
Utility Advisory Committee Rate Discussion Presentation

December 7, 2022

Presentation Goals

- Electric, Comparison to Water and Discussion
- Electric and General Rate Concepts
- Electric Rate Structure and Electric Rate history
- Use the FY 23 Electric Budget and the current Electric Rates as a starting point to get an understanding of Electric Rates and the Electric Rate structure
- Show FY 23 Electric Budget and estimated revenue based on the current Electric Rate structures
- Show how the current Electric Rate structures relates to revenues and expenses
- Discuss possible ways to modify the current Electric Rate structures
- Discuss issues which could affect future revenues
- Discuss overall revenue requirements and rate issues
- Next Steps

Basic Rate Concepts - Electric

- Revenue Requirement

- The following are expenses that change or increase enough each year to cause rate issues:
 - Purchase of Electricity
 - Capital
- Other expenses that might change or increase enough to cause rate issues are:
 - Maintenance expenses
 - Personnel expenses
 - Electrical workers salaries update

- Rates and Rate Structures

- The Rate Structure has the capability of establishing a fair rate base for each electric group i.e. Residential and Commercial

- Data Collection

- Estimated Electric Energy, Demand & Losses
- Electric Users and/or User Accounts

- Revenues

- Wholesale & Service charge
- Retail Revenues
- Offsets

- Expenses

- Admin
 - 57% of General Admin is charged to Electric
- O&M
- Capital

Basic Rate Concepts - General

- Electric - Water
 - Revenue Requirement
 - Cost of Service
 - Fair cost distribution
 - Rates and Rate Structures
- Electric – Water Losses
 - Line and Equipment losses
 - Non metered energy
 - City Street Lights ~ 1,752,000 kWh a year
 - Energy demand for Street light should be reducing with the LED lights
 - Other
 - Pipeline, tank, etc. losses
 - Data shows 10% losses
- Data Collection
 - Rates; Customers; Usage; CIP & Finances
- Revenues
 - Electric Offsets
 - Water Offsets
 - Taxes
- Expenses
 - Admin
 - O&M
 - Capital
 - Debt

Electric Rate Structure

- The "Charge for Services" revenue is collected based on the Electric Rate structure of Nine Schedules and a Municipal Rates Section.
- The Nine Schedules are:
 - A. RESIDENTIAL SCHEDULE - RS:
 - B. RESIDENTIAL SCHEDULE MASTER METERED - RSM:
 - C. GENERAL SERVICE SCHEDULE: GS
 - D. LARGE GENERAL SERVICE SCHEDULE - LGS:
 - E. TIME- OF- USE GENERAL SERVICE - TOU - GS:
 - F. BOULDER CITY HOSPITAL SCHEDULE - BC:
 - G. SPORTS FIELD LIGHTING:
 - H. SCHEDULE OF RATES FOR AREA LIGHTING SERVICE:
 - I. SCHEDULE OF RATES FOR SPRINKLER SYSTEM CONTROL AND LANDSCAPE LIGHTING SERVICE:
- The Customer, Energy, and Demand charges for most of the above schedules are shown in Slides 14 and 15.

Electric Rate Structure (continued)

- Two additional Sections can effect the Revenues
 - Section J. Purchase Power Rider Added in 2002:
 - Activated when the average wholesale costs exceeds **4 cents** in any given month.
 - The Residential Schedule for the first tier was also **4 cents** in that year.
 - Last changed in December of 2009 to **6 cents**.
 - The Residential Schedule for the first tier was **7.43 cents** in that year.
 - Section K. Credit for energy generated from customer-owned renewable sources:
 - Should be discussed more in the future.
 - Roof top solar helps the customer more than it helps the City.
 - Less Revenues are collected but the same infrastructure is needed to supply the solar loads when they are not producing.

When Boulder City (BC) Rates were Established

When BC Rates were established - important additions and changes

- First Utility Rates were established under Ordinance 14, effective January 1, 1960
- Chapter 9-10 of the City Code established regulations for the Municipally-owned electric utility of Boulder City, Nevada; Section 9-10-14 allows the City Council to set the electric utility rates by resolution following a Public Hearing
- March 14, 1978 the first Electric Resolution R-545 is established with the following rates and schedules:
 - An Electric charge of **1.5 cents** per kWh, per month
 - A Service charge up to 200 amp service \$3.10; over 200 amp service \$6, per month
 - Six schedules
 - A. RESIDENTIAL SCHEDULE – RS:
 - Single phase
 - B. COMMERCIAL SERVICE SCHEDULE - CS:
 - Single phase
 - C. GENERAL SERVICE SCHEDULE – THREE PHASE – GS-3:
 - D. SCHEDULE OF RATES FOR FLOODLIGHTING SERVICE:
 - E. SCHEDULE OF RATES FOR SPRINKLER SYSTEM CONTROLS AND AREA LIGHTING SERVICE:
 - F. BULK RATE SCHEDULE - PS (MASTER METERED):
- February 9, 1982 Resolution R-839: Increased the Energy Charge to **(1.9 cents)**; Eliminated the Commercial Service Schedule; and created the General Service Large Schedule
 - Under the General Service Schedule; two tiers were established First 3000 kWh **(GS 2.1 cents)** Additional kWh **(GS 1.6 cents)** *Yes additional was less*
 - Changed Bulk Rate Schedule to Residential Bulk Rate Schedule – B (Master Metered)
- October 22, 1985 R-1266: Established three separate rate increases the first to be effective with the December 1, 1985 billing **(RS 2.7 cents) (GS 2.9 cents, 2.4 cents)**; then with the November 1, 1986 billing **(RS 3.3 cents) (GS 3.5 cents, 3 cents)**; and finally with the November 1, 1987 billing **(RS 3.7 cents) (GS 4 cents, 3.5 cents)**
- January 9, 1990 Resolution R-1756:
 - Under the Residential Schedule; Three tiers were established First 2000 kWh **(RS 3.5 cents)**, 2001 – 4000 kWh **(RS 4.5 cents)** greater than 4000 kWh **(RS 5 cents)**
 - Changed GS; First 3000 kWh **(GS 4 cents)** Additional kWh **(GS 4.5 cents)** **Increase second tier at this point**

Important Additions and Changes (continued)

- June 25, 2002 Resolution R-3967: Increased RS and GS Rates - **(RS 4 cents, 5.25 cents and 6 cents) (GS 4.75 cents and 5.5 cents)**
 - Added New Section E. Time of Use General Service – TOU-GS:
 - Added Section I. Purchase Power Rider and included it in all the applicable Sections.
 - In the event the average wholesale cost of purchased power in any given month exceeds 4 cents per kWh...
- March 25, 2003 Resolution R-4101: No rate change
 - Added new Section F. BOULDER CITY HOSPITAL SCHEDULE - BC: Customer charge at \$3.5 compared to the GS at \$6.5 and all kWh at 4 cents
- May 9, 2006 Resolution R-4771: Increased Rates **(RS 4.75 cents, 6.5 cents and 7.25 cents) (GS 5.75 cents and 6.6 cents)**
 - Changed the Customer charge and the Energy Charges but not the Demand charges;
- June 9, 2009 R-5412: Increased Rates **(RS 5.5 cents, 7.25 cents and 8 cents) (GS 6.5 cents and 7.35 cents)**
- December 8, 2009 R-5498: Increased Rates **(RS 7.43 cents, 9.79 cents and 10.8 cents) (GS 8.78 cents and 9.92 cents)**
 - Changed the Power rider to be activated when in any given month the average wholesale cost exceeds 6 cents per kWh
- January 12, 2010 R-5512: No change to RS and GS; LGS and TOU were increased
 - Added Section K. Credit for Energy Generated From Customer-Owned Renewable Sources
- 2016 Resolution R-6489: Increased Rates **FY 2017 (RS \$0.0862, \$0.1136 and \$0.1253) (GS \$0.1018 and \$0.1151)**
FY 2018 (RS \$0.0905, \$0.1192 and \$0.1351) (GS \$0.1044 and \$0.1179) FY 2019 (GS \$0.1070 and \$0.1209)
 - Major Rate changes to the Customer, Energy and Demand charges over a two year period for RS and over a three year period for GS
 - Added L. ANNUAL ADJUSTMENTS:
 - Added M. MUNICIPAL RATES:
- November 12, 2019 Resolution R-7030: No rate change
 - Removed L. ANNUAL ADJUSTMENTS:
 - Added N. REVIEW PERIOD:
- Current Resolution R-7282 signed on May 25, 2021 reduced all the Energy charges by 3%: **FY 2017 (RS \$0.0878, \$0.1156 and \$0.1276) (GS \$0.1038 and \$0.1173)**
 - Based on the 2021 Rate Study Final Report and the UAC's Recommendation
 - Before major increases to the Electric 5 Year CIP

Major Components for Electric Rates

- Ongoing and Future Capital Costs
 - Carryover Budget for Ongoing Projects from FY 22 = \$6,291,718
 - Revised FY 23 = \$13,318,196
 - Carryover and FY 23 = \$19,609,914
 - Five year
 - FY 22 – FY 26 Total \$16,200,000 – (As of May 2021)
 - FY 23 – FY 27 Total \$42,486,749 – (As of May 2022)
 - Increased Capital budget of \$26,286,749
 - Non critical projects might have to be pushed out to avoid major electric rate increase
 - Should avoid major rate increase that will not be needed once the major infrastructure is upgraded
 - Unrestricted excess Utility Funds could be used to help pay for Electric Capital to avoid major rate increases
- Uncertain Energy costs
 - SSEA Estimates an average of \$7,122,306.43 for Energy costs for the next 5 years
 - Energy Costs have been in the mid \$5 million to \$6 million in the last several years
- BC Energy Demand – How much Energy is estimated to be charged retail?

FY 23 Electric Budget and Current Electric Rates

- Using the FY 23 electric budget and current Boulder City and Silver State Energy Association (SSEA) Budgeted estimates, the object of this section is to show how the current Electric rates relates to the FY 23 Electric budget.
- The following Slides will show the FY 23 Electric budget from the Final Budget Brochure, and a way to view how the current Electric rates are used to generate revenue.

FY 23 Utility Electric Budget

- The Electric Budget table information is from the “**Annual Proprietary Funds Budgets EXECUTIVE SUMMARY for the Fiscal Year Beginning July 1, 2022**”, printed 5/25/22
- Capital was Decreased by \$500k

Annual Proprietary Funds Budgets		Printed
EXECUTIVE SUMMARY		5/25/2022
for the Fiscal Year Beginning July 1, 2022		
	Revenues	Expenses
	FY 23	FY 23
Electric Revenue	Budget	
Charge for Services	\$16,745,162	
Total Revenues	\$16,745,162	
Electric Expenses		
Operations		\$3,651,009
Purchase of Electricity		\$7,332,259
Non-Electric		\$258,600
Transfer to Utility Admin Fund		\$1,925,492
Total Expenses		\$13,167,360
Capital Expenses		\$13,878,196
Transfers In (Voter Approved Capital Improvement Fund)	\$2,074,612	
NET INCREASE(DECREASE) TO NET POSITION	-\$8,225,782	
NON-CASH FUND ADJUSTMENTS (required by NRS/GASB/GAAP)		
Depreciation		\$1,100,000
Allocation of Net Increase to Net Position	-\$8,225,782	
Use of Unrestricted Electric Net Position**	\$9,325,782	
Allocation of Net Increase to Net Position*	\$0	
* “Budgeted Net Change” must equal zero or be positive under law		
** “Unrestricted Fund Balance” is assets minus liabilities, is not reserved or restricted for specific purposes, and is available for use		

SSEA Current Rates and Charges

- For FY 23 SSEA Estimated the BC's Energy Demand at 149,560,200 kWh at a cost of \$7,332,259 for all cost associated with the "Purchase of Electricity"
- SSEA invoices based on the monthly estimated amount of energy and costs
- Water comparison:
 - SNWA invoices on the actual amount delivered the previous month

BC Current Retail Electric Rates

- The following two slides and tables show the current two charges for the Residential schedules, three charges for the General services and Time of Use and the two charges for the BC Hospital.

BC Current Electric Rates (continue)

- Residential Electric Rates

Residential Electric Rates				
Residential Schedule RS; Residential Schedule Master Metered RSM				
60 Hertz, single phase or combined single phase and three phase		Service		
		Charge		Demand
		per	Energy Charge	Charge
		Month	per kWh	per kW
Residential Schedule RS	Single family	\$10.00 \$25.00 *	\$0.0878 (0-2000 kWh)	N/A
			\$0.1156 (2001 - 4000 kWh)	
			\$0.1276 (Over 4001 kWh)	
Residential Schedule Master Metered RSM	Domestic >5 Units	\$50.00	\$0.1077 All kWh	
* Meter not equipped with Electronic Communication link				

BC Current Retail Electric Rates (continue)

- General Service Electric Rates

General Service GS; Large General Service LGS; Time of Use TOU				
Boulder City Hospital Schedule BCH				
Peak Demand highest 3 months out of 12	Service Voltage	Customer Charge per Month	Energy Charge per kWh	Demand Charge per kW
General Service GS < 300 kW	Secondary	\$15.00	\$0.1038 (0-3000 kWh)	\$0.00 (0-10 kW)
		\$25.00 *	\$0.1173 (> 3000 kWh)	\$3.05 (> 10 kW)
Large General Service LGS >300 - 499 kW		\$50.00	\$0.1317 All kWh	\$3.05
			\$0.1652 (SON)	\$14.62 (SON)
	Primary	\$200.00	\$0.1173 (SOFF)	\$4.87 (SOFF)
Time of Use TOU ≥ 500 kW			\$0.1317 (OTH)	\$3.05 (OTH)
			\$0.1622 (SON)	\$14.33 (SON)
		\$200.00	\$0.1152 (SOFF)	\$4.78 (SOFF)
			\$0.1303 (OTH)	\$3.05 (OTH)
Boulder City Hospital Schedule BCH		\$25.00	\$0.0886 All kWh	N/A
* Meter not equipped with Electronic Communication link				
<u>Time-of-Use Periods</u>				
SON (Summer On-Peak):	Noon - 10 PM, May - September			
SOFF(Summer Off-Peak):	10 PM - Noon, May - September			
OTH (All other periods):	October - April			

Estimated Revenues Relating to “Charge for Services”

- The following slides shows a way to look at the FY 23 estimated revenues collected by the current Electric rate structure.
- Hospital Revenue will be less due to the installation of Solar provided free by a third party.
- The Municipal Rate “shall be adjusted to equal the City’s average wholesale power cost per kWh received during the previous calendar year.”
- Metered and Non-Meter loads
 - the non meter loads are being paid for by retail customers.

Estimated Energy, Demand and Customer Charge Revenues

- Based on the current Electric Rate Resolution, the Energy, Demand and Customer charge revenues are estimated.
- The table below shows the different schedules of electric users, an estimated amount of Energy and Demand to be used by each group in FY 23 and an estimated amount of revenue from each group.
 - The table relates to the revenue associated with the "Charge for Services" \$16,745,162 and the "Purchase of Electricity" \$7,332,259.

	Annual		Annual		Annual	Rate	
	Energy		Demand		Customer	Per	
Electric Users	Charge	kWh	Charge	kW	Charge	Month	Accounts
Residential	\$8,645,309	94,448,488			\$857,148	\$10.00	7,143
Residential - Master Meter	\$346,625	3,218,427			\$1,200	\$50.00	2
General Service - <300 kW	\$3,509,809	31,367,658	\$209,127	99,768	\$162,540	\$15.00	903
Large General Service - >300 kW	\$1,081,631	8,212,836	\$61,305	20,100	\$3,600	\$50.00	6
Time of Use - <600V	\$305,943	2,211,553	\$44,228	5,699	\$2,400	\$200.00	1
Time of Use - >2,400V	\$435,841	3,205,890	\$77,943	10,438	\$2,400	\$200.00	1
Boulder City Hospital	\$190,501	2,150,129			\$300	\$25.00	1
City	\$233,388	6,030,686			\$13,200	\$10.00	110
Area Lighting					\$34,161	Varies	311
Sportsfield Lighting	\$145	1,260			\$600		1
City Street Lights							
Totals	\$14,749,190	150,846,928	\$392,603		\$1,077,549		8,479
Hookup fees	\$210,000						
Estimate "Charge for Services"	\$16,429,341						

Estimated Electric and Water Accounts

- For FY 23 8,479 Electric Accounts are estimated
- For FY 23 7,721 Water Accounts are estimated
- The difference is 758 accounts

Electric users	Accounts
Residential	7,143
Residential - Master Meter	2
General Service - <300 kW	903
General Service - >300 kW	6
Time of Use - <600V	1
Time of Use - >2,400V	1
Boulder City Hospital	1
City	110
Area Lighting	311
Sportsfield Lighting	1
Total	8,479

Water users	Accounts
Residential - Single Family	5,382
Resident Mult	1,734
Commercial - Potable	440
Cascata - Potable	1
City - Potable (Golf Course)	8
City - Potable (All Other)	120
Commercial - Raw	6
Cascata - Raw	2
City - Raw (Golf Course)	4
City - Raw (All Other)	24
Total	7,721

Estimated Wholesale and Retail Electric Revenue

- The table below is based on BC FY 23 Energy Estimates of 150,846,928 kWh and the current BC Electric Rates. SSEA Estimated 149,560,200 kWh of annual energy.
- The table below shows a way to look at the cost of Energy per category and what retail is estimated per category. The Wholesale should go towards the “Purchase of Electricity” \$7,332,259.

The Municipal Rate for FY 23 is \$0.0365, this is what the City pays.

		FY23	
	Annual	Avg Cost	FY23
Electric users	kWh	\$0.0490	Retail
Residential	94,448,488	\$4,630,381	\$4,014,927
Residential - Master Meter	3,218,427	\$157,785	\$188,840
General Service - <300 kW	31,367,658	\$1,537,814	\$1,971,994
General Service - >300 kW	8,212,836	\$402,638	\$678,992
Time of Use - <600V	2,211,553	\$108,422	\$197,520
Time of Use - >2,400V	3,205,890	\$157,170	\$278,671
Boulder City Hospital	2,150,129	\$105,411	\$85,090
Sub Total	144,814,981	\$7,099,622	\$7,416,035
		Avg Cost	
		\$0.0365	
City	6,030,686	\$220,120	\$0
Total	150,845,667	\$ 7,319,742	\$ 7,416,035

Avg Cost of \$0.0490 is what SSEA estimated the Avg Wholesale cost of Energy would be for FY 23.

FY 23 Electric Expenses Breakout

- The table below shows the FY 23 Electric expenses broken out into additional categories, and estimated revenues in relation to the expenses. This is a way to start reviewing cost of service.

	Budget	Estimated	
	Expenses	Revenue	
Electric	FY 23	FY 23	
SSEA Estimated Budget for FY 23	\$7,332,259	\$7,319,742	Estimated Wholesale Revenue
Purchased Power	\$7,332,259	\$7,319,742	
Maintenance and Equipment	\$1,010,800	\$1,077,549	Customer Charge Revenue
Personnel	\$2,288,230	\$7,416,035	Energy Retail Revenue
Technical and Professional	\$250,000	\$392,603	Demand Charge Revenue
Supplies	\$63,449	\$210,000	Hookup Fees
Other	\$297,130		
Fund 60 - UT Admin Billing	\$603,297		
Fund 60 - UT Admin All Other	\$558,953		
Fund 60 - GF Central Services	\$763,241		
Operations & Transfer to Utility Admin Fund	\$5,835,101	\$9,096,187	Partial "Charge for Service" Revenue
Total O&M	\$13,167,360	\$16,415,929	"Charge for Service" Revenue
			(Voter Approved Capital Improvement Fund)
Capital Expenses	\$13,878,196	\$2,074,612	
		\$9,325,782	Use of Unrestricted Electric Cash
Totals	\$27,045,556	\$27,816,323	

City Load & Municipal Rate

- The City Energy load is a small percentage of the over all BC Energy load, compared to the City Water demand which is a larger percentage of the over all BC Water demand:
 - The City Energy load is 4% of the overall BC Energy load.
 - The City Water demand is 37% of the overall BC Water demand.
- Approximately 6,030,686 kWh's, which is the metered City load, out of the 150,846,928 kWh estimate of energy is paid at the Municipal Rate of \$0.0365 for FY 23, which is not the same as the SSEA estimated wholesale rate of \$0.490 for FY 23.
- The City load includes the two City Golf courses.
- City Street lights use ~ 1,752,000 kWh a year which is not part of the 6M kwh of the City load.

Purchase Power Rider Added to Bills on October 1, 2022

- The Purchase Power Rider is activated when the average wholesale costs exceeds **\$0.06** in any given month.
- The estimated energy costs of July and September of 2022 averaged over \$0.06 at \$0.07308 and \$0.06228.
- The combined overage of \$0.01536 was divided by 12 to have \$0.00128 multiplied by the energy used each month from October 1, 2022 to October 1, 2023, added as an additional charge to each bill.

The table shows the estimated Revenue from the Purchase Power Rider.

	FY23	FY23
	Annual	Power Rider
Electric users	kWh	\$0.00128
Residential	94,448,488	\$120,894
Residential - Master Meter	3,218,427	\$4,120
General Service - <300 kW	31,367,658	\$40,151
General Service - >300 kW	8,212,836	\$10,512
Time of Use - <600V	2,211,553	\$2,831
Time of Use - >2,400V	3,205,890	\$4,104
Boulder City Hospital	2,150,129	\$2,752
City	6,030,686	\$7,719
Total	150,845,667	\$ 193,082

Revenue and Rate Issues

- Issues need to be reviewed that will have an effect on future revenues and rates:
 - Is there an Energy reduction or increase expected for the future?
 - Raftelis showed a reduction to future BC energy demand, SSEA shows an increase to future BC energy demand.
 - When and how many houses are expected to be built around the BC Creek?
 - Wholesale cost increases for Energy and Water
 - Best to understand what schedules, and how much the estimated revenue is being collected from. With customer variations revenue might vary.
 - Rate structures for Electric and Water
 - Tiers: how many and what units per tier
 - Service Charges
 - Offsets

Rate Adjustments just for Energy Charge

- The table below uses:
 - An Estimated 5 year average Revenue Requirement of \$19,589,391, that includes Capital, which is taken from the best available data for FY 24 - FY 28.
 - Assume \$2M is available from the Electric Fund's Unrestricted Cash, after the ongoing CIP and FY 23 CIP is covered, Then an average of \$400k could be used to reduce the \$19,589,391 to \$19,189,391.
 - A reduced BC Hospital load due to their solar addition.
 - FY 23 City's Energy estimate minus the Hospitals reduction.

Most of the difference between the Revenue Requirement and the Collected Avg Revenue Requirement is the unknown Municipal rate for the City.

		FY 23 BC Est.	
	5 Year Avg	- Hospital solar	Avg
Revenue Requirement	\$19,189,391	Annual	Energy
		kWh	Charge
Residential	\$10,386,217	94,448,488	\$0.1100
Residential - Master Meter	\$416,424	3,218,427	\$0.1294
General Service - <300 kW	\$4,216,580	31,367,658	\$0.1344
General Service - >300 kW	\$1,299,439	8,212,836	\$0.1582
Time of Use - <600V	\$367,551	2,211,553	\$0.1662
Time of Use - >2,400V	\$523,606	3,205,890	\$0.1633
Boulder City Hospital	\$235,401	1,476,600	\$0.1064
City	\$227,960	6,030,686	\$0.0378
Sportsfield Lighting	\$0	1,260	
	\$17,673,178	150,173,399	
Demand Charge Revenue	\$392,603		
Customer Charge Revenue	\$1,077,549		
Collected Avg Revenue Requirement	\$19,143,330		

This is intended as a starting point for discussion, the table contains many variables that need to be reviewed and discussed before final rate adjustments can be determined.

Cost per kWh Increase Residential

The tables below show an estimated Rate Adjustment for the Residential Charge if you start with the 5 year average Electrical Revenue Requirement of \$19,589,391, which includes Capital and reduce it by \$400k to **\$19,189,391**, assuming \$2M is available from the Electric Funds Unrestricted Cash, after the ongoing CIP and FY 23 CIP is covered.

The rates are based on the FY 23 City's Residential Energy estimate.

The table below shows the Residential estimated rate adjustment using the **\$19,189,391**.

	5 Year Avg		
Residential - Single Family	Annual	Cost Per	Annual
Energy Usage Rate	kWh	kWh	Revenue
First 2,000 kWh per month	82,742,708	\$0.1075	\$8,894,841
2,001 - 4,000 kWh per month	9,429,893	\$0.1250	\$1,178,737
Over 4,001 kWh per month	2,275,886	\$0.1400	\$318,624
Totals	94,448,488		\$10,392,202

The table below shows the Residential estimated rate adjustment using **\$17,189,319**, if you use \$2 Million a year from unrestricted excess Utility funds for FY 24 -28.

	5 Year Avg		
Residential - Single Family	Annual	Cost Per	Annual
Energy Usage Rate	kWh	kWh	Revenue
First 2,000 kWh per month	82,742,708	\$0.0940	\$7,777,815
2,001 - 4,000 kWh per month	9,429,893	\$0.1200	\$1,131,587
Over 4,001 kWh per month	2,275,886	\$0.1350	\$307,245
Totals	94,448,488		\$9,216,646

Tier Modification & Cost per kWh Increase

General Service

The tables below show an estimated Rate Adjustment for the General Service Charge if you start with the 5 year average Electrical Revenue Requirement of \$19,589,391, which includes Capital and reduce it by \$400k to **\$19,189,391**, assuming \$2M is available from the Electric Funds Unrestricted Cash, after the ongoing CIP and FY 23 CIP is covered.

The rates are based on the FY 23 City's General Service Energy estimate.

The table below shows the General Service estimated rate adjustment using the **\$19,189,391**.

	5 Year Avg		
General Service	Annual	Cost Per	Annual
Energy Usage Rate	kWh	kWh	Revenue
First 2,000 kWh per month	7,538,563	\$0.1075	\$810,395
2,001 - 10,000 kWh per month	9,726,555	\$0.1275	\$1,240,136
10,001 - 30,000 kWh per month	5,641,016	\$0.1450	\$817,947
30,001 - 60,000 kWh per month	4,700,847	\$0.1550	\$728,631
Over 60,001 kWh per month	3,760,677	\$0.1650	\$620,512
Totals	31,367,658		\$4,217,622

The table below shows the General Service estimated rate adjustment using **\$17,189,319**, if you use \$2 Million a year from unrestricted excess Utility funds for FY 24 -28.

	5 Year Avg		
General Service	Annual	Cost Per	Annual
Energy Usage Rate	kWh	kWh	Revenue
First 2,000 kWh per month	7,538,563	\$0.0945	\$712,394
2,001 - 10,000 kWh per month	9,726,555	\$0.1175	\$1,142,870
10,001 - 30,000 kWh per month	5,641,016	\$0.1250	\$705,127
30,001 - 60,000 kWh per month	4,700,847	\$0.1350	\$634,614
Over 60,001 kWh per month	3,760,677	\$0.1450	\$545,298
Totals	31,367,658		\$3,740,304

Review Sewer Rates

- Review the Sections in the latest Sewer resolution and see if anything needs to be updated.
- Historic Whereas statements in the Sewer Resolutions are helpful to understand why the Resolution was changed.

Resolution Issues

- Review the Sections in each rate resolution and see if anything needs to be updated.
- How are the rates and rate structures documented?
- The Whereas section should be better used to explain what are the major changes in the rate resolution.
 - Can the Whereas related to the old Resolutions be added to in the future Resolution to help clarify what happen in the past?
- Look at possibly modifying the Municipal Rate to use the SSEA estimate.
- Look at the Purchase Power Rider amount.
 - Should the \$0.06 be increased to a higher activation amount?

Additional Issues

- Admin fund % breakout for each Utility
 - Electric 57%; Water 30%; Sewer 10%; Landfill 3%
 - Should the Electric and Water have more equalized percentages?
- Need 5 future years budget numbers for the Utilities revenues and expenses
- Check for all revenues and offsets
- Calculate Electric use for the future, what revenue can we expect
 - How will Solar effect future demand and revenue
- City use of Solar (Parking Structure Solar)
 - Since the City does not pay for Utility infrastructure this would be less of an impact and could be controlled by the City
- Golf course considerations

Next Steps

- Discuss RFP for Rate Study
- Gather sample data on Commercial and Residential accounts
 - What is the average Energy and Water use per month and year
 - Is there a way to determine a baseline usage for Energy and Water used by the different categories
 - Increased Commercial rates will just be passed along to the customers and not necessarily reduce waste
- Discuss options in more detail