject ORA's recommendations and instead adopt SDG&E's position.

> Parties lack basis for rejecting SDG&E's consistently used base year 1. plus adjustments forecast methodology

As documented in SDG&E's direct testimony, the use of base year 2016 adjusted recorded O&M labor expenses plus adjustments for TY 2019 incremental resource requirements

¹⁰ Ex. ORA-20 (Loy) at 3:9-12.

¹¹ Ex. UCAN-A.17-10-007 (Zeller) at 2.

¹² Ex. UCAN-A.17-10-007 (Zeller) at 2.

¹³ Ex. CFC-02 (Roberts) at 1.

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is appropriate and justified due to the nature of IT-related costs. ¹⁴ The consistent use of base year 2016 adjusted recorded O&M labor expenses plus adjustments is reasonable for SDG&E because of:

- The pace of change in the technology industry continues to accelerate when compared to prior years.¹⁵
- The growth in computing power at the hardware level. 16
- The number and diversity of applications at the software level. 17
- Emerging computing trends, such as cloud computing and the increasing commercialization of IT capabilities.¹⁸
- "Black swan" events like the IT outages encountered in 2017. 20

SDG&E consistently applies this methodology across the entire forecast because these themes do not change when considering the various IT cost categories. ORA chooses to base their recommendation on a single year's results and UCAN's approach is to apply a flat percentage reduction of 15% across all of SDG&E's forecasts. Neither party challenges any of SDG&E's arguments against using historical information or trends to predict future needs.

2. Parties wrongly contend SDG&E's forecasts do not include sufficient supporting material

ORA contends that SDG&E's 2017 adjusted, recorded expenses should be used as the basis for their forecasts. Their premise is that SDG&E's "supporting workpapers are too weak in quantitative support to be reliable for ratesetting purposes." UCAN states "in several areas

¹⁴ December 2017, Revised SDG&E Direct Testimony of Christopher R. Olmsted (Information Technology), Ex. SDG&E-24-R (Ex. SDG&E-24-R (Olmsted)) at CRO-5:21-CRO-7:4.

¹⁵ Ex. SDG&E-24-R (Olmsted) at CRO-5:24-25.

¹⁶ Ex. SDG&E-24-R (Olmsted) at CRO-5:25-26.

¹⁷ Ex. SDG&E-24-R (Olmsted) at CRO-5:26-27.

¹⁸ Ex. SDG&E-24-R (Olmsted) at CRO-6:27-28.

¹⁹ An event or occurrence that deviates beyond what is normally expected of a situation and is extremely difficult to predict. Black swan events are typically random and unexpected.

²⁰ Ex. SDG&E-24-R (Olmsted) at CRO-6:11-CRO-7:4.

²¹ Ex. ORA-20 (Lov) at 10:5-6.

SDG&E's application fails to meet its burden of proving the reasonableness of its proposed IT expenditures."²²

SDG&E provides appropriate detail and analysis in support of its request of incremental TY 2019 expenses. Neither parties question any incremental expense. Contrary to the parties' assertions, SDG&E's direct testimony, O&M workpapers, and discovery responses provide narrative and analytical support for its incremental non-shared expense request.

SDG&E's workpapers provide details of SDG&E's O&M expense forecast as summarized in direct testimony. Forecasted costs are categorized into IT functional groupings (i.e., Applications, Infrastructure and IT Support). Workpapers include additional details, such as cost center and activity descriptions, forecast methodology explanations, 2012 through 2016 recorded costs (labor and non-labor), year to year (2017 – 2019) line item incremental activities for each cost center, and explanations for incremental changes for each of the forecast years.

The content of workpapers is consistent with the level of detail that has been provided in past rate cases and deemed acceptable. In addition, SDG&E provided all information in workpapers to ORA in a more analysis-friendly Excel format. In some cases, quantitative information such as number of resources, annual rates and historical O&M percentages were included. In others, the forecasts are based on the judgement and experience of professionals in the IT division. In fact, SDG&E's use of professional judgement and management experience is an acceptable forecasting methodology in a GRC, according to the guidelines governing these proceedings.²³

ORA's use of a single year's results and UCAN's percentage reduction are unwarranted and less reliable than the approach taken by SDG&E.

3. Parties do not challenge any of SDG&E's incremental proposals

SDG&E provided non-shared and shared O&M increases in direct testimony. These were further detailed in O&M workpapers and addressed in response to ORA's discovery requests. At no point during discovery or in their testimony did parties choose to refute any of the incremental proposals that make up the overall increase. Instead, ORA bases their case on

²² Ex. UCAN-A.17-10-007 (Zeller) at 2.

²³ Appendix A, Rate Case Plan, as updated by D.07-07-004, at A-31 (stating that "Where judgement is involved in setting an estimate level, [the applicant must] explain why that particular level was adopted").

the 2017 adjusted, recorded amount as compared to SDG&E's 2017 forecast. And UCAN
provides an arbitrary reduction of 15% across all forecasts. Neither party supports their position
for lower spending levels with any specific recommendations as to which SDG&E increases are
inappropriate or unwarranted. For example, SDG&E's proposed increases related to data
center/infrastructure enhancements, legacy system support, incremental resources supporting
new functions/features, labor vacancies, mainframe capacity, cloud subscriptions, and contract
escalations were not challenged. Without this level of detail, the parties cannot reliably provide
an accurate spending level for SDG&E to provide the necessary level of support for its business

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an accurate spending level for SDG&E to provide the necessary level of support for its business operations and customers.

B. Non-Shared Services O&M

NON-SHARED O&M - Constant 2016 (\$000)					
	Base Year Test Year 2016 2019		Change		
SDG&E	17,762	29,741	11,979		
ORA	17,762	19,235	1,473		
UCAN	17,762	$25,280^{24}$	7,518		

1. Disputed Cost - ORA

ORA recommends a forecast of \$19.235 million which is \$10.506 million lower than SDG&E's forecast of \$29.741 million.²⁵ The basis for the reduction is "the inaccuracy of SDG&E's 2017 forecast."²⁶ ORA "developed its 2019 forecast by multiplying SDG&E's 2019 forecast by 64.67%, its 2017 adjusted, recorded expense divided by its 2017 forecast."²⁷

2. Disputed Cost - UCAN

UCAN does not provide a specific amount related to non-shared O&M expenses.

Instead, they apply a 15% reduction across all SDG&E's forecasts. As documented in section III.A above, SDG&E has based forecasts on a reliable methodology and backs each forecast up

²⁴ UCAN did not provide a TY 2019 non-shared O&M amount in testimony; figure is derived based on 15% reduction recommendation.

²⁵ Ex. ORA-20 (Loy) at 8:3-4.

²⁶ Ex. ORA-20 (Loy) at 8:5.

²⁷ Ex. ORA-20 (Loy) at 10:12-14.

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C. **Shared Services O&M**

SHARED O&M - Constant 2016 (\$000)					
	Base Year 2016	Test Year 2019	Change		
SDG&E	55,616	58,708	3,092		
ORA	55,616	57,163	1,547		
UCAN	55,616	$49,902^{28}$	(5,714)		

with detailed information in workpapers. UCAN also uses 2017 operating results to attempt to

1. **Disputed Cost - ORA**

establish that SDG&E is unable to accurately forecast expenses.

ORA takes issue with the Test Year O&M forecast for shared services. ORA recommends a forecast of \$57.163 million which is \$1.555 million lower than SDG&E's forecast of \$58.708 million.²⁹ The basis for the reduction is SDG&E's "2017 forecast exceeding the 2017 adjusted."³⁰ ORA "developed its 2019 forecast by multiplying SDG&E's 2019 forecast down by 97.35%, its 2017 adjusted, recorded expense divided by its 2017 forecast."31

2. **Disputed Cost - UCAN**

UCAN does not provide a specific amount related to O&M expenses. Instead, they apply a 15% reduction across all SDG&E's forecasts. As documented in section III.A above, SDG&E has based forecasts on a reliable methodology and backs each forecast up with detailed information in workpapers. UCAN also uses 2017 operating results to attempt to establish that SDG&E is unable to accurately forecast expenses.

D. **SDG&E O&M Recommendation**

ORA and UCAN base their recommendations on SDG&E's 2017 adjusted recorded comparison to the 2017 forecast. The fallacy in ORA's and UCAN's arguments is that SDG&E's forecasts for 2017, 2018 and 2019 are based on IT leadership's view for the necessary levels of funding to adequately support the business operations and customers of SDG&E. The difference between forecasts and adjusted, recorded in 2017 will only be exacerbated in TY 2019

²⁸ UCAN did not provide a TY2019 shared O&M amount in testimony, figure is derived based on 15% reduction recommendation.

²⁹ Ex. ORA-20 (Loy) at 10:17-18.

³⁰ Ex. ORA-20 (Loy) at 10:19-20.

³¹ Ex. ORA-20 (Loy) at 12:11-13.

if a single percentage based on one year's results is applied per ORA's and UCAN's
recommendations. SDG&E again emphasizes that the merits of the individual components of the
proposed increases were not challenged, just the overall amount. In summary, SDG&E provides
appropriate detail and analysis in support of its request of incremental TY 2019 non-shared
expenses of \$29.741 million and shared expenses of \$58.708 million.

IV. REBUTTAL TO PARTIES' CAPITAL PROPOSALS

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TOTAL CAPITAL - Constant 2016 (\$000)						
	2017	2018	2019	Total	Variance	
SDG&E	119,566	130,371	139,777	389,714	N/A	
ORA	121,072	105,724	121,756	348,552	(41,162)	
					2019	
					Variance	
	No	No				
UCAN	Recommendation	Recommendation	127,638	127,638	(12,139)	
	No	No	_			
CFC	Recommendation	Recommendation	109,577	109,577	(30,200)	

A. With limited exceptions, parties did not challenge the merits or implementation timing of IT capital projects proposed by SDG&E

ORA's and CFC's IT testimonies did not provide any support for their recommendations based on the individual merits or details of any particular IT capital project proposed by SDG&E. UCAN's only project-specific recommendation is for LTE project forecasts to "be levelized over the entire rate case cycle that SDG&E's incremental additions to its rate base would be limited to \$34.1 million for the TY and 2020."³²

SDG&E's 2017-2019 IT capital request is well-supported by project-by-project information.³³ SDG&E has provided over 500 pages of detailed capital workpapers, representing 82 projects. SDG&E's capital workpapers specifically identify the types of investments needed for the forecast period.³⁴ SDG&E also forecasted in-service dates for each

³² Ex. UCAN-A.17-10-007 (Zeller) at 2.

³³ Ex. SDG&E-24-R (Olmsted) at CRO-16:1-CRO-31:24.

³⁴ December 2017, Revised Capital Workpapers to Prepared Direct Testimony of Christopher R. Olmsted On Behalf of San Diego Gas & Electric Company, Ex. SDG&E-24- CWP-R.

project listed in the SDG&E IT 2017-2019 capital forecasts. SDG&E's revised direct testimony includes narratives in support of the SDG&E IT-sponsored capital projects.³⁵

B. Disputed Costs – ORA

ORA recommends reduced capital expenditures for SDG&E in 2018 and 2019. They state "for 2017, capital expenditures, ORA used recorded adjusted data provided by SDG&E. For 2018 and 2019, ORA used recommendations from Ex. ORA-06, Electric Distribution Capital." SDG&E provides rebuttal to the 2018 and 2019 reductions via testimony provided by Alan Colton and by Ted Reguly. 38

C. Disputed Costs - UCAN

UCAN recommends that "capital expenditures associated with SDG&E's IT LTE project be levelized over the entire rate case cycle so that SDG&E's incremental additions to its rate base would be limited to \$34.1 million for the TY and 2020." As UCAN notes, based on SDG&E's direct testimony and discovery responses, SDG&E "retained an outside engineering firm to perform a total cost of ownership analysis over 20 years given its various communication needs. In addition, SDG&E participates in the Electric Power Research Institute's Telecom Initiative and information from that forum was used by SDG&E to help develop its proposal for the LTE network. This same data response states that several alternative technologies and solutions were considered besides the LTE deployment including discussions with solution providers." This results in UCAN's conclusion that "SDG&E's showing is notably lacking in specifics such as what criteria were used to select the option chosen, whether a competitive bidding process was used to select the firms that would be used to complete the network, to what extent alternative methods of providing comparable communications services were considered,

³⁵ Ex. SDG&E-24-R (Olmsted) at CRO-19:3-CRO-31:24.

³⁶ Ex. ORA-20 (Loy) at 13:2-4.

³⁷ June 18, 2018, SDG&E Rebuttal Testimony of Alan Colton (Electric Distribution Capital), Ex. SDG&E-214.

³⁸ June 18, 2018, SDG&E Rebuttal Testimony of Ted Reguly (DER Projects), Ex. SDG&E-253.

³⁹ Ex. UCAN-A.17-10-007 (Zeller) at 2.

⁴⁰ Ex. UCAN-A.17-10-007 (Zeller) at 5 (citations omitted).

and the specific deficiencies of its existing communications systems and whether less expensive alternatives were considered instead of developing a dedicated LTE network."⁴¹

SDG&E outlines requirements in requests for information and proposals, which are sent to multiple systems and solutions vendors for their response. All vendors are treated equitably, and SDG&E evaluates each vendor's response against a pre-established set of criteria developed with SDG&E's Supply Management organization. Time and resources were committed to understanding the implications of staying with existing technology when compared to moving to a new LTE technology. SDG&E uses both in-house and outside experts to evaluate business strategy to provide an ideal mix of focused, domain-specific knowledge and broader, crossindustry insight to provide overall guidance. SDG&E uses internal expertise in addition to consulting with utility peers, industry experts, technical experts as well as well-regarded research institutes in order to provide cost estimates for IT initiatives. SDG&E asserts that by deploying an industry standard solution, which may be more expensive in the near term, the overall solution costs will be lower in the long run.

With respect to SDG&E's plans to deploy a privately owned and operated, licensed, LTE network; SDG&E has deployed a number of wireless networks. As technology has advanced, it now gives SDG&E the opportunity to consolidate many of these networks into a single network with standards recognized worldwide. Using this network provides efficiencies in terms of deployment and management and offers more security. Using an industry standard, such as LTE, provides significant benefits to SDG&E and its customers. The broader telecommunications market has provided more alternatives, which in turn has driven prices down for equipment and engineering resources.

SDG&E went through a robust process to scope and price this initiative. Requests of this size are highly scrutinized when seeking internal approval. SDG&E has thoroughly vetted this solution and it warrants being funded at the requested levels rather than the reductions proposed by UCAN.

D. Disputed Costs - CFC

CFC recommends that SDG&E's capital forecast for IT related projects be reduced by \$30.2 million due to "the absence of guidance on the actual returns Sempra realizes on IT capital

⁴¹ Ex. UCAN-A.17-10-007 (Zeller) at 6.

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spending."⁴² The reductions are "based on limiting the 2019 IT Division capital spending to a 15% annual growth rate,"⁴³ which is consistent with an "observed IT capital investment growth generally reported by other large corporations."⁴⁴ SDG&E's forecast includes \$50.262 million for the LTE project described in section IV.C above. That project alone accounts for over 60% of the planned spending in 2019. Reducing spending to CFC recommended levels will limit SDG&E's ability to deliver on this and other IT capital projects listed in testimony, putting IT's ability to provide safe, reliable service to our employees and customers at risk.

E. SDG&E Capital Recommendation

In summary, SDG&E agrees with ORA's recommendation for capital expenses of \$121.072 million in 2017, but contests ORA's, UCAN's, and CFC's capital proposals for the remaining years. SDG&E's capital proposals of \$130.371 million in 2018 and \$139.777 million in 2019 are reasonable and well-supported by the record.

V. CONCLUSION

SDG&E has addressed the proposed recommendations presented by parties and demonstrated that their proposals are not warranted. In conclusion, SDG&E has demonstrated the following:

- SDG&E's TY 2019 shared O&M forecast is reasonable.
- SDG&E's TY 2019 non-shared O&M forecast is reasonable.
- SDG&E accepts ORA's 2017 capital expenditure recommendation.
- SDG&E's 2018 and 2019 capital expenditure forecasts are reasonable.

This concludes my prepared rebuttal testimony.

⁴² Ex. CFC-02 (Roberts) at 1.

⁴³ Ex. CFC-02 (Roberts) at 2.

⁴⁴ Ex. CFC-02 (Roberts) at 2.

APPENDIX A - GLOSSARY OF TERMS

CFC Consumer Federation of California

Foundation

Commission/CPUC California Public Utilities Commission

IT Information Technology
LTE Long-Term Evolution

O&M Operations and Maintenance

ORA Office of Ratepayer Advocates

SDG&E San Diego Gas & Electric Company

UCAN The Utility Action Consumer's Network