Docket:	:A.13-12-015
Exhibit Number	:ORA-1
Commissioner	:Michael Peevey
Admin. Law	:Stephen C.
Judge	:Roscow
DRA Witness	:Yakov Lasko

OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

TESTIMONY ON SOUTHERN CALIFORNIA EDISON'S 2013 RATE DESIGN WINDOW APPLICATION

San Francisco, California
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SCE'S 2013 RATE DESIGN WINDOW APPLICATION

(Witness: Yakov Lasko)

I. SUMMARY AND RECOMMENDATIONS

This chapter presents the Office of Ratepayer Advocates' ("ORA") rate design window recommendations for the Southern California Edison ("SCE") 2013 Rate Design Window ("RDW") Application ("A.")13-12-015. SCE has made several rate design recommendations, including modifications to Option R and Schedule TOU-EV-1 and migration of existing customers from Schedule TOU-D-TEV to a newly created, non-tiered rate called Schedule TOU-D. In this chapter ORA discusses SCE's rate proposals for electric vehicle ("EV") customers and in turn presents ORA's recommendations. ORA takes no position on the proposed changes to Option R.

ORA recommends:

1. SCE's proposed modification to Schedule TOU-EV-1, to change the summer season to be consistent with the summer season for other residential rates, should be adopted.
2. SCE's proposal to add a new monthly meter charge of $2.64 to Schedule TOU-EV-1 should be rejected. Instead, the basic monthly meter charge of $0.9125 should be adopted to be consistent with other domestic rate schedules.
3. SCE's proposed Schedule TOU-D rate should be limited to electric vehicle ("EV") customers only.
4. If Schedule TOU-D were offered to all residential customers, then the time-of-use ("TOU") periods should not be changed to incorporate the early evening hours into the summer on-peak period. The latter question should be deferred to the Residential Rate Design rulemaking (R.12-06-013, or "RROIR").
5. SCE's proposed TOU-D, Option B rate should be rejected.

II. SCE'S RATE PROPOSALS FOR EV CUSTOMERS

SCE recommends several residential rate design changes for EV customers in this Application, most of which derive from past Commission directives.[1] In addition to complying with requirements from Decision (D.)11-07-029, SCE states that it "endeavors in this RDW to leverage the proposed Schedule TOU-D, Option B in service of additional goals applicable to a broader customer base than just EV owners."[2]

For residential EV customers, SCE proposes a number of significant rate design changes to current EV-specific optional rate schedules TOU-EV-1 and TOU-D-TEV:

1) The TOU-EV-1 is a non-tiered time-of-use rate for customers who separately meter their EV charging. In this Application, SCE proposes to "(a) add a new monthly meter charge to recover the costs of the separate meter; and (b) change the summer season – currently defined as May 1 to November 1 – to be consistent with summer season for other residential rates, which is June 1 to October 1."[3]

2) The TOU-D-TEV is a whole-house, single meter time-of-use rate consisting of two inclining-block usage tiers. SCE proposes to "close this schedule and migrate customers to a newly created, non-tiered rate called Schedule TOU-D."[4] Further, SCE proposes to open the new TOU-D rate schedule to all residential customers, not just those who own EVs, and to define time-of-use periods for Schedule TOU-D differently from those in the current TOU-D-TEV rate schedule.

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[1] In a decision from Phase 2 of the 2009 of the 2009 Alternative Fuel Vehicle Order Instituting Rulemaking, D.11-07-029, the Commission ordered the IOUs to study a number of factors pertinent to EV ratemaking and to modify their EV tariffs based on an analysis of load data and customer behavior under existing tariffs.

[2] A.13-12-015 Prepared Testimony in Support of SCE's 2013 Rate Design Window Application, filed December 24, 2013 ("SCE Testimony"), pg. 16, lines 16-18.

[3] SCE Testimony pg. 13, lines 9-11.

[4] SCE Testimony pg. 13, lines 12-13.

III. DISCUSSION & ORA'S PROPOSALS

A. Proposed Schedule TOU-EV-1 Changes

As previously indicated, SCE proposes to make two changes to Schedule TOU-EV-1. First, SCE recommends adding a new monthly meter charge to recover the costs of the separate meter. Second, SCE recommends shortening the summer season definition from seven months (May 1 to November 1) to five months (June 1 to October 1).

Regarding the first proposal, SCE states that the proposed fixed "meter charge will be based on the meter component of the customer marginal cost adopted in Phase 2 of SCE's last General Rate Case. SCE will set the TOU-EV-1 monthly meter charge at the full Equal Percent Marginal Cost (EPMC) level."[5] The table below, based on SCE's Testimony, summarizes the current versus proposed Schedule TOU-EV-1 rates:

Table 1

Current vs. Proposed Schedule TOU-EV-1 Rates			
Periods	**Current (¢/kWh)**	**Proposed (¢/kWh)**	**Change (¢/kWh)**
Summer On-Peak	33.0	33.8	+0.8
Summer Off-Peak	10.6	11.6	+1.00
Winter On-Peak	22.6	20.9	-1.70
Winter Off-Peak	10.9	11.1	+0.2
Basic Charge ($/month)	-	$2.64	+$2.64

Regarding the second proposal, SCE states that it "will maintain the current (two) time-of-use periods for Schedule TOU-EV-1, but proposes to adjust the seasons [...so that…] the summer season for Schedule TOU-EV-1 is proposed to be June 1 to October 1 (instead of May 1 to November 1)."[6] SCE claims that the purpose of the adjustment is to improve the simplicity and understandability of this new schedule for customers who may wish to compare the separately metered option to other domestic rate schedules.

[5] SCE Testimony pg. 19, lines 2-4.

[6] SCE Testimony pg. 19, lines 5-8.

The table below, taken from SCE's Testimony, summarizes the current versus proposed time-of-use periods for Schedule TOU-EV-1:

Table 2

Current vs. Proposed Time-of-Use Periods (Schedule TOU-EV-1)		
Periods	**Current**	**Proposed**
Summer	May 1st – October 31st	June 1st – September 30th
Winter	November 1st – April 30th	October 1st – May 31st
On-Peak	12pm – 9pm, everyday	12pm – 9pm, everyday
Off-Peak	All other hours	All other hours

ORA does not object to SCE's second proposal, to adjust the seasons for Schedule TOU-EV-1. ORA agrees with SCE that the modification would allow customers to better compare the separately metered option to other domestic rate schedules.

ORA does, however, take issue with SCE's first proposal, to establish a $2.64 meter charge. ORA sees no reason why a separate meter charge for EV customers in this schedule should be almost three times as large as the customer charge of other domestic rate schedules, nor does SCE provide any justification for such an increase in its Application. In fact, in Appendix H (Costs and Benefits of EV Integration and Charging) SCE states that "there may be incremental marginal costs associated with EV adoption in the future as some customers might adopt higher charging levels, at this point the cost data does not indicate a need for special rate treatment, including the addition of demand charges, for owners of EVs to distinguish the costs of serving EV loads from those of other equipment."[7] Therefore, ORA proposes that Schedule TOU-EV-1 customers should have the same basic charge of $0.9125/month, equivalent to that of other domestic rate schedules. Making the basic charge the same as that of other schedules also would improve the simplicity and understandability of this schedule for customers who may wish to compare the separately metered option to other domestic rate schedules, which is one of the goals SCE cites in this Application when proposing TOU period changes for Schedule TOU-EV-1.

[7] SCE Testimony Appendix H, pp. H-2.

ORA utilized SCE's TOU-EV-1 workpaper to recalculate the Schedule TOU-EV-1 rates under the assumption that the basic charge would be $0.9125/month instead of SCE's proposed $2.64. ORA's proposed Schedule TOU-EV-1 rates are presented in the table below along with SCE's proposed rates and the magnitudes of proposed changes compared to the current Schedule TOU-EV-1 rates.

Table 3

Current vs. Proposed SCE and ORA Schedule TOU-EV-1 Rates					
Periods	**Current (¢/kWh)**	**SCE Proposed (¢/kWh)**	**Change (¢/kWh)**	**ORA Proposed (¢/kWh)**	**Change (¢/kWh)**
Summer On-Peak	33.0	33.8	+0.8	34.2	+1.2
Summer Off-Peak	10.6	11.6	+1.0	11.6	+1.0
Winter On-Peak	22.6	20.9	-1.7	21.4	-1.2
Winter Off-Peak	10.9	11.1	+0.2	11.1	+0.2
Basic Charge ($/month)	-	$2.64	+$2.64	$0.9125	+$0.9125

B. Schedules TOU-D-TEV and TOU-D

The Schedule TOU-D-TEV is a whole-house, single meter time-of-use rate consisting of two inclining-block usage tiers. In this Application, SCE proposes to close Schedule TOU-D-TEV and to migrate existing customers to a newly created, non-tiered rate called Schedule TOU-D. In addition, SCE proposes to open the new TOU-D rate schedule to all residential customers, not just those who own EVs, as well as to define new time-of-use periods.

The proposed Schedule TOU-D differs from the existing Schedule TOU-D-TEV in two ways: (1) the time-of-use periods (e.g., on-peak and off-peak hours) are different, and (2) Schedule TOU-D will have two options (Options A and B) to choose from for lower-usage and higher-usage customers.

With respect to the first difference, the table below, taken from SCE's Testimony, compares the current TOU-D-TEV and the proposed TOU-D time-of-use periods.

Table 4

Current TOU-D-TEV vs. Proposed TOU-D Time-of-Use Periods		
Periods	**Current TOU-D-TEV**	**Proposed TOU-D**
On-Peak	10am – 6pm, weekdays except holidays	2pm-8pm, weekdays except holidays
Super-Off-Peak	12am – 6am, everyday	10pm – 8am, everyday
Off-Peak	All other hours – all year, everyday	All other hours – all year, everyday

Regarding the second difference, SCE states that the

> …new Schedule TOU-D will have an "Option A," designed for lower usage customers, and an "Option B" designed for higher usage customers, with an ability for customers to switch between options as their usage patterns change. Option A customers will receive a baseline credit allowance and will pay a customer charge that correlates with whatever the customer charge is for Schedule D (SCE's default residential schedule). Option B customers will not have a baseline credit allowance, and the customer charge is proposed to be substantially higher than the customer charge for Option A customers.[8]

The table below from SCE's Testimony shows SCE's proposed TOU-D rates for Option A and Option B:

[8] SCE Testimony pp. 13-14, lines 18-2.

Table 5

Proposed TOU-D Rates (Option A & Option B)[9]		
Period	**TOU-D Option A (¢/kWh)**	**TOU-D Option B (¢/kWh)**
S. On-Peak	40.2	33.9
S. Off-Peak	24.6	18.2
S. Super-Off-Peak	10.9	10.9
W. On-Peak	28.0	21.7
W. Off-Peak	21.3	14.9
W. Super-Off-Peak	10.9	10.9
Baseline Credit (¢/kWh)	(3.8)	-
Basic Charge ($/month)	$0.91	$16.37

C. The Proposed Schedule TOU-D Should be Limited to EV Customers Only

ORA does not support opening SCE's proposed Schedule TOU-D to all residential customers due to the significant revenue deficiency that this action may create, caused by the migration of customers from Schedule D to Schedule TOU-D. SCE recognizes this potential issue, stating,

> "[b]ecause the proposed Schedule TOU-D rate is more cost-based than the Schedule D rate (which is still constrained by statutory restrictions that have only recently been partially lifted), the migration of customers from Schedule D to Schedule TOU-D has the potential of creating a revenue deficiency. To address this issue, SCE proposes to annually rebalance the Schedule TOU-D rate to be revenue neutral to Schedule D. Any revenue deficiency will be captured in the Conservation Incentive Adjustment (CIA) balancing account, and will be allocated to the entire residential class of customers."[10]

Utilizing Table III-9 and Table III-10 from SCE's testimony along with submitted workpapers, ORA created Table 6 showing projected monthly revenues and shortfall totals under each Option, should Schedule TOU-D be open to SCE's proposed 2014

9 The proposed TOU-D rates are based on SCE's proposed 2014 3-Tier Schedule D.

10 SCE Testimony pg. 27, lines 2-7.

default three-tier Schedule D customers. ORA estimates that rational customers whose load is 700 kWh/month and above would choose Option B over Option A or a 3-Tier Schedule D that SCE has proposed in R.12-06-013. All other customers whose load is below 700 kWh/month would prefer to remain on the proposed 3-Tier Schedule D. This self-selection under the worst-case scenario would potentially create a revenue deficiency of $16,006,755 per month or $192.081 million per year.[11] This annual deficiency roughly translates to a 4.47 percent revenue shortfall if it were uniformly distributed over all residential sales.[12] A 4.47 percent rate increase would be in addition to any other rate changes coming from revenue requirements increases and rate restructuring caused by changing the current residential tier structure in R.12-06-013. It may interfere with the orderly unwinding of the tiered rate structure in R.12-06-013. Allowing an option for large customers to bypass tiered rates before they are unwound may be inadvisable.

[11] This is the sum of the negative values in the far right column of Table 6. The negative values indicate a bill reduction from migrating to Schedule TOU-D, Option B.

[12] This calculation assumes an annual residential revenue requirement of $4.3 billion. Thus, 4.47% = $192.081 million / $4.3 billion.

Table 6

Projected Monthly Revenues and Shortfalls[13]					
		OPTION A		OPTION B	
	Number of Customers	**Monthly $ Change per customer**	**Monthly $ All Customers**	**Monthly $ Change per customer**	**Monthly $ All Customers**
≤100	87,365	0.1	12,180	15.6	1,359,619
100 to 300	579,619	1.6	902,650	16.0	9,290,531
300 to 500	758,759	3.2	2,409,948	14.1	10,689,163
500 to 700	643,913	4.2	2,713,427	7.5	4,799,425
700 to 900	366,857	3.8	1,407,810	-2.0	(734,155)
900 to 1100	226,375	0.8	176,474	-12.9	(2,929,607)
1100 to 1300	86,941	-7.8	(678,374)	-30.0	(2,604,538)
1300 to 1500	66,210	-11.5	(762,819)	-43.7	(2,895,461)
>1500	63,273	-44.5	(2,813,771)	-108.1	(6,842,994)

(Highlighted numbers show revenue deficiency)

Note that this analysis was performed assuming that SCE's proposed 3-tier Schedule D is approved in the RROIR. If the analysis were done assuming the current 4-tier Schedule D rates, the revenue shortfall would be 8.44 percent[14]. It is higher because the current 4-tier Schedule D has higher upper tier rates than does SCE's proposed 3-tier Schedule D. It is not clear that SCE's proposal will be adopted. Intervenor testimony has not yet been served, but some intervenors may oppose SCE's proposal.

SCE's testimony indicates that there is no "established and cost-effective way to verify and track EV ownership," citing this as one reason against limiting eligibility for the proposed TOU-D to EV customers. Based on SCE's response to ORA's data request

[13] Based on the proposed 2014 3-Tier Schedule D for 2015.

[14] Please refer to Appendix B.

regarding this issue, however, ORA is not convinced that this is an insurmountable challenge.[15]

D. The Change of TOU Periods Should Be Investigated More Fully before Opening TOU-D to All Residential Customers

ORA does not oppose changing the TOU periods by shifting the on-peak period to 8 PM as long as the schedule is limited to customers owning electric vehicles. It would be imprudent, however, to change the TOU periods if the schedule were opened to all residential customers without investigating customers' behavioral responses and rate impacts more fully. The Commission is reviewing the various TOU options in the RROIR, and it would be advisable to investigate the change in TOU periods in that proceeding. The Commission has expressed an interest in promoting time varying rates for residential customers. There is evidence from Arizona that moving the on-peak TOU period into the evening hours could dampen participation.[16] SCE states that it does not see the need to change the TOU periods for non-residential customers at this point in time.[17] Therefore, it may be premature to do so in a rate schedule that would be offered to all residential customers before examining the issue more carefully than is possible in this rate design window.[18]

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[15] Specifically, SCE states that it "has engaged the Departmetn [sic] of Motor Vehicles to directly access registration records as authorized under California Vehicle Code (VC) Section 1808.23., but has not yet implemented the process needed to comply with the VC's requirements." SCE response to ORA data request A.13-12-015 ORA-SCE-004, Question 1.d.

[16] "Can Arizona's Success with Time-of-Use Rates Be Replicated in California?" by Robert Levin and Elise Torres, paper for Center for Research in Regulated Industries Annual Western Conference (presented June 26, 2014), pp. 18-19.

[17] R.12-06-013 Phase 1 Supplemental Filing of Southern California Edison Company (U 338-E) Including Responses to Questions 26-38 of Appendix A to February 13, 2014 Assigned Commissioner's Ruling, filed March 21, 2014, p. A-2 (response to Question 26).

[18] R.12-06-013 Pacific Gas and Electric Company (PG&E) Long Term Residential Electric Rate Design Reform Proposal Phase 1 Responses to Questions 26-38, pp. 4-5 (response to Question 30: "determining the optimal length of peak pricing periods that will induce peak demand reduction and load shifting… whether offering multiple TOU rate options would increase the attractiveness of optional TOU rates…[and] how best to balance the need for technical precision around system needs with consumer comprehension and ability to take action [are] relevant issue[s] for consideration" in the RROIR.), filed March 21, 2014.

E. Proposed Schedule TOU-D, Option B Should be Rejected

ORA has evaluated the proposed Schedule TOU-D Options A and B based on the load characteristics of the current total house electric vehicle ("TEV") customers. ORA recommends that Option B be rejected based on the revenue deficiencies this option could create even if the proposed Schedule TOU-D were restricted to the current EV customers. While the revenue deficiencies are not numerically large, they represent a significant deficiency in percentage terms relative to what the customers who self-select onto Option B should be paying. In other words, they would not be paying their fair share of the revenue requirement, especially under Option B. This is because the volumetric rates under Option B are much lower than they are under Option A, and it is the larger customers on the rate schedule who would self-select into this option.

ORA utilized the data presented in SCE's Table III-11,[19] as shown in Table 7 below, to compare revenue collections under the current Schedule TOU-D-TEV[20] and TOU-D Options A and B, shown in Table 8.

Table 7

Hypothetical Bill Impacts				
Group Usage (kWh)	**Number of TEV Customers**	**TEV Rate (Balanced to 3-Tier D)**	**TOU-D (Option A)**	**TOU-D (Option B)**
≤100	6	$24	$24	$40
100-300	94	52	51	67
300-500	423	83	83	94
500-700	629	118	116	122
700-900	611	158	155	153
900-1100	385	198	192	183
1100-1300	235	241	231	215
1300-1500	160	287	274	249
>1500	304	468	439	381

[19] SCE Testimony pg. 26.

[20] The rates on Schedule TOU-D-TEV have been scaled to bring in the same revenues had those customers been on Schedule D, the default rate. This was done since the intent is that both Schedule TOU-D-TEV and the new Schedule TOU-D be revenue neutral with Schedule D.

Table 8

Comparison of Revenue Collections - Assuming Customers Rationally Select Rate Schedule					
Group Usage (kWh)	**Number of TEV Customers**	**TEV Rate (Balanced to 3-Tier D)**	**TOU-D (Option A)**	**TOU-D (Option B)**	**Total Revenue Collection – Self Selection**
≤100	6	$147	$145	$239	$145
100-300	94	4,857	4,813	6,272	4,813
300-500	423	35,111	35,174	39,794	35,174
500-700	629	74,151	73,237	76,724	73,237
700-900	611	96,248	94,471	93,381	94,471
900-1100	385	76,077	73,824	70,511	70,511
1100-1300	235	56,619	54,387	50,570	50,570
1300-1500	160	45,966	43,890	39,822	39,822
>1500	304	142,293	133,482	115,865	115,865
Total	**2,847**	**$531,468**	**$513,422**	**$493,179**	**$484,609**

(Highlighted numbers show revenue deficiency under rational self selection scenario)

Table 8 shows that, based on SCE's hypothetical bill impacts, there will be systematic revenue under-collections under Options A and B, and the under-collection is highest under Option B. Based on the current total number of SCE's TEV customers, the total revenue collections under the current Schedule TOU-D-TEV, which SCE proposes to close, is $531,468 per month or $6,377,616 annually. Under the proposed new Schedule TOU-D, if all customers were to select TOU-D Option A, the revenue collections would be $513,422 per month or $6,161,064 annually. Similarly, if all customers were to select TOU-D Option B, the revenue collections would be $493,179 per month or $6,161,064 annually. Thus, if Options A and B are treated independently, there will be a potential monthly revenue under-collection of $18,046 for Option A and $38,289 for Option B compared with the current TOU-D-TEV rate. This amounts to an annual under-collection of $216,552 for Option A and $459,468 for Option B. This revenue under-collection represents a 3.4 percent and 7.2 percent shortfall for Option A and Option B, respectively.

The magnitude of revenue shortfalls would be further exacerbated if customers will be allowed to rationally self-select between Options A and B without any barriers, as

SCE proposes. ORA estimates that rational TEV customers whose load is below 900 kWh/month would choose Option A while the remaining customers whose load is above 900 kWh/month would choose Option B. ORA finds that, should Options A and B coexist together, the potential monthly revenue collection after rational customer self-selection will be approximately $484,609 or $5,815,309 annually. Thus, if Options A and B are evaluated together, there will be a potential monthly revenue under-collection of $46,859 per month or $562,308 annually, representing an 8.8 percent shortfall.

Table 9 below summarizes all the above estimates. Thus it provides monthly and annual revenue collections as well as monthly and annual revenue deficits (numerical and as a percentage) for TOU-D Options A and B and for the hypothetical rational self-selection scenario compared with the current TEV rate (Balanced to Three-Tier D).

Table 9

Revenues and Potential Revenue Shortfalls				
	TEV Rate (Balanced to 3-Tier D)	**TOU-D, Option A**	**TOU-D, Option B**	**Rational Self-Selection**
Monthly Revenue Collection	$531,468	$513,422	$493,179	$484,609
Annual Revenue Collection	$6,377,616	$6,161,064	$5,918,148	$5,815,308
Monthly Revenue Deficit		($18,046)	($38,289)	($46,859)
Annual Revenue Deficit		($216,552)	($459,468)	($562,308)
Deficit (as a % of TEV Rate Revenue Collection)	-	3.4%	7.2%	8.8%
Monthly Deficit per TEV Customer	-	$6.34	$13.45	$16.46
Annual Deficit Per TEV Customer	-	$76.06	$161.39	$197.51

As can be seen, the most serious revenue shortfall is associated with Option B, whether looking at it independently or in combination with Option A in the rational self-selection scenario. Thus, ORA recommends that Option B be rejected even if the proposed Schedule TOU-D were restricted to TEV customers. It is important that all customers pay their fair share. It is inadvisable to make available an option that allows larger customers not to do so.

Finally, SCE proposes that "[a]ny revenue deficiency will be captured in the Conservation Incentive Adjustment (CIA) balancing account, and will be allocated to the entire residential class of customers."[21] This proposal should be rejected. To the extent that the Commission adopts SCE's proposed Schedule TOU-D, in part or in whole, that may result in any revenue deficiencies. Those revenue deficiencies should be borne by TEV (and high usage customers, should Schedule TOU-D be open to the entire residential class) customers who will cause those deficiencies to occur.

IV. CONCLUSION

ORA recommends that the Commission adopt SCE's proposal to change the TOU-EV-1 summer season to be consistent with the summer season for other residential rates, and instead of SCE's proposed $2.64 monthly meter charge, adopt a $0.9125 monthly meter charge for Schedule TOU-EV-1. For SCE's proposed Schedule TOU-D, ORA recommends that the Commission reject Option B and make the remaining TOU-D (Option A) available only to EV customers. If, however, the Commission allows SCE to make TOU-D available to all residential customers, then the TOU periods should not be changed to incorporate the early evening hours into the summer on-peak period. The issue of whether to change TOU period definitions is more appropriately addressed in the Residential Rate Design rulemaking (R.12-06-013).

[21] SCE Testimony, p. 27, lines 6-7.

APPENDIX A

QUALIFICATIONS AND PREPARED TESTIMONY
OF
YAKOV LASKO

Q.1 Please state your name and business address.

A.1 My name is Yakov Lasko. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

Q.2 By whom are you employed and what is your job title?

A.2 I am employed by the California Public Utilities Commission as a Public Utilities Regulatory Analyst in the Electricity Planning and Policy Branch of the Office of Ratepayer Advocates (ORA).

Q.3 Will you please briefly state your educational background and experience?

A.3 I received a Bachelor of Arts Degree in Political Economy of Industrial Societies from the University of California, Berkeley. I also possess a Master of Science Degree in Corporate Finance from SDA Bocconi School of Management located in Milan, Italy.

I joined the Office of Ratepayer Advocates in 2012. I have worked on Resource Adequacy, Flexible Capacity and Long-Term Planning and Procurement proceedings, Energy Resource Recovery Account (ERRA) Compliance, and the Commission's investigation on costs associated with the San Onofre Nuclear Generating Station retirement. At present, I am involved in ERRA Compliance and the Joint Reliability Plan rulemaking.

Q.4 What testimony are you sponsoring in this proceeding?

A.4 I am responsible for Chapter 1, SCE's 2013 Rate Design Window application.

Q.5 Does this complete your testimony at this time?

A.5 Yes, it does.

APPENDIX B

IMPACTS BASED ON ANTICIPATED (4-TIER) SCHEDULE D RATES

ORA issued additional data requests to SCE to determine projected monthly revenues and shortfalls for each Option of Schedule TOU-D relative to the current default 4-tier Schedule D. The Table 10 below shows the results of SCE's bill impact model on Options A and B rates for different periods relative to the current 4-tier Schedule D, while Table 11 shows the projected monthly revenue and shortfall totals for each Option should the Schedule TOU-D (with the rates in Table 10) be open to SCE's current default 4-tier Schedule D customers.

Table 10

TOU-D Rates under Default 4-Tier Schedule D[22]		
Period	**TOU-D Option A (¢/kWh)**	**TOU-D Option B (¢/kWh)**
S. On-Peak	46.86	39.07
S. Off-Peak	27.64	19.85
S. Super-Off-Peak	11.11	11.11
W. On-Peak	35.79	28.00
W. Off-Peak	23.29	15.50
W. Super-Off-Peak	11.13	11.13
Baseline Credit (¢/kWh)	(5.74)	-
Basic Charge ($/month)	$0.943	$16.37

As with the proposed three-tier Schedule D, ORA estimates that rational customers whose load is 700 kWh/month and above would choose Option B over Option A or the current 4-Tier Schedule D. All other customers whose load is below 700 kWh/month would prefer to remain on the current 4-Tier Schedule D. This self-selection would potentially create an even larger revenue deficiency than under the proposed 3-Tier Schedule D. The potential monthly revenue deficiency under the worst-case scenario would be $30,236,644 or $362.84 million annually. This annual

[22] Option A and B rates under the current 4-tier Schedule D.

deficiency roughly translates to an 8.44 percent revenue shortfall ($362.84 million / $4.3 billion), which would have to be recovered from all residential rate schedules.

Table 11

Monthly Revenues and Shortfalls under Default 4-Tier Schedule D					
		OPTION A		OPTION B	
	Number of Customers	**Monthly $ Change**	**Monthly $ Total**	**Monthly $ Change**	**Monthly $ Total**
≤100	87,365	1.0	89,889	17.0	1,489,445
100 to 300	579,619	4.9	2,813,266	21.2	12,289,742
300 to 500	758,759	8.1	6,168,523	21.2	16,070,115
500 to 700	643,913	5.6	3,605,795	9.6	6,200,928
700 to 900	366,857	-1.2	(449,596)	-8.2	(3,002,426)
900 to 1100	226,375	-10.5	(2,375,911)	-26.9	(6,097,094)
1100 to 1300	86,941	-27.6	(2,400,794)	-54.2	(4,715,211)
1300 to 1500	66,210	-38.3	(2,533,496)	-77.1	(5,107,433)
≥1500	63,273	-101.9	(6,447,648)	-178.8	(11,314,480)

(Highlighted numbers show revenue deficiency)