MEMORANDUM

TO: **UTILITIES ADVISORY COMMISSION**

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FROM: **UTILITIES DEPARTMENT**

DATE: **April 9, 2019**

SUBJECT: **Staff Recommendation that the Utilities Advisory Commission Recommend that the City Council Adopt: 1) a Resolution Approving the Fiscal Year 2020 Electric Financial Plan, and 2) a Resolution Increasing Electric Rates by 8% by Amending the E-1, E-2, E-2-G, E-4, E-4-G, E-4 TOU, E-7, E-7-G, E-7 TOU, E-14, E-EEC and E-NSE Rate Schedules**

REQUEST

Staff requests that the Utilities Advisory Commission (UAC) recommend that the Council:

1. Adopt a resolution (Attachment A) approving the fiscal year (FY) 2020 Electric Financial Plan (Attachment B); and
2. Adopt a resolution (Attachment C) amending Rate Schedules E-1 (Residential Electric Service), E-2 (Small Non-Residential Electric Service), E-2-G (Small Non-Residential Green Power Electric Service), E-4 (Medium Non-Residential Electric Service), E-4-G (Medium Non-Residential Green Power Electric Service), E-4 TOU (Medium Non-Residential Time of Use Electric Service), E-7 (Large Non-Residential Electric Service), E-7-G (Large Non-Residential Green Power Electric Service), E-7 TOU (Large Non-Residential Time of Use Electric Service), E-14 (Street Lights), E-NSE (Net Metering Net Surplus Electricity Compensation), and E-EEC (Export Electricity Compensation).

EXECUTIVE SUMMARY

The FY 2020 Electric Utility Financial Plan includes projections of the utility's costs and revenues through FY 2024. Costs are projected to rise substantially for the next several years for several reasons. Costs for electric supply purchases are increasing as a result of increases in transmission costs and the last of the City's renewable energy projects coming online. Substantial additional capital investment in the electric distribution system is planned for FY 2019 through FY 2023, and operational costs are increasing. There has been some decrease in the City's electric load. Lastly, revenues are below costs as of FY 2019.

Because of these rising costs and other factors, an increase in sales revenues is required. An 8% rate increase is proposed for July 1, 2019, with 4% increases in the following years. While 8% would be the overall increase in average rates, different customer classes will see slightly

different increases ranging from 4% to 9%, as shown in Tables 3 and 4. Actual rate increases are calculated using the 2016 cost of service analysis (COSA) model created for the City by EES Consulting, which was implemented on July 1, 2016.

This proposed rate increase is slightly lower than the 9% July 1, 2019 rate increase in staff's preliminary rate projections.

BACKGROUND

Every year staff presents the UAC with Financial Plans for its Electric, Gas, Water, and Wastewater Collection Utilities and recommends any rate adjustments required to maintain their financial health. These Financial Plans include a comprehensive overview of the utility's operations, both retrospective and prospective, and are intended to be a reference for UAC and Council members as they review the budget and staff's rate recommendations. Each Financial Plan also contains a set of Reserves Management Practices describing the reserves for each utility and the management practices for those reserves.

DISCUSSION

Summary of Proposed Actions

The two resolutions recommended for Council adoption will accomplish the following:

1. Increase overall electric rates by 8% effective July 1, 2019;
2. Approve the FY 2020 Electric Financial Plan

Proposed and Projected Sales Revenue Requirement, FY 2020 through FY 2024

The proposed July 1, 2019 rate increase would be the fourth and last projected increase in a series of substantial rate increases starting in FY 2017 and continuing into the foreseeable future. Prior to the first increase on July 1, 2016, rates had not been increased since July 1, 2009 because costs had been low over that period. Table 1 shows the sales revenue increases needed to recover costs of operation over the forecast period in the FY 2020 Electric Financial Plan.

Table 1: Electric Rate Adjustments, FY 2017 to FY 2024

FY 2017 *Approved*	FY 2018 *Approved*	FY 2019 *Approved*	FY 2020 *Projected*	FY 2021 *Projected*	FY 2022 *Projected*	FY 2023 *Projected*	FY 2024 *Projected*
11%	14%	6%	8%	4%	4%	4%	3%

These retail rate increases are for the utility as a whole, but the rate changes will differ for individual customer classes. Proposed rate increases for each customer class are discussed below.

Changes from Prior Financial Forecasts

This projection has changed since the FY 2019 Electric Utility Financial Plan presented last year. Table 2 compares current rate projections to those projected in the last two year's Financial Plans.

Table 2: Projected Electric Rate Trajectory for FY 2019 to FY 2025

Projection	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Current (FY 2020 Financial Plan)	8%	4%	4%	4%	3%
Last year (FY 2019 Financial Plan)	3%	2%	0%	1%	1%
Two years ago (FY 2018 Financial Plan)	0%	0%	1%	2%	1%

The rate increases are related to several factors: increasing transmission costs and the cost of renewable projects coming online, substantial additional capital investment in the electric distribution system is planned through FY 2023, and operations costs are increasing due to larger contracting needs. Revenues have also declined as customer usage has decreased, requiring larger than projected rate increases.

Historically, total electric utility costs (excluding short-term drought impacts) were roughly $120 million per year, allowing the electric utility to go without a rate increase from July 1, 2009 to July 1, 2016. Over the period from FY 2016 to FY 2018, though, annual costs (net of energy supply related revenue, like surplus energy sales) increased to roughly $146 million per year (costs are unusually low in FY 2019 due to some one time savings). Costs are projected to increase to over $160 million by FY 2024. Figure 1 shows the overall utility's costs (net of surplus sales revenues) in FY 2014, FY 2019, and FY 2024. Costs for the supply portfolio increased by about 3.5% per year on average in the past, but are projected to increase at a slower pace (about 1%) in the future. Costs for managing the distribution system (e.g. maintenance, capital investment, customer service, billing, etc.) have increased as well, growing by 3.2% per year on average in the past, but projected to grow by nearly 4% per year going forward. Overall, costs are projected to increase by 2.2% per year over the forecast horizon

Figure 1: Electric Utility Costs, FY 2014 Actual vs. FY 2019 and FY 2024 Projections

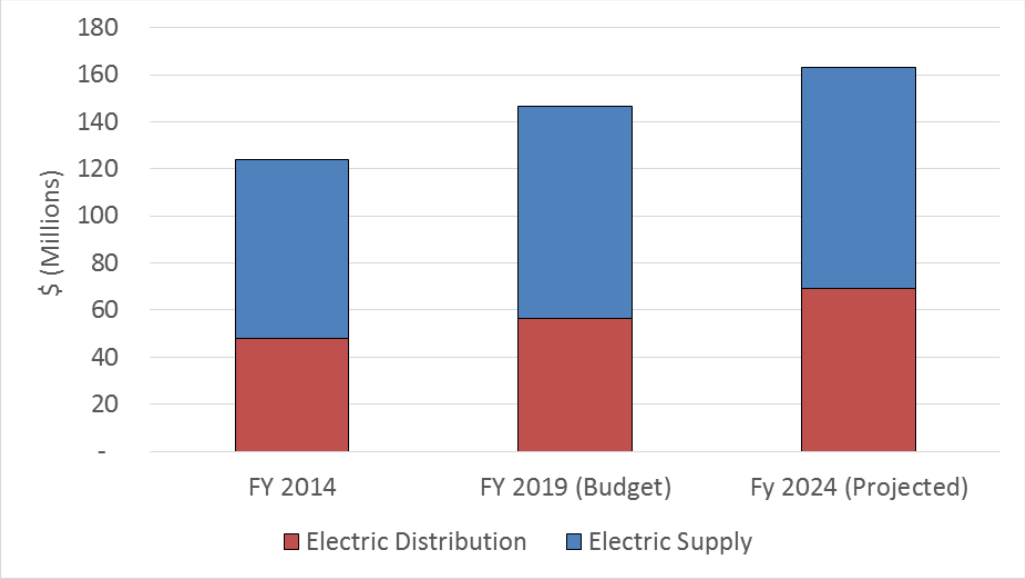
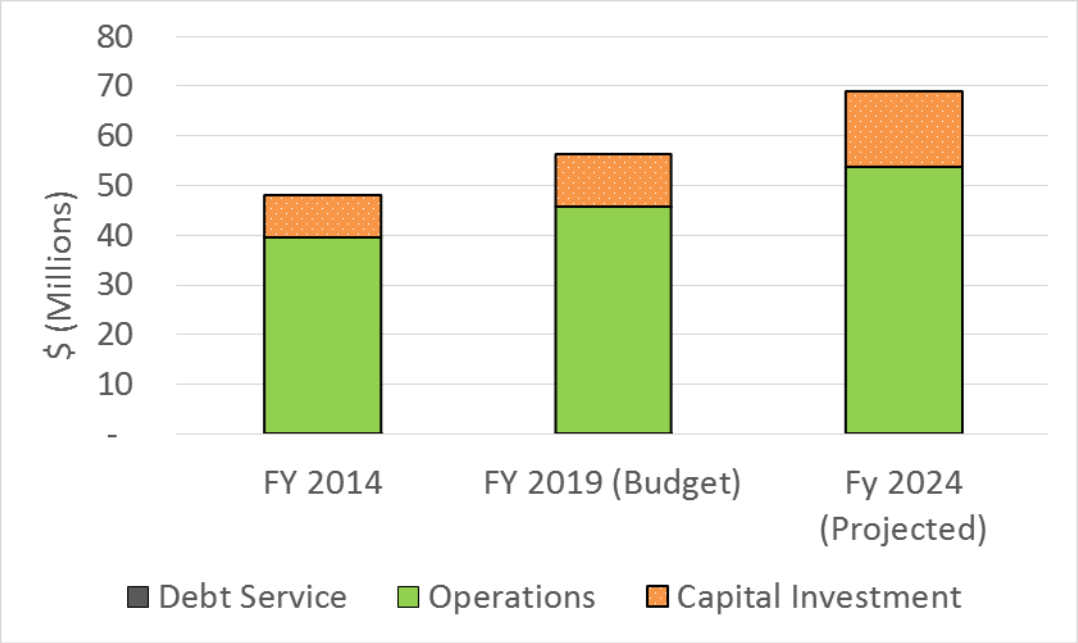


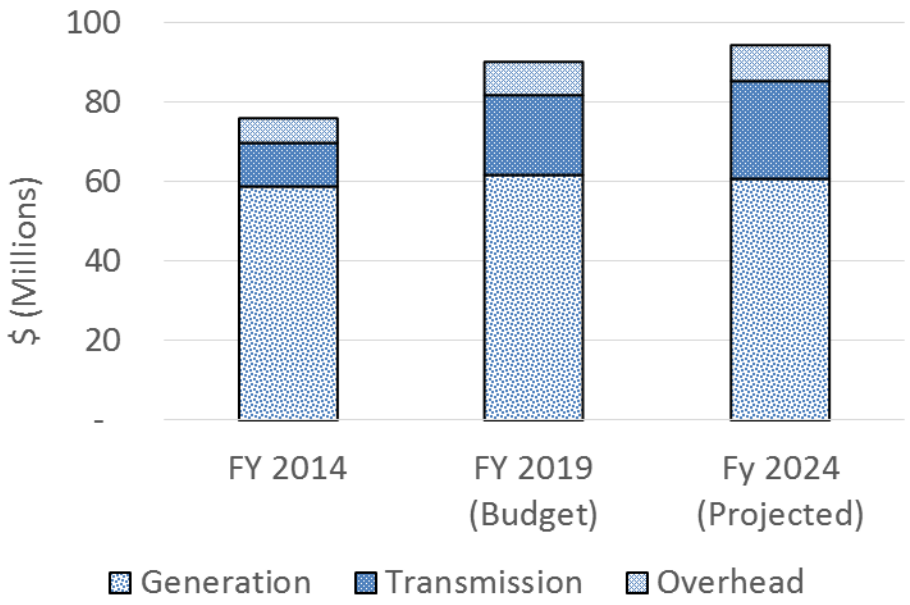
Figure 2 shows electric distribution costs more specifically. Capital costs increased significantly, increasing by about 7.5% per year on average over the last five years. Increased costs are related to increased capital investment in the distribution system (e.g. underground district rebuilds, as well as substation and upgrades). Distribution system operational spending is projected to increase by about 3 to 4% annually. Some of this is due to projected increases in costs of labor and materials, but also due to the fact that in FY 2014 operational costs were unusually low due to higher than anticipated staff vacancies and other factors.

Figure 2: Electric Distribution Costs, FY 2014 vs. FY 2019 and FY 2024



The electric supply portfolio cost increases from FY 2014 to FY 2019 are related primarily to transmission cost increases and, to a lesser extent, to renewable energy projects coming online, as shown in Figure 3. In the future, staff forecasts that increased costs will largely be due to transmission cost increases. These are due to rehabilitation and replacement of the existing statewide electric transmission system as well as expansion of that system to accommodate new generation, mostly renewable. Staff works to contain transmission costs through partner agencies, including the Transmission Agency of Northern California (TANC) and Northern California Power Agency (NCPA), and through direct partnerships with other local utilities (the Bay Area Municipal Transmission group, BAMx). All of these groups intervene in transmission proceedings at the Federal Energy Regulatory Commission (FERC) and the California Independent System Operator (CAISO) and have achieved some reductions in long-term transmission costs. Staff is beginning to look at strategies to achieve cost savings in electric supply, and will discuss these strategies in greater detail through the ongoing Integrated Resource Planning (IRP) process.

Figure 3: Electric Supply Costs, FY 2014 Actual vs. FY 2019 and FY 2024 Projections



With an 8% rate increase, this Financial Plan will prevent any further reductions in reserves, which are already low. The Supply and Distribution Operations Reserves are at their minimums, the Hydroelectric Stabilization Reserve is at $7.4 million, below the target of $17 million that enables the City to implement its strategy for managing the financial impacts of a multi-year drought, and the electric utility has already taken a loan of $10 million from its Electric Special Projects reserve, which is intended to fund projects like smart grid and a second transmission line. More information on reserve transfers can be found in the FY 2020 Electric Financial Plan (Attachment B).

Staff also recognizes the importance of managing operating costs and maximizing efficiency in order to minimize rate increases. As discussed above, staff is working on cost containment measures related to transmission and renewable energy costs. Utility consumers also see some long-term cost savings from City-wide efforts to manage personnel costs. As reflected in the Utilities Strategic Plan, staff is exploring additional ways to effectively use available resources, particularly across Divisions.

Rate Changes by Customer Class

Table 3 shows the rates that will be used to recover sale revenues for each customer class. The Street Lighting (E-14) class and the E-4 and E-7 Time of Use (TOU) rates are not shown in the table, but can be seen in the attached rate schedules (Attachment E). These schedules are omitted for various reasons: the E-14 rate schedule is not easy to summarize, E-7 TOU rate is not easy to summarize and is only used by one customer, and the E-4 TOU rate schedule is both difficult to summarize and not utilized by any customers at this time.

Table 3: Electric Rates (Current and Proposed)

	Current Rates	Proposed Rates (7/1/19)	Change	
			$	%
E-1 (Residential)				
Tier 1 Energy ($/kWh)	0.12871	0.13757	0.00886	6.9%
Tier 2 Energy ($/kWh)	0.19279	0.19367	0.00088	0.5%
Minimum Bill ($/day)	0.3040	0.3283	0.0243	8.0%
E-2 & E-2-G (Small Non-Residential)				
Summer Energy ($/kWh)	0.20090	0.20853	0.00763	3.8%
Winter Energy ($/kWh)	0.13861	0.14624	0.00763	5.5%
Minimum Bill ($/day)	0.7740	0.8359	0.0619	8.0%
E-4 & E-4-G (Medium Non-Residential)				
Summer Energy ($/kWh)	0.12081	0.12848	0.00767	6.3%
Winter Energy ($/kWh)	0.09297	0.09946	0.00649	7.0%
Summer Demand ($/kW)	24.11	28.91	4.80	19.9%
Winter Demand ($/kW)	18.52	18.97	0.45	2.4%
Minimum Bill ($/day)	15.9946	17.2742	1.2796	8.0%
E-7 & E-7-G (Large Non-Residential)				
Summer Energy ($/kWh)	0.10507	0.11432	0.00925	8.8%
Winter Energy ($/kWh)	0.07449	0.07738	0.00289	3.9%
Summer Demand ($/kW)	26.77	30.69	3.92	14.6%
Winter Demand ($/kW)	17.01	17.05	0.04	0.2%
Minimum Bill ($/day)	45.4758	49.1139	3.6381	8.0%

Table 4 shows the impact of the proposed July 1, 2019 rate changes on the residential and non-residential bills for various consumption levels. The overall rate change for the residential class is roughly 4%.

Table 4: Impact of Proposed Electric Rate Changes on Customer Bills

Rate Schedule	Usage (kwh/mo)	Bill under Current Rates ($/mo)	Bill Under Rates Proposed 7/1/19 ($/mo)	Change	
				$/mo	%
E-1	300	38.61	41.27	2.66	6.9
	(Summer Median) 365	49.22	45.40	2.92	6.9
	(Winter Median) 453	66.19	69.22	3.03	4.6
	650	104.17	107.37	3.21	3.1
	1200	210.20	213.89	3.69	1.8
E-2	1,000	170	178	8	4.5
E-4	160,000	26,347	28,661	2,313	8.8
E-7	500,000	75,758	81,337	5,579	7.4
E-7	2,000,000	303,030	325,346	22,316	7.4

Cost of Service Analysis and Rate Study

The rates discussed in the previous section are based on the cost of service methodology established in the "City of Palo Alto Electric Cost of Service and Rate Study"[1] drafted by EES Consulting, Inc. in 2016. Staff provided EES with updated sales and budget projections, including projected transmission and distribution costs, power supply costs and billing data, in order for EES to update individual cost of service model components and determine the proposed rates.

Electric Bill Comparison with Surrounding Cities

Table 6 compares electric bills under current rates as of March 1, 2019 for residential customers to those in surrounding communities. Under current rates, CPAU's customer bills are far below PG&E's and are lower than others for non-residential customers, but slightly higher than Santa Clara's for higher using residential customers.

[1] Staff Report 6857 http://www.cityofpaloalto.org/civicax/filebank/documents/52274

Table 5: Average Electric Bill Comparison ($/month)

As of March 1, 2019					
Customers	Usage (KWh/mo)	Palo Alto (Current)	Palo Alto (Proposed)	PG&E	Santa Clara
Residential Customers	300	$ 38.61	$ 41.27	$ 65.33	$ 35.89
	365 (Summer Median)	49.22	45.40	85.16	43.95
	453 (Winter Median)	66.19	69.22	98.64	54.86
	650	104.17	107.37	150.77	79.29
	1200	210.20	213.89	301.48	147.48
Non-Residential Customers	1,000	170	178	253	184
	160,000	25,628	28,661	30,936	21,243
	500,000	66,780	81,337	86,341	64,155
	2,000,000	289,010	325,346	372,799	261,360

NEXT STEPS

The Finance Committee is scheduled to review the FY 2020 Electric Financial Plan in May 2019. The City Council will consider the recommendations with the FY 2020 budget.

RESOURCE IMPACT

The proposed July 1, 2020 rate changes are projected to increase sales revenues by $9 million per year over the forecast period.

POLICY IMPLICATIONS

The proposed electric rate adjustments were developed using the 2016 cost of service study and methodology, and are consistent with the Council adopted Reserve Management Practices that are part of the Financial Plan.

ENVIRONMENTAL REVIEW

The UAC's review and recommendation to Council on the FY 2020 Electric Financial Plans and rate adjustments does not meet the California Environmental Quality Act's definition of a project, pursuant to Public Resources Code Section 21065, thus no environmental review is required.

ATTACHMENTS

A. Resolution of the Council of the City of Palo Alto Approving the FY 2020 Electric Utility Financial Plan

B. Proposed FY 2020 Electric Utility Financial Plan
https://cityofpaloalto.org/civicax/filebank/blobdload.aspx?t=42439.07&BlobID=70058

C. Resolution of the Council of the City of Palo Alto Adopting an Electric Rate Increase and Amending Rate Schedules E-1, E-2, E-2-G, E-4, E-4-G, E-4 TOU, E-7, E-7-G, E-7 TOU, E-14, E-NSE and E-EEC

D. Proposed Amendments to Rate Schedules E-1, E-2, E-2-G, E-4, E-4-G, E-4 TOU, E-7, E-7-G, E-7 TOU, E-14, E-NSE and E-EEC
https://cityofpaloalto.org/civicax/filebank/blobdload.aspx?t=42673.19&BlobID=70059

PREPARED BY: **ERIC KENISTON,** Senior Resource Planner

REVIEWED BY: **JONATHAN ABENDSCHEIN,** Assistant Director, Resource Mgmt.

APPROVED BY:

DEAN BATCHELOR
Utilities General Manager

Attachment A

* NOT YET APPROVED *
Resolution No. _____
Resolution of the Council of the City of Palo Alto Approving the Fiscal Year 2020 Electric Utility Financial Plan

R E C I T A L S

A. Each year the City of Palo Alto ("City") regularly assesses the financial position of its utilities with the goal of ensuring adequate revenue to fund operations. This includes making long-term projections of market conditions, the physical condition of the system, and other factors that could affect utility costs, and setting rates adequate to recover these costs. This is done with the goal of providing safe, reliable, and sustainable utility services at competitive rates. The City adopts Financial Plans to summarize these projections.

B. The City uses reserves to protect against contingencies and to manage other aspects of its operations, and regularly assesses the adequacy of these reserves and the management practices governing their operation. The status of utility reserves and their management practices are included in Reserves Management Practices attached to and made part of the Financial Plans.

The Council of the City of Palo Alto does hereby RESOLVE as follows:

SECTION 1. The Council hereby approves the FY 2020 Electric Utility Financial Plan.

SECTION 2. The following transfers that were previously approved by resolution 9692 to take place in FY 2017, but which were not performed due to staff error, are hereby reauthorized in FY 2019: 1) transfer up to $9.0 million from the Hydroelectric Stabilization Reserve to the Supply Operations Reserve, 2) transfer up to $9.011 million from the Supply Rate Stabilization Reserve to the Supply Operations Reserve, and 3) transfer up to $4.5 million from the Supply Operations Reserve to the Distribution Operations Reserve.

SECTION 3. The Council finds that the adoption of this resolution does not meet the California Environmental Quality Act's (CEQA) definition of a project under Public Resources Code Section 21065 and CEQA Guidelines Section 15378(b)(5), because it is an administrative governmental activity which will not cause a direct or indirect physical change in the environment, and therefore, no environmental review is required.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

Attachment A

* NOT YET APPROVED *

ATTEST:

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City Clerk

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Mayor

APPROVED AS TO FORM:

APPROVED:

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Assistant City Attorney

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City Manager

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Director of Utilities

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Director of Administrative Services

* NOT YET APPROVED *

Resolution No. _____

Resolution of the Council of the City of Palo Alto Adopting an Electric Rate Increase and Amending Rate Schedules E-1 (Residential Electric Service), E-2 (Residential Master-Metered and Small Non-Residential Electric Service), E-2-G (Residential Master-Metered and Small Non-Residential Green Power Electric Service), E-4 (Medium Non-Residential Electric Service), E-4-G (Medium Non-Residential Green Power Electric Service), E-4 TOU (Medium Non-Residential Time of Use Electric Service), E 7 (Large Non-Residential Electric Service), E-7-G (Large Non-Residential Green Power Electric Service), E-7 TOU (Large Non-Residential Time of Use Electric Service), E-14 (Street Lights), E-NSE (Net Metering Net Surplus Electricity Compensation), and E-EEC (Export Electricity Compensation).

R E C I T A L S

A. Pursuant to Chapter 12.20.010 of the Palo Alto Municipal Code, the Council of the City of Palo Alto may by resolution adopt rules and regulations governing utility services, fees and charges.

The Council of the City of Palo Alto does hereby RESOLVE as follows:

SECTION 1. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-1 (Residential Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-1, as amended, shall become effective July 1, 2019.

SECTION 2. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-2 (Residential Master-Metered and Small Non-Residential Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-2, as amended, shall become effective July 1, 2019.

SECTION 3. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-2-G (Residential Master-Metered and Small Non-Residential Green Power Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-2-G, as amended, shall become effective July 1, 2019.

SECTION 4. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-4 (Medium Non-Residential Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-4, as amended, shall become effective July 1, 2019.

SECTION 5. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-4-G (Medium Non-Residential Green Power Electric Service) is hereby

amended to read as attached and incorporated. Utility Rate Schedule E-4-G, as amended, shall become effective July 1, 2019.

SECTION 6. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-4 TOU (Medium Non-Residential Time of Use Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-4 TOU, as amended, shall become effective July 1, 2019.

SECTION 7. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-7 (Large Non-Residential Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-7, as amended, shall become effective July 1, 2019.

SECTION 8. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-7-G (Large Non-Residential Green Power Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-7-G, as amended, shall become effective July 1, 2019.

SECTION 9. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-7 TOU (Large Non-Residential Time of Use Electric Service) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-7 TOU, as amended, shall become effective July 1, 2019.

SECTION 10. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-14 (Street Lights) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-14, as amended, shall become effective July 1, 2019.

SECTION 11. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-NSE (Net Metering Net Surplus Electricity Compensation) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-NSE, as amended, shall become effective July 1, 2019.

SECTION 12. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule E-EEC (Export Electricity Compensation) is hereby amended to read as attached and incorporated. Utility Rate Schedule E-EEC, as amended, shall become effective July 1, 2019.

SECTION 13. The Council makes the following findings:

a. The revenue derived from the adoption of this resolution shall be used only for the purpose set forth in Article VII, Section 2, of the Charter of the City of Palo Alto.

b. The fees and charges adopted by this resolution are charges imposed for a specific government service or product provided directly to the payor that are not provided

to those not charged, and do not exceed the reasonable costs to the City of providing the service or product.

c. The adoption of this resolution changing electric rates to meet operating expenses, purchase supplies and materials, meet financial reserve needs and obtain funds for capital improvements necessary to maintain service is not subject to the California Environmental Quality Act (CEQA), pursuant to California Public Resources Code Sec. 21080(b)(8) and Title 14 of the California Code of Regulations Sec. 15273(a). After reviewing the staff report and all attachments presented to Council, the Council incorporates these documents herein and finds that sufficient evidence has been presented setting forth with specificity the basis for this claim of CEQA exemption.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

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City Clerk

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Mayor

APPROVED AS TO FORM:

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Assistant City Attorney

APPROVED:

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City Manager

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Director of Utilities

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Director of Administrative Services