Utility Committee Meeting

October 11, 2023

Packet

CITY OF SALEM UTILITY COMMITTEE

MINUTES OF MEETING

September 13, 2023

The City of Salem Utility Committee meeting was called to order by Utility Committee Chairman and West Ward Alderman, Kyle Williams. The following individuals were present: Catherine Dent, John Hambacker, Harold Hamilton, Nathan Kinsey, Rick Letchworth, and David Weiss.

Recognition for their attendance was given to City Administrator, Sally Burbridge; Finance Director, Stacy Houston; Director of Public Works, Mark Nash; and Chris McGuirt, from the utility department. Reports and financials for utility usage were presented by Stacy Houston, Financial Director for the City of Salem, and the minutes of the August 9, 2023, meeting of the utility committee were approved.

John Hambacker inquired about the number of transformers on poles and if they were performing and if not, could they be taken down. Mark Nash stated that some transformers had been removed and rebuilt.

John Hambacker also remarked on the need for some kind of notification regarding peak alerts and noted that in other cities there are speaker systems telling everyone when there was a peak alert. The City system is set up only for one siren sound (tornado) and Joe Chase stated he was working on a proposal with the City Administrator on a new system regarding an alert.

City Administrator, Sally Burbridge, spoke on the Execeleron program and stated work has been done to make sure payments are routed to the specific banks, etc. She noted that in the next few weeks, the city will be moving to launch two pieces of the billing system (online payments and 24/7 automated phone system) and there is a cost for these systems. Work is still progressing on emailing utility bills and Encode is hoping to deploy this system soon.

Sally also told those in attendance she will be attending the MPUA annual conference September 27, 2023, and will also be representing the city at the MMMPEP committee meeting in November.

The water testing quote of $3691 per well that was given at the last meeting was brought before the committee. The water has been exceptional but there has been some residue that may provide discoloration. The committee was asked if they wanted to pursue additional water testing and no motion was made to do so.

The Board of Aldermen asked committee members to meet in closed session in a privileged consultation with an attorney regarding the cost of utilities for individuals outside the city limits. This meeting would follow the Board of Aldermen meeting September 26, 2023. Members of the committee agreed to meet.

The meeting was then opened to questions and comments from those persons in attendance who do not serve on the committee.

The committee heard from Frank Rauhe on his installation of solar panels and net metering, and individuals concerned about the trash service and recycling. Debbie Murphy stated she was tired of fees going up and down and that the City should look at cuts that might help with this situation. Lisa French asked for an explanation about kilowatt hours and charges and expressed her distaste in the 4% COLA increase for the City coming from the electric fund. French also wanted to know why the city was buying wire for McDonalds and it was explained that McDonalds was reimbursing the city for the wire.

With no other business occurring, a motion was made by Catherine Dent and seconded by John Hambacker that the meeting close. Motion carried.

The next meeting of the City Utility Committee will be October 11 at 6:15 at the Community Center at the Armory.

Prepared by: Catherine Dent

UTILITY USAGE & REVENUE

	2021-2022 ACTUAL	2022-2023 ACTUAL	2022-2023 JULY-SEPT	2023-2024 YTD	2023-2024 BUDGETED	Percent of Budget
Electric Consumption Sold	52,787,837	52,732,043	15,098,887	14,150,081		
Electric Sales Rev.	$ 5,388,796	$ 7,105,213	1,889,221	$ 2,002,143	$ 7,111,608	28%
Availability Fee	$ -	$ 314,205		$ 73,488		
Electric Revenue Collected	$ 5,309,157	$ 6,950,178		$ 1,809,750		
Water Consumption Sold	133,720,064	149,352,518	39,883,054	33,202,543		
Water Sales Rev.	$ 839,084	$ 975,956	$ 254,914	$ 214,301	$ 906,470	24%
Base Rate		$ 160,272		$ 39,504		
Water Revenues Collected	$ 882,471	$ 930,781		$ 219,091		
Sewer Consumption Sold	121,145,016	128,052,344	34,674,422	29,813,883		
Sewer Sales Rev.	$ 777,868	1,087,415	$ 226,092	281,052	$ 1,179,027	24%
Base Rate		$ 153,834		$ 38,214		
Sewer Revenues Collected	$ 832,558	$ 1,008,308		$ 283,193		

**As of 09/30/2023 (Pending Transfers & Adjustments)

501-ELECTRIC FUND SUMMARY

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
Total Sales Tax	$ 181,709	$ 239,425	$ 64,449	198,783	68,722	0.35
Total Permits/Licenses/Fees	$ 367	$ 426	$ 331	150	223	1.48
Total Charges for Services	$ 5,467,541	$ 7,139,031	$ 1,903,940	7,132,836	2,027,246	0.28
Total Miscellaneous	$ 3,754	$ 62,706	$ 1,681	2,500	17,272	6.91
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	
TOTAL REVENUES	**$ 5,653,370**	**$ 7,441,588**	**$ 1,970,402**	**7,334,269**	**2,113,462**	**0.29**
EXPENDITURES						
Total Personnel	$ 523,282	$ 465,090	$ 131,139	551,637	112,851	0.20
Total Supplies	$ 39,568	$ 25,350	$ 3,154	32,600	4,730	0.15
Total Maintenance	$ 115,081	$ 91,702	$ 7,904	113,000	7,544	0.07
Total Miscellaneous	$ 261,069	$ 316,171	$ 74,588	393,970	88,363	0.22
Total Utilities	$ 4,140,529	$ 4,429,037	$ 1,307,733	4,891,350	1,204,704	0.25
Total Cap Improvements	$ 218,980	$ 209,738	$ 111,754	189,400	21,700	0.11
TOTAL EXPENDITURES	**$ 5,298,510**	**$ 5,537,087**	**$ 1,636,271**	**6,171,957**	**1,439,892**	
REVENUES OVER/(UNDER) EXPENDITURES	$ 354,860	$ 1,904,501	$ 334,131	1,162,312	673,570	
OTHER SOURCES	$ 350,000	$ -	$ -	-	-	
OTHER USES	$ 638,510	$ 1,480,000	$ -	1,144,926	-	
(UNDER) EXPENDITURES & OTHER USES	**$ 66,350**	**$ 424,501**	**$ 334,131**	**17,386**	**673,570**	

501-ELECTRIC FUND DETAILS

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
SALES TAX						
SALES TAX-UTILITIES	181,709	239,425	64,449	198,783	68,722	
Total Sales Tax	$ 181,709	$ 239,425	$ 64,449	198,783	68,722	0.35
PERMITS/LICENSES/FEES						
30% CREDIT BUREAU FEE	210	204	239	-	169	
INSUFFICIENT CHECK CHARGE	158	222	93	150	54	
Total Permits/Licenses/Fees	$ 367	$ 426	$ 331	150	223	1.48
CHARGES FOR SERVICES						
SALE OF ELECTRIC	5,388,796	7,025,709	1,889,221	7,111,608	2,002,143	0.28
ELECTRIC DISCOUNTS APPLIED	(22,939)	(26,990)	(6,213)	(31,243)	(7,307)	0.23
AMP REVENUE	17,822	(19,254)	(6,772)	(25,000)	-	-
RECONNECTS	11,913	7,817	2,225	5,000	2,045	0.41
PENALTY FEES-ELECTRIC	71,886	111,479	25,479	40,000	24,149	0.60
SERVICES CHARGES	63	-	-	50	-	-
PROCESSING FEES		10,408	-	25,000	6,140	0.25
RENTS & ROYALTIES	-	13,362	-	7,421	-	-
SALE OF FIXED ASSETS	-	16,500	-	-	76	
Total Charges for Services	$ 5,467,541	$ 7,139,031	$ 1,903,940	7,132,836	2,027,246	0.28
MISCELLANEOUS						
MISCELLANEOUS	3,730	36,168	930	1,500	17,272	11.51
COBRA INSURANCE REIMBURSEMENT	-	-	-	-	-	-
SUPER NOW INTEREST	24	26,539	751	1,000	-	-
DIVIDENDS	-	-	-	-	-	
Total Miscellaneous	$ 3,754	$ 62,706	$ 1,681	2,500	17,272	6.91
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
TOTAL REVENUES	**$ 5,653,370**	**$ 7,441,588**	**$ 1,970,402**	**7,334,269**	**2,113,462**	**0.29**
EXPENDITURES						
Personnel						
SUPERVISION	66,184	59,607	17,333	69,120	15,360	0.22
OPERATING	254,269	209,688	54,235	250,200	47,746	0.19
CLERICAL	63,638	58,714	14,035	61,816	13,474	0.22
PUBLIC WORKS DIRECTOR	16,188	16,636	4,032	18,553	3,871	0.21
OVERTIME	1,137	2,898	1,429	5,200	964	0.19
OVERTIME-CLERICAL	-	-	-	-	-	-
FICA	30,397	26,327	6,746	32,391	6,167	0.19
UNEMPLOYMENT	480	491	20	1,236	39	0.03
WORKERS COMPENSATION	13,339	12,056	12,056	15,000	5,379	0.36
HEALTH INSURANCE	32,917	37,011	10,476	44,764	8,930	0.20
SHORT-TERM DISABILITY				1,436	461	0.32
LIFE INSURANCE	458	467	130	500	95	0.19
RETIREMENT	44,276	41,194	10,647	51,421	10,365	0
Total Personnel	$ 523,282	$ 465,090	$ 131,139	551,637	112,851	0.20
SUPPLIES						
CHEMICAL SUPPLIES	-	199	199	500	-	-
COMPUTER SUPPLIES	957	98	98	1,000	-	-
GENERAL SUPPLIES	80	-	-	100	46	0.46
JANITORIAL SUPPLIES	253	183	66	500	-	-
OFFICE SUPPLIES	31,756	16,394	1,163	23,000	4,489	0.20
TOOLS	6,522	8,476	1,628	7,500	195	0.03
Total Supplies	$ 39,568	$ 25,350	$ 3,154	32,600	4,730	0.15
MAINTENANCE						
BUILDING MAINTENANCE	870	1,457	897	3,500	-	-
EQUIPMENT MAINTENANCE	107,530	86,744	6,510	90,000	7,544	0.08
LIGHTING MAINTENANCE	6,208	3,350	-	15,000	-	-

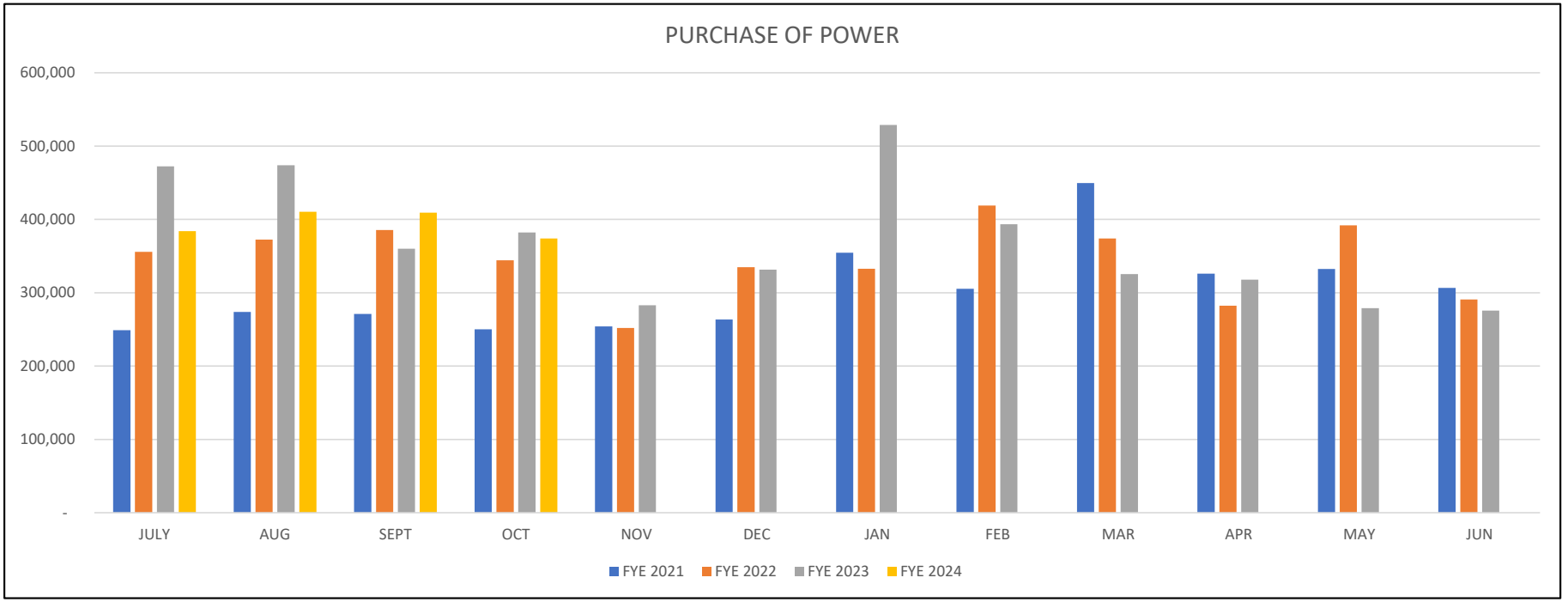
	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
PUBLIC GROUNDS MAINTENANCE	474	(229)	245	500	-	-
VEHICLE MAINTENANCE	(1)	381	252	4,000	-	-
Total Maintenance	$ 115,081	$ 91,702	$ 7,904	113,000	7,544	0.07
MISCELLANEOUS						
ADVERTISING	458	67	-	200	-	-
EQUIPMENT HIRE	-	-	-	1,000	-	-
BOOKS & PERIODICALS	-	-	-	-	-	-
FUEL-MOTOR VEHICLES	11,613	13,084	3,176	16,200	2,901	0.18
GENERAL INSURANCE	6,808	7,239	7,239	7,963	8,012	1.01
MEMBERSHIPS	1,317	1,414	-	1,500	-	-
MISCELLANEOUS	10,649	1,534	102	2,500	-	-
RENT	160	-	-	100	-	-
SALES TAX PAYABLE	181,688	224,300	46,714	212,035	68,340	0.32
TRAVEL	-	861	-	2,500	-	-
SAFETY & TRAINING	285	6,615	533	8,000	61	0.01
SPECIAL SERVICES	9,714	18,565	6,638	35,700	682	0.02
STATE AUDIT	-	-	-	-	-	-
COMPUTER SOFTWARE	-	-	-	53,800	250	0.00
CREDIT CARD SERVICE CHARGES	34,795	37,315	8,804	47,372	7,437	0.16
WEARING APPAREL	3,550	4,708	1,370	5,000	968	0.19
CHARGE BACK ITEM FEE	32	468	12	100	(289)	(2.89)
BAD DEBT	-	-	-	-	-	
Total Miscellaneous	$ 261,069	$ 316,171	$ 74,588	393,970	88,363	0.22
UTILITIES						
UTILITIES-ELECTRIC	1,355	1,300	325	1,456	325	0.22
UTILITIES-PURCHASE OF POWER	4,135,284	4,423,590	1,306,494	4,884,189	1,203,470	0.25
UTILITIES-WATER	63	26	-	420	18	0.04
UTILITIES-TELEPHONE	3,828	4,120	914	5,285	891	0.17
Total Utilities	$ 4,140,529	$ 4,429,037	$ 1,307,733	4,891,350	1,204,704	0.25

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
CAPITAL IMPROVEMENTS						
CAPITAL OUTLAY-TRANSFORMERS	19,551	30,817	14,985	-	-	-
CAPITAL OUTLAY-POLES	26,426	-	-	-	-	-
CAPITAL OUTLAY- ELECTRIC TRUCK	-	-	-	-	-	-
CAPITAL IMPROVEMENT-2 SHOP BAY	-	-	-	-	-	-
LED LIGHT UPGRADE-4TH STREET	-	19,225	-	-	-	-
TRACATOR W/LOADER	-	-	-	-	-	-
F550 W/DUMP BED	-	-	-	-	-	-
DIGGER TRUCK	-	14,514	-	57,600	14,164	0.25
DIGGER TRUCK RENTAL	73,500	42,000	15,750	-	-	-
BUCKET TRUCK	-	2,862	-	30,300	7,536	0.25
VACUUM TRUCK	-	-	-	-	-	-
GIS MAPPING	-	-	-	-	-	-
SCENIC RIVER PLAZA PROJECT	-	-	-	-	-	-
GRAPPLE	0	-	-	-	-	-
1/2 COP PAYMENT NOVEMBER	79,338	81,019	81,019	82,500	-	-
1/2 COP PAYMENT MAY	20,165	19,301	-	19,000	-	-
Total Cap Improvements	$ 218,980	$ 209,738	$ 111,754	189,400	21,700	0.11
TOTAL EXPENDITURES	**$ 5,298,510**	**$ 5,537,087**	**$ 1,636,271**	**6,171,957**	**1,439,892**	
REVENUES OVER/(UNDER) EXPENDITURES	$ 354,860	$ 1,904,501	$ 334,131	1,162,312	673,570	
OTHER SOURCES	$ 350,000	$ -	$ -	-	-	
OTHER USES	$ 638,510	$ 1,480,000	$ -	1,144,926	-	
(UNDER) EXPENDITURES & OTHER USES	**$ 66,350**	**$ 424,501**	**$ 334,131**	**17,386**	**673,570**	

503-ELECTRIC RESERVE FUND

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
CHARGES FOR SERVICE						
SALE OF FIXED ASSETS	-	-	-	-	-	
Total Charges for Service	$ -	$ -	$ -	-	-	
MISCELLANEOUS						
SUPER NOW INTEREST	151	4,377	61	200	-	
CD INTEREST	-	-	-	-	-	
Total Miscellaneous	$ 151	$ 4,377	$ 61	200	-	
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	
TOTAL REVENUES	**$ 151**	**$ 4,377**	**$ 61**	**200**	**-**	
(UNDER) EXPENDITURES & OTHER USES	$ 151	$ 4,377	$ 61	200	-	
EXPENDITURES						
CAPITAL IMPROVEMENTS						
CAPITAL OUTLAY-TRANSFORMERS				30,000	3,660	
CAPITAL OUTLAY-POLES				25,000	-	
HYDROVAC TRUCK				47,500	-	
Total Cap Improvements				102,500	3,660	
TOTAL EXPENDITURES				**102,500**	**3,660**	
OTHER SOURCES	$ -	$ 730,000	$ -	544,926	-	
OTHER USES	$ 350,000	$ -	$ -	-	-	
(UNDER) EXPENDITURES & OTHER USES	**$ (349,849)**	**$ 734,377**	**$ 61**	**442,626**	**(3,660)**	

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FYE 2021	249,064	273,688	271,141	250,180	254,147	263,367	354,698	305,477	449,750	326,037	332,511	306,679
FYE 2022	355,791	372,348	385,469	344,122	251,881	334,754	332,872	418,886	374,160	282,379	391,851	290,772
FYE 2023	472,392	474,004	360,098	382,275	282,875	331,624	528,787	393,307	325,565	317,806	279,129	275,729
FYE 2024	384,031	410,302	409,137	373,977								



510-WATER FUND SUMMARY

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
Total Sales Tax	$ 13,699	$ 14,108	$ 3,706	13,597	3,942	
Total Other	$ -	$ -	$ -	-	-	
Total Charges for Services	$ 904,626	$ 918,597	$ 265,681	929,770	220,851	0.24
Total Miscellaneous	$ 249	$ 19,951	$ 1,689	2,600	2,030	0.78
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	
TOTAL REVENUES	**$ 918,573**	**$ 952,656**	**$ 271,077**	**945,967**	**226,823**	**0.24**
EXPENDITURES						
Total Personnel	$ 417,042	$ 346,844	$ 106,664	389,494	84,952	0.22
Total Supplies	$ 8,683	$ 10,066	$ 3,530	14,250	1,575	0.11
Total Maintenance	$ 106,938	$ 91,854	$ 8,637	109,900	10,914	0.10
Total Miscellaneous	$ 58,017	$ 64,024	$ 34,086	89,920	33,814	0.38
Total Utilities	$ 119,832	$ 169,332	$ 46,211	165,264	35,563	0.22
Total Cap Improvements	$ 112,585	$ 147,858	$ 101,425	135,411	13,137	
TOTAL EXPENDITURES	**$ 823,097**	**$ 829,977**	**$ 300,554**	**904,239**	**179,955**	
(UNDER) EXPENDITURES & OTHER USES	$ 95,476	$ 122,679	$ (29,477)	41,728	46,868	
OTHER SOURCES	$ -	$ -	$ -	-	-	
OTHER USES	$ -	$ -	$ -	41,155	-	
(UNDER) EXPENDITURES & OTHER USES	**$ 95,476**	**$ 122,679**	**$ (29,477)**	**573**	**46,868**	

510-WATER FUND DETAILS

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/2023	% OF BUDGET
REVENUES						
SALES TAX						
SALES TAX-UTILITIES	13,699	14,108	3,706	13,597	3,942	0.29
Total Sales Tax	$ 13,699	$ 14,108	$ 3,706	13,597	3,942	
OTHER						
RURAL SEWER GRANT	-	-	-	-	-	-
Total Other	$ -	$ -	$ -	-	-	
CHARGES FOR SERVICES						
WATER SALES	839,084	875,341	254,914	906,470	214,301	0.24
WATER SOLD @ PLANT	5,414	4,215	-	2,500	1,127	0.45
RECONNECTS	9,469	5,913	2,063	2,500	1,763	0.71
PENALTY FEES-WATER	36,429	17,204	6,674	5,000	3,154	0.63
CONNECTIONS-WATER	4,035	2,030	2,030	2,500	-	-
PRIMACY FEE-WATER	9,607	12,794	-	9,500	508	0.05
SERVICE CHARGES	88	50	-	100	-	-
WATER TOWER RENTAL	-	-	-	1,200	-	-
SALE OF FIXED ASSETS	500	1,050	-	-	-	-
Total Charges for Services	$ 904,626	$ 918,597	$ 265,681	929,770	220,851	0.24
MISCELLANEOUS						
MISCELLANEOUS	-	162	-	600	2,030	3.38
SUPER NOW INTEREST	249	19,789	1,689	2,000	-	-
RENT-HEARTLAND METAL	-	-	-	-	-	-
Total Miscellaneous	$ 249	$ 19,951	$ 1,689	2,600	2,030	0.78
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	
TOTAL REVENUES	**$ 918,573**	**$ 952,656**	**$ 271,077**	**945,967**	**226,823**	**0.24**

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/2023	% OF BUDGET
EXPENDITURES						
Personnel						
SUPERVISION	32,690	31,174	6,362	37,498	7,940	0.21
OPERATING	217,786	167,908	48,827	175,200	38,507	0.22
CLERICAL	35,896	38,688	9,610	41,600	9,212	0.22
PUBLIC WORKS DIRECTOR	16,188	16,636	4,032	18,553	3,871	0.21
OVERTIME	7,132	3,828	2,225	6,458	119	0.02
OVERTIME-CLERICAL	-	-	-	535	-	-
FICA	23,918	20,282	5,338	22,388	4,554	0.20
UNEMPLOYMENT	496	318	21	969	94	0.10
WORKERS COMPENSATION	12,559	10,602	10,602	14,100	7,199	0.51
HEALTH INSURANCE	38,247	25,038	8,001	35,172	6,532	0.19
SHORT-TERM DISABILITY				1,126	347	0.31
LIFE INSURANCE	411	282	88	355	74	0.21
RETIREMENT	31,720	32,088	11,558	35,540	6,504	0.18
Total Personnel	$ 417,042	$ 346,844	$ 106,664	389,494	84,952	0.22
SUPPLIES						
CHEMICAL SUPPLIES	3,748	2,477	2,477	5,500	25	0.00
COMPUTER SUPPLIES	300	-	-	400	-	-
GENERAL SUPPLIES	142	-	-	150	46	0.30
JANITORIAL SUPPLIES	237	290	50	400	59	0.15
OFFICE SUPPLIES	2,128	2,224	979	2,800	1,397	0.50
TOOLS	2,129	5,075	24	5,000	49	0.01
Total Supplies	$ 8,683	$ 10,066	$ 3,530	14,250	1,575	0.11
MAINTENANCE						
BUILDING MAINTENANCE	2,639	132	-	2,000	-	-
EQUIPMENT MAINTENANCE	100,942	85,018	8,386	100,000	8,860	0.09
PUBLIC GROUND MAINTENANCE	275	1,331	-	400	-	-
STREET MAINTENANCE	1,494	2,925	-	4,500	-	-
REPAIR TOWER & FENCE	-	-	-	-	-	-

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/2023	% OF BUDGET
VEHICLE MAINTENANCE	1,590	2,448	251	3,000	2,054	0.68
AMI METER UPGRADES	-	-	-	-	-	-
Total Maintenance	$ 106,938	$ 91,854	$ 8,637	109,900	10,914	0.10
MISCELLANEOUS						
ADVERTISING	1,163	1,359	-	800	-	-
BOOKS & PERIODICALS	-	-	-	-	-	-
FUEL-MOTOR VEHICLE	11,123	11,367	3,826	14,720	2,548	0.17
GENERAL INSURANCE	9,531	10,135	10,135	11,600	11,217	0.97
MEMBERSHIPS	2,483	2,350	-	2,500	-	-
MISCELLANEOUS	31	244	-	300	-	-
RENT	520	-	-	1,000	-	-
TRAVEL	5,774	4,208	2,224	4,000	924	0.23
SAFETY EQUIPMENT	3,027	590	50	2,000	-	-
SPECIAL SERVICES	12,876	20,456	6,557	15,900	6,078	0.38
STATE AUDIT	-	-	-	-	-	-
WEARING APPAREL	4,437	2,631	609	3,500	534	0.15
PRIMACY FEE	7,050	10,685	10,685	10,800	12,512	1.16
BAD DEBT	-	-	-	-	-	-
COMPUTER SOFTWARE	-	-	-	22,800	-	-
Total Miscellaneous	$ 58,017	$ 64,024	$ 34,086	89,920	33,814	0.38
UTILITIES						
UTILITIES-ELECTRIC	115,377	162,078	44,737	157,300	33,960	0.22
UTILITIES-SEWER	431	1,530	266	1,500	259	0.17
UTILITIES-WATER	349	1,266	273	1,494	189	0.13
UTILITIES-TELEPHONE	3,676	4,457	934	4,970	1,154	0.23
Total Utilities	$ 119,832	$ 169,332	$ 46,211	165,264	35,563	0.22
CAPITAL IMPROVEMENTS						
GIS MAPPING	-	-	-	-	-	
1/2 COP PAYMENT MAY	20,165	19,301	-	20,911	-	-

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/2023	% OF BUDGET
1/2 COP PAYMENT NOVEMBER	79,338	81,019	81,019	82,500	-	-
CENTER ST WATER LINE REPLACEME	200	-	-	-	-	
CAPITAL OUTLAY-WELL #8	-	-	-	-	-	
New Service Truck/van		17,800	-	-	-	
HIGHWAY 19 SOUTH EXTENSION	-	-	-	-	-	
WATER ENGINEERING FEES	975	9,332	-	20,000	1,196	0.06
BACKHOE LEASE	11,907	11,907	11,907	12,000	11,941	1.00
Fencing	-	-	-	-	-	
NEW WELL DESIGN	-	8,500	8,500	-	-	
NEW WELL CONSTRUCTION	-	-	-	-	-	
NEW WELL CONSTRUCTION ADMIN	-	-	-	-	-	
RECONDITION 2 RETENTION TANKS	-	-	-	-	-	
DIAPHRAGM PUMP	-	-	-	-	-	
Total Cap Improvements	$ 112,585	$ 147,858	$ 101,425	135,411	13,137	
TOTAL EXPENDITURES	**$ 823,097**	**$ 829,977**	**$ 300,554**	**904,239**	**179,955**	
(UNDER) EXPENDITURES & OTHER USES	$ 95,476	$ 122,679	$ (29,477)	41,728	46,868	
OTHER SOURCES	$ -	$ -	$ -	-	-	
OTHER USES	$ -	$ -	$ -	41,155	-	
(UNDER) EXPENDITURES & OTHER USES	**$ 95,476**	**$ 122,679**	**$ (29,477)**	**573**	**46,868**	

512-WATER RESERVE

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/2023	% OF BUDGET
REVENUES						
OTHER						
WATER GRANT FUND				778,000	31,083	
Total Other	$ -	$ -	$ -	778,000	31,083	
MISCELLANEOUS						
SUPER NOW INTEREST	614	20,482	2,181	549	-	
CD INTEREST	-	-	-	-	-	
OTHER INCOME-CD TO CHECKING	-	-	-	-	-	
Total Miscellaneous	$ 614	$ 20,482	$ 2,181	549	-	
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	210,140	-	
TOTAL REVENUES	**$ 614**	**$ 20,482**	**$ 2,181**	**988,689**	**31,083**	
EXPENDITURES						
MISCELLANEOUS						
MISCELLANEOUS	-	-	-	-	-	
Total Miscellaneous	$ -	$ -	$ -	-	-	
CAPITAL IMPROVEMENTS						
PAINT INSIDE TOWER-IND PARK	-	-	-	-	-	
PAINT OUTSIDE TOWER-IND PARK	-	-	-	-	-	
CENTER ST WATER LINE REPLACEME	-	-	-	60,000	-	
FENCING	-	-	-	40,000	-	
LEAD-SERVICE LINE INVENTORY	-	-	-	180,000	-	
NEW WELL DESIGN	-	-	-	634,343	31,400	
NEW WELL CONSTRUCTION	-	-	-	-	-	
RECONDITION 2 RETENTION TANKS	-	-	-	68,000	-	
HYDROVAC TRUCK	-	-	-	47,500	-	
Total Cap Improvements	$ -	$ -	$ -	1,029,843	31,400	

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/2023	% OF BUDGET
TOTAL EXPENDITURES	**$ -**	**$ -**	**$ -**	**1,029,843**	**31,400**	
(UNDER) EXPENDITURES & OTHER USES	$ 614	$ 20,482	$ 2,181	(41,155)	(317)	
OTHER SOURCES	$ -	$ -	$ -	41,155	-	
OTHER USES	$ -	$ -	$ -	-	-	
(UNDER) EXPENDITURES & OTHER USES	**$ 614**	**$ 20,482**	**$ 2,181**	**(0)**	**(317)**	

520-SEWER FUND SUMMARY

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
Total Permits/Licenses/Fees	$ -	$ -	$ -	-	-	
Total Other	$ 25,000	$ -	$ -	-	-	
Total Charges for Services	$ 826,269	$ 1,049,582	$ 231,710	1,190,427	285,194	0.24
Total Miscellaneous	$ 1,075	$ 22,917	$ -	3,200	-	-
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	
TOTAL REVENUES	**$ 852,344**	**$ 1,072,499**	**$ 231,710**	**1,193,627**	**285,194**	**0.24**
EXPENDITURES						
Total Personnel	$ 316,512	$ 318,703	$ 91,098	327,049	71,124	0.22
Total Supplies	$ 17,717	$ 6,899	$ 581	10,100	4,144	0.41
Total Maintenance	$ 50,964	$ 61,558	$ 5,427	74,000	12,614	0.17
Total Miscellaneous	$ 89,957	$ 123,592	$ 27,410	149,506	46,438	0.31
Total Utilities	$ 112,580	$ 162,359	$ 35,848	188,216	43,309	0.23
Total Cap Improvements	$ 504,046	$ 302,299	$ 244,395	305,790	-	-
TOTAL EXPENDITURES	**$ 1,091,777**	**$ 975,410**	**$ 404,758**	**1,054,661**	**177,628**	
REVENUE OVER/(UNDER) EXPENDITURES	$ (239,433)	$ 97,089	$ (173,048)	138,966	107,566	
OTHER SOURCES	$ 195,000	$ -	$ -	-	-	
OTHER USES	$ 14,000	$ -	$ -	67,408	-	
(UNDER) EXPENDITURES & OTHER USES	**$ (58,433)**	**$ 97,089**	**$ (173,048)**	**71,557**	**107,566**	

520-SEWER FUND DETAILS

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
PERMITS/LICENSES/FEES						
SEWER INSPECTIONS	-	-	-	-	-	-
Total Permits/Licenses/Fees	$ -	$ -	$ -	-	-	
OTHER						
RURAL SEWER GRANT	25,000	-	-	-	-	-
Total Other	$ 25,000	$ -	$ -	-	-	
CHARGES FOR SERVICES						
SEWER RECEIPTS	777,868	1,016,956	226,092	1,179,027	281,052	0.24
RECONNECTS	-	-	-	-	-	-
PENALTY FEES-SEWER	43,297	20,346	5,617	8,000	4,141	0.52
CONNECTIONS-SEWER	2,086	-	-	500	-	-
PRIMACY FEES-SEWER	3,018	2,981	-	2,900	-	-
SERVICE CHARGES	-	-	-	-	-	-
SALE OF FIXED ASSETS	-	9,300	-	-	-	-
Total Charges for Services	$ 826,269	$ 1,049,582	$ 231,710	1,190,427	285,194	0.24
MISCELLANEOUS						
MISCELLANEOUS	1,075	19,418	-	3,200	-	-
SUPER NOW INTEREST	-	3,499	-	-	-	-
CD INTEREST	-	-	-	-	-	-
COP INTEREST INCOME	-	-	-	-	-	-
Total Miscellaneous	$ 1,075	$ 22,917	$ -	3,200	-	-
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	-	-	
TOTAL REVENUES	**$ 852,344**	**$ 1,072,499**	**$ 231,710**	**1,193,627**	**285,194**	**0.24**
EXPENDITURES						

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
Personnel						
SUPERVISION	32,962	35,365	10,179	37,440	7,940	0.21
OPERATING	147,816	144,307	37,780	136,800	26,345	0.19
CLERICAL	35,940	38,420	9,610	40,560	9,148	0.23
PUBLIC WORKS DIRECTOR	16,188	16,636	4,032	18,553	3,871	0.21
OVERTIME	9,195	5,370	2,555	6,215	1,370	0.22
OVERTIME-CLERICAL	-	-	-	535	-	-
FICA	18,218	16,652	4,852	19,208	3,733	0.19
UNEMPLOYMENT	419	312	26	431	27	0.06
WORKERS COMPENSATION	6,238	6,179	6,179	6,811	5,862	0.86
HEALTH INSURANCE	25,219	28,178	7,841	28,777	6,262	0.22
SHORT-TERM DISABILITY				923	275	0.30
LIFE INSURANCE	239	310	88	302	59	0.20
RETIREMENT	24,076	26,974	7,955	30,493	6,232	0.20
Total Personnel	$ 316,512	$ 318,703	$ 91,098	327,049	71,124	0.22
SUPPLIES						
CHEMICAL SUPPLIES	2,371	1,037	51	2,000	621	0.31
COMPUTER SUPPLIES	235	-	-	500	-	-
GENERAL SUPPLIES	224	-	-	100	46	0.46
JANITORIAL SUPPLIES	308	386	101	500	204	0.41
LAB SUPPLIES	5,842	374	51	3,000	418	0.14
OFFICE SUPPLIES	3,403	2,176	378	2,000	715	0.36
TOOLS	5,334	2,926	-	2,000	2,141	1.07
Total Supplies	$ 17,717	$ 6,899	$ 581	10,100	4,144	0.41
MAINTENANCE						
BUILDING MAINTENANCE	1,653	-	-	2,000	581	0.29
EQUIPMENT MAINTENANCE	46,674	60,487	5,406	68,000	10,952	0.16
PUBLIC GROUNDS MAINTENANCE	151	-	-	300	-	-
STREET MAINTENANCE	1,488	-	-	2,500	-	-
VEHICLE MAINTENANCE	1,000	1,071	21	1,200	1,081	0.90

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
SEWER GRANT REIMB EXPENSES	-	-	-	-	-	-
Total Maintenance	$ 50,964	$ 61,558	$ 5,427	74,000	12,614	0.17
MISCELLANEOUS						
ADVERTISING	308	33	33	600	-	-
FUEL	4,760	6,257	4,280	8,034	630	0.08
GENERAL INSURANCE	11,028	11,583	11,583	12,741	12,819	1.01
MEMBERSHIPS	2,662	2,166	-	2,500	118	0.05
MISCELLANEOUS	588	-	-	600	-	-
TRAVEL	4,014	1,623	341	3,500	562	0.16
SAFETY & TRAINING	8,186	5,904	1,204	4,000	1,547	0.39
SPECIAL SERVICES	53,122	90,916	9,226	89,200	30,135	0.34
STATE AUDIT	-	-	-	-	-	-
WEARING APPAREL	2,394	2,395	743	2,530	628	0.25
PRIMACY FEE	2,895	2,715	-	3,000	-	-
BAD DEBT	-	-	-	-	-	-
Exceleron	-	-	-	22,800	-	-
Total Miscellaneous	$ 89,957	$ 123,592	$ 27,410	149,506	46,438	0.31
UTILITIES						
UTILITIES-ELECTRIC	107,901	154,814	33,688	178,592	40,777	0.23
UTILITIES-SEWER	1,560	2,853	893	3,535	1,172	0.33
UTILITIES-WATER	1,464	2,225	853	2,794	752	0.27
UTILITIES-TELEPHONE	1,656	2,466	414	3,295	608	0.18
Total Utilities	$ 112,580	$ 162,359	$ 35,848	188,216	43,309	0.23
CAPITAL IMPROVEMENTS						
INTEREST EXPENSE-COP 2017	-	-	-	-	-	-
1/2 COP PAYMENT NOVEMBER	238,014	243,056	243,056	243,056	-	-
1/2 COP PAYMENT MAY	60,496	57,904	-	62,734	-	-
One Ton Hoist	-	1,339	1,339	-	-	-
SLUDGE BLANKET SCADA MONITORS	32,250	-	-	-	-	-

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
Total Cap Improvements	$ 504,046	$ 302,299	$ 244,395	305,790	-	-
TOTAL EXPENDITURES	**$ 1,091,777**	**$ 975,410**	**$ 404,758**	**1,054,661**	**177,628**	
REVENUE OVER/(UNDER) EXPENDITURES	$ (239,433)	$ 97,089	$ (173,048)	138,966	107,566	
OTHER SOURCES	$ 195,000	$ -	$ -	-	-	
OTHER USES	$ 14,000	$ -	$ -	67,408	-	
(UNDER) EXPENDITURES & OTHER USES	**$ (58,433)**	**$ 97,089**	**$ (173,048)**	**71,557**	**107,566**	

522-SEWER RESERVE FUND

	2021-2022 ACTUAL	2022-2023 ACTUAL	YTD 2022-2023 JULY-SEPT	2023-2024 BUDGET	YTD 2023-2024 THRU 9/30/23	% OF BUDGET
REVENUES						
OTHER						
SEWER GRANT	-	-	-	892,000	19,604	0.02
Total Other	$ -	$ -	$ -	892,000	19,604	0.02
MISCELLANEOUS						
SUPER NOW INTEREST	94	3,134	334	84	-	-
Total Miscellaneous	$ 94	$ 3,134	$ 334	84	-	-
RESERVES FROM PRIOR YEAR	$ -	$ -	$ -	11,363	-	-
TOTAL REVENUES	**$ 94**	**$ 3,134**	**$ 334**	**903,447**	**19,604**	**0.02**
EXPENDITURES						
CAPITAL IMPROVEMENTS						
CAPITAL IMP-MANHOLE RELINING				-	-	-
BONE BRAKE SEWER MAIN PROJECT				-	-	-
I/I EVALUATION- ENGINEERING FEES				72,850	-	-
SEWER UPGRADES- Phase 2				850,505	19,800	0.02
HYDROVAC TRUCK				47,500	-	-
Total Cap Improvements	$ -	$ -	$ -	970,855	19,800	
TOTAL EXPENDITURES	**$ -**	**$ -**	**$ -**	**970,855**	**19,800**	
REVENUE OVER/(UNDER) EXPENDITURES	$ 94	$ 3,134	$ 334	(67,408)	(196)	
OTHER SOURCES	$ 14,000	$ -	$ -	67,408	-	
OTHER USES						
(UNDER) EXPENDITURES & OTHER USES	**$ 14,094**	**$ 3,134**	**$ 334**	**0**	**(196)**	

FISCAL YEAR 2023-2024 ACTUALS (as of 9/30/2023)

SUMMARY OF REVENUES & EXPENSES

Fund	Beginning Bal	Revenues	Expenses	Xfers In	Xfers Out	Ending Balance
501-ELECTRIC FUND	412,442	2,113,462	1,439,892	-	-	1,086,012
502-ELECTRIC D & R FUND	78,151	-				78,151
503-ELECTRIC RESERVE FUND	753,598	-	3,660	-	-	749,938
510-WATER FUND	736,051	226,823	179,955	-	-	782,919
511-WATER D & R FUND	210,299	-	-		-	210,299
512-WATER RESERVE	710,131	31,083	31,400	-	-	709,814
520-SEWER FUND	181,488	285,194	177,628	-	-	289,054
521-SEWER D & R	181,294	-	-	-	-	181,294
522-SEWER RESERVE FUND	108,672	19,604	19,800	-		108,476
TOTAL ALL FUNDS	**3,372,125**	**2,676,166**	**1,852,335**	**-**	**-**	**4,195,956**

**As of 09/30/2023 (Pending Transfers & Adjustments)

2022-2023 SUMMARY- COST OF POWER (rolling 12 months)

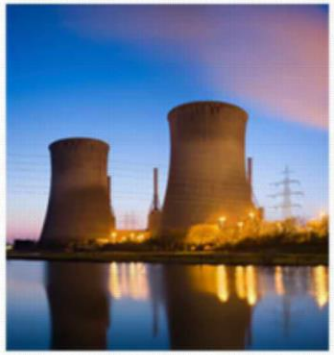
2022-2023	2022	2022	2022	2022	2022	2023	2023	2023	2023	2023	2023	2023	2023	
	August	September	October	November	December	January	February	March	APRIL	MAY	JUNE	JULY	AUG	
CAPACITY														
Peak Demand (MW)	12	11.3	7.5	9.1	7.5	10.9	10.3	8.9	6.8	8.7	12.3	12	12.7	
Day	3	20	18	17	27	30	1	13	6	31	29	28	21	
Hour	16	17	9	8	11	18	9	10	9	17	17	16	16	
Demand Costs														
Billed Demand (kW)	12,900	12,900	12,900	12,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	
Wholesale Demand Charge ($/kW)	10.4128	9.7991	9.3795	11.4912	9.7794	9.0919	10.4211	9.5566	9.6892	11.1092	10.5085	11.2721	10.6562	
Wholesale Demand Costs ($)	$ 134,325.22	$ 126,408.71	$ 120,995.15	$ 148,236.43	$ 135,933.31	$ 126,377.19	$ 144,853.21	$ 132,836.82	$ 134,680.38	$ 154,418.13	$ 146,068.26	$ 156,681.55	$ 148,120.78	
ENERGY														
Energy Costs														
Billed Energy & Losses (/kWh)	5,543,456	4,372,555	3,958,679	4,824,202	6,236,709	5,813,203	4,872,780	5,008,563	3,825,250	4,129,130	4,859,833	5,666,185	5,611,401	64,721,946
Billed Energy & Losses ($/kWh)	0.033945	0.029636	0.024332	0.028717	0.047635	0.027870	0.026290	0.021994	0.018773	0.022811	0.027868	0.028896	0.032717	
Wholesale Energy Costs ($)	$188,172.61	$129,585.04	$96,322.58	$138,536.61	$297,085.63	$162,013.97	$128,105.39	$110,158.33	$71,811.42	$94,189.58	$135,433.83	$163,730.08	$183,588.21	
POWER														
Wholesale Capacity & Energy Costs ($)	$322,497.84	$255,993.75	$217,317.73	$286,773.04	$433,018.95	$288,391.16	$272,958.59	$242,995.16	$206,491.80	$248,607.71	$281,502.09	$320,411.63	$331,708.98	
All-in Costs ($/kWh)	0.058176	0.058546	0.054897	0.059445	0.069431	0.049610	0.056017	0.048516	0.053981	0.060208	0.057924	0.056548	0.059113	
(does not include local transmission)														
LOCAL TRANSMISSION														
Peak (KW)	12,072.7	11,297.0	7,468.1	7,468.1	13,943.6	10,901.4	10,302.1	8,930.8	8,770.6	8,770.6	12,261.0	12,053.2	12,696.2	
Transmission Rate ($/kW)	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	5.02	5.02	5.02	5.02	5.02	
Total Transmission Cost ($)	$60,122.05	$56,259.06	$37,191.14	$37,191.14	$69,439.13	$54,288.97	$51,304.46	$44,475.38	$44,028.41	$44,028.41	$61,550.22	$60,507.06	$63,734.92	
FEBRUARY RELIEF														
Relief Payment	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	$19,572.57	
Sikeston and AECI True-Up	$35,669.50					$7,060.51	$0.00	$0.00	$0.00					
Reserve Funding												$13,967.00	$13,967.00	
TOTAL BILLED TO CITY	$402,192.46	$331,825.38	$274,081.44	$343,536.75	$522,030.64	$369,313.21	$343,835.62	$307,043.11	$270,092.78	$312,208.70	$362,624.88	$414,458.27	$428,983.48	$ 4,682,227
All-in Costs ($/kWh)	**$0.072553**	**$0.075888**	**$0.069236**	**$0.071211**	**$0.083703**	**$0.063530**	**$0.070563**	**$0.061304**	**$0.070608**	**$0.075611**	**$0.074617**	**$0.073146**	**$0.076449**	$0.072344
Change from prior year	0.0952	0.1365	0.1239	(0.0456)	0.3948	0.0463	0.1248	(0.0472)	(0.1621)	0.1139	(0.1688)	0.0233	0.0537	

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Challenges in the Energy System

Jim Robb, President and CEO
September 28, 2023

RELIABILITY | RESILIENCE | SECURITY

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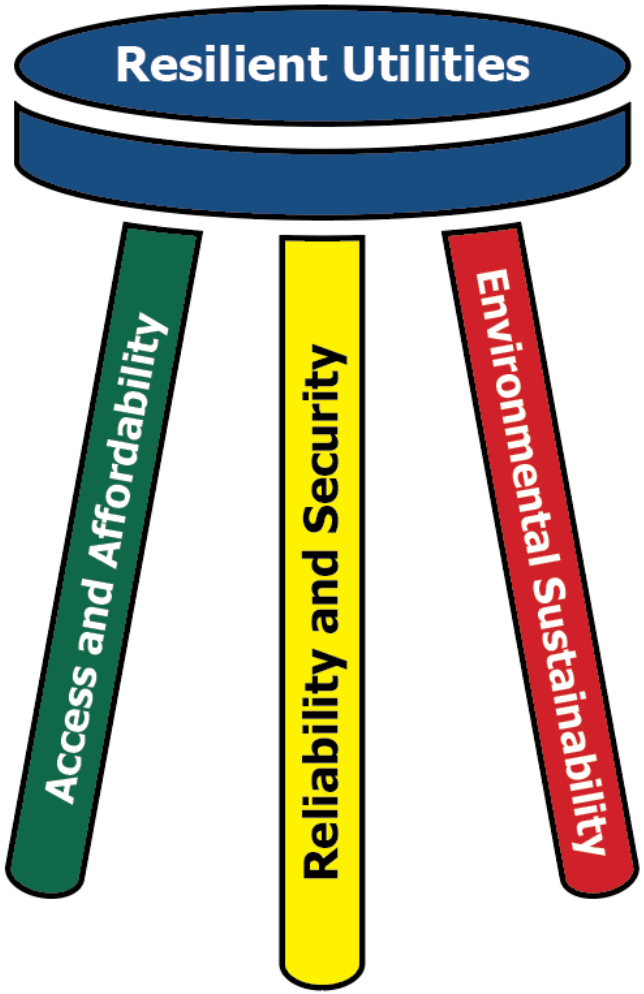
Policymaker's Tri-Lemma



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Risk Environment

Hyper Complex Risk Environment

- Rapidly changing resource mix
  - Retirements of traditional generation
  - Natural gas interdependencies
  - Inverter-Based Resource (IBR) integration
  - DER performance and visibility
- Extreme weather complexities
  - Extreme not infrequent
  - Broader deeper longer
- Energy & Environmental Policy
  - Electrification
  - Emissions
- Rapidly Evolving Threat Landscape
  - S/W vulnerabilities
  - Supply chain
  - Ransomware
  - Physical attacks

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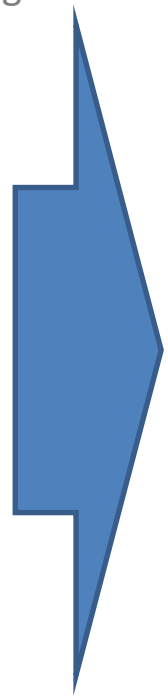

Reliability/Resilience/Security Concerns

- Fuel assurance/uncertainties
  - Natural gas
  - Renewables
- Loss of key “essential reliability services” with retirements
  - Inertia/frequency response
  - Reactive Power/voltage support
- Appropriate level of investment in infrastructure for hardening & resilience
  - Extreme weather
  - Coordinated Physical attack
- Expanding cyber attack surface
  - Industry Control Systems (ICSs)
  - IBRs/DERs/EV Charging
- Sophistication of recent cyber attacks
  - SolarWinds (one to many)
  - Pipedream, Industroyer malware

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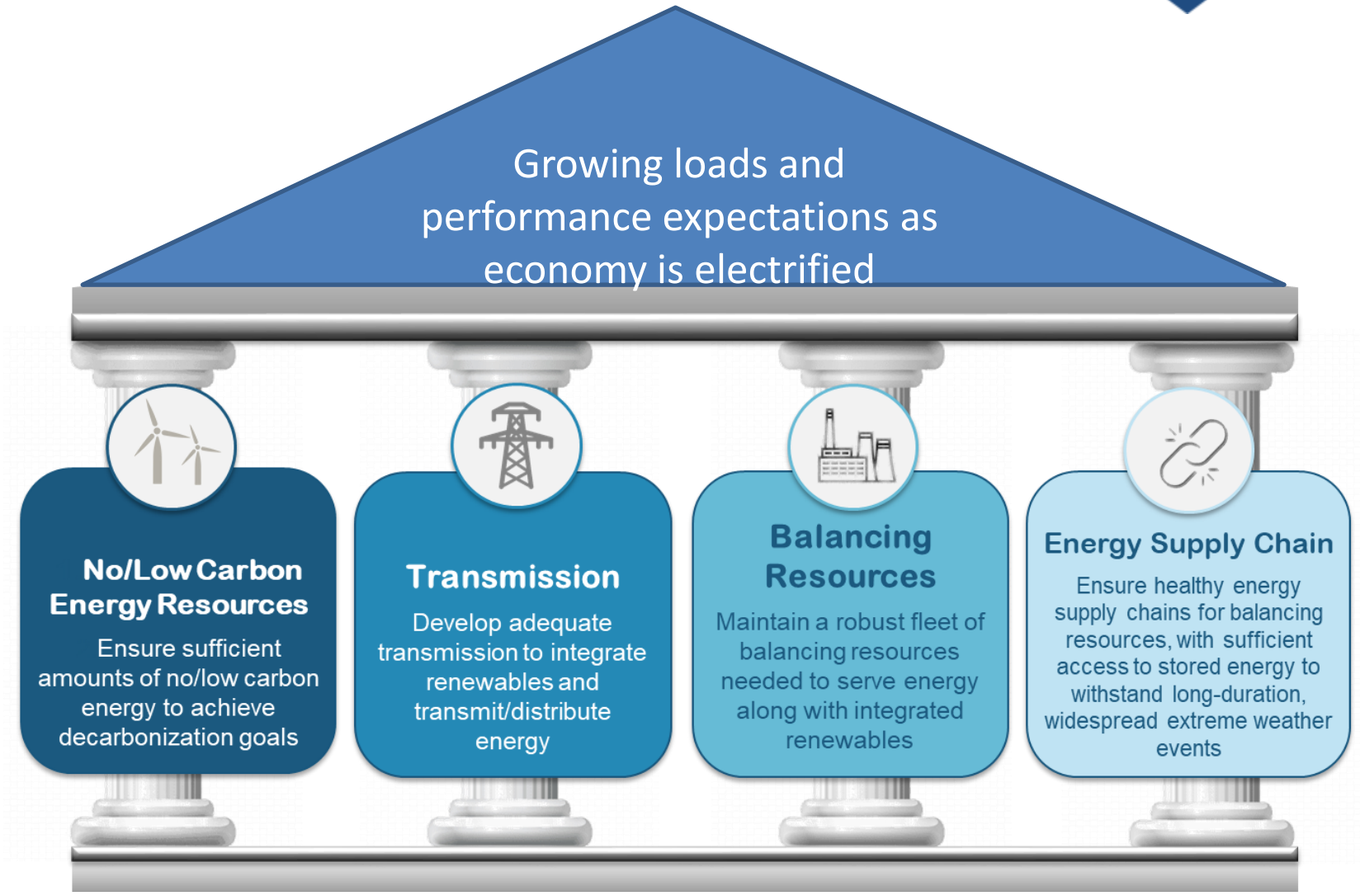
Four Pillars of the Energy Transition



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Questions and Answers

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Trends in Electric Rate Design

Which rate structures are right for your utility

Mark Beauchamp + Jill Jurczyk

Utility Financial Solutions, LLC

Opportunities and Challenges

Decarbonization

- Energy Efficiency
  - Objective: Reduce customer reliance on electricity
- Solar and Wind
  - Objective: Carbon free intermittence resource
- Energy Storage
  - Objective: system resiliency
- Transportation
  - Objective: Reduce reliance on oil
- Electrification of buildings
  - Objective: Reduce use of natural gas

Other Considerations:

- Grid Stability
- Regional Transmission Organizations

How are challenges managed and how do Utilities take advantage of opportunities?

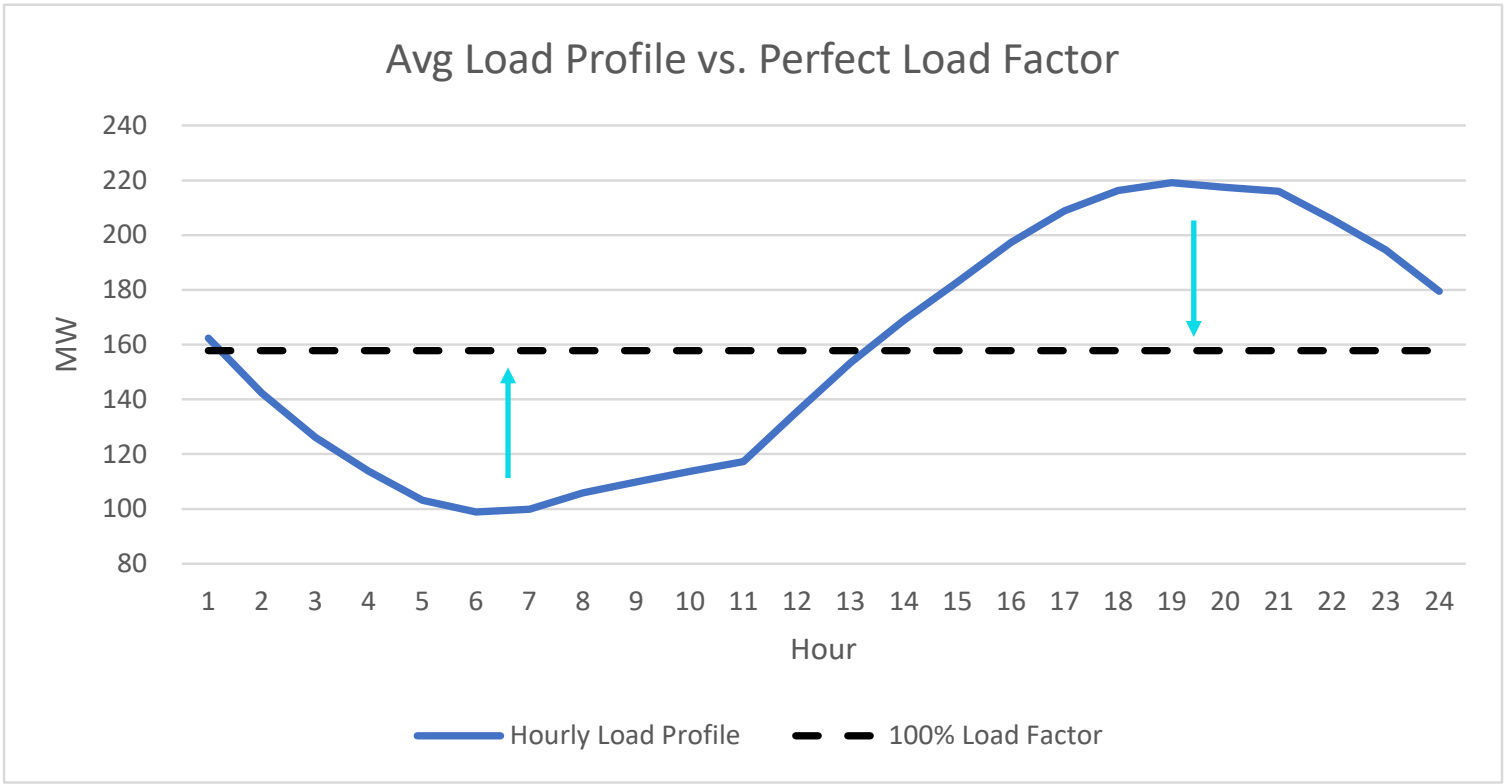
Historical Establishment of Rates

- Previously customers were placed into rate classes bases on similar usage patterns and customer requirements
    - Customer Load factors
    - When energy was used
    - Metering requirements
    - Service levels – Secondary/Primary/Sub-T
- Categories of Rates:
    - Residential; Commercial; Industrial

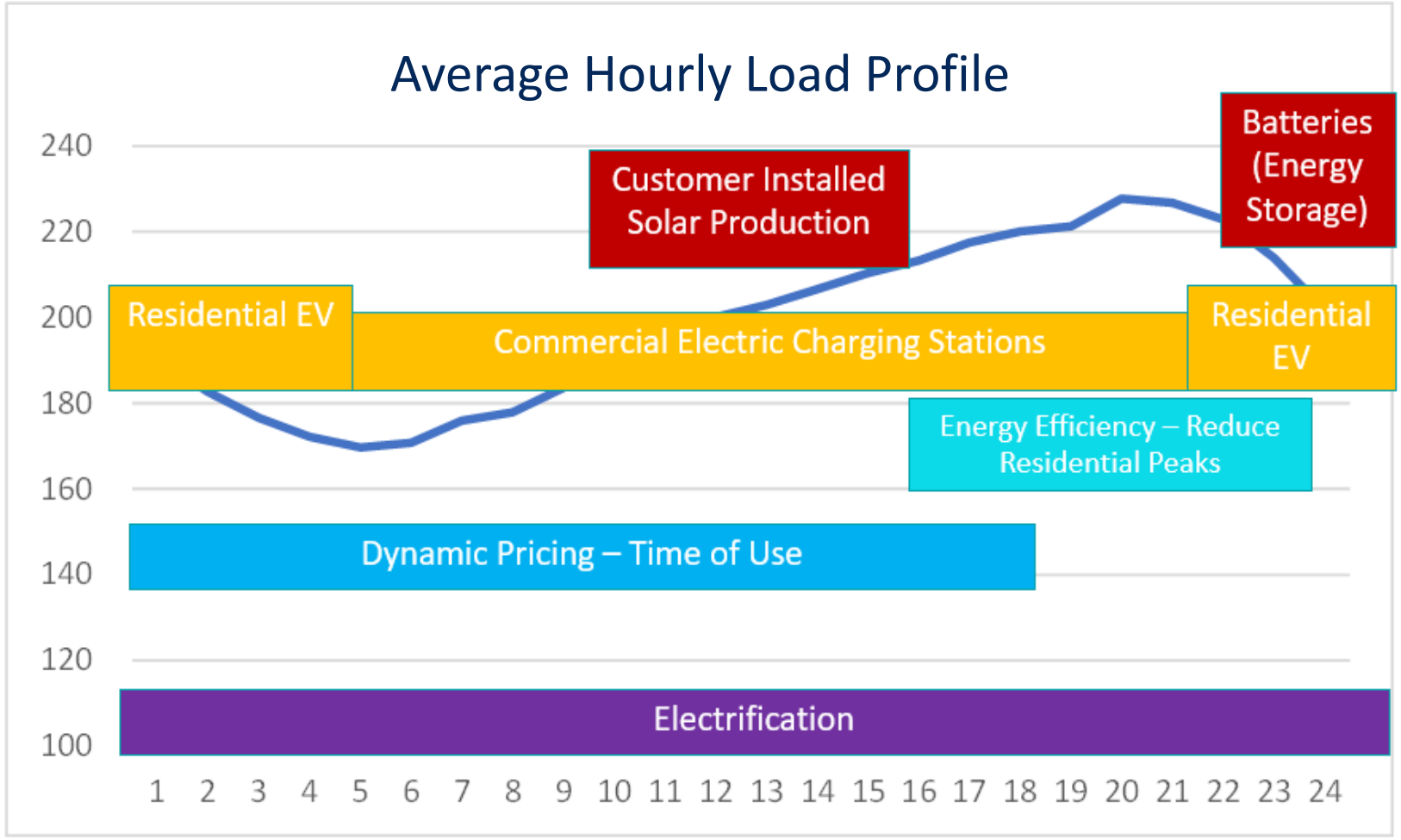
Customer usage patterns now vary substantially from class averages

Utility Objective

Improve Load Factor



Technology Impacts on Hourly System Usages



Major Rate Design Changes + Trends

- Demand Charges AMI required
- Dynamic Pricing (AMI required)
- Commercial EV Charging Station Rates
- Inverted block rate structures
- Customer charges based on size of service
- Rebate Programs for EE and Battery Storage
- Demand Side Interruptible Rates
- Marginal Power Supply Rates for New Large Loads

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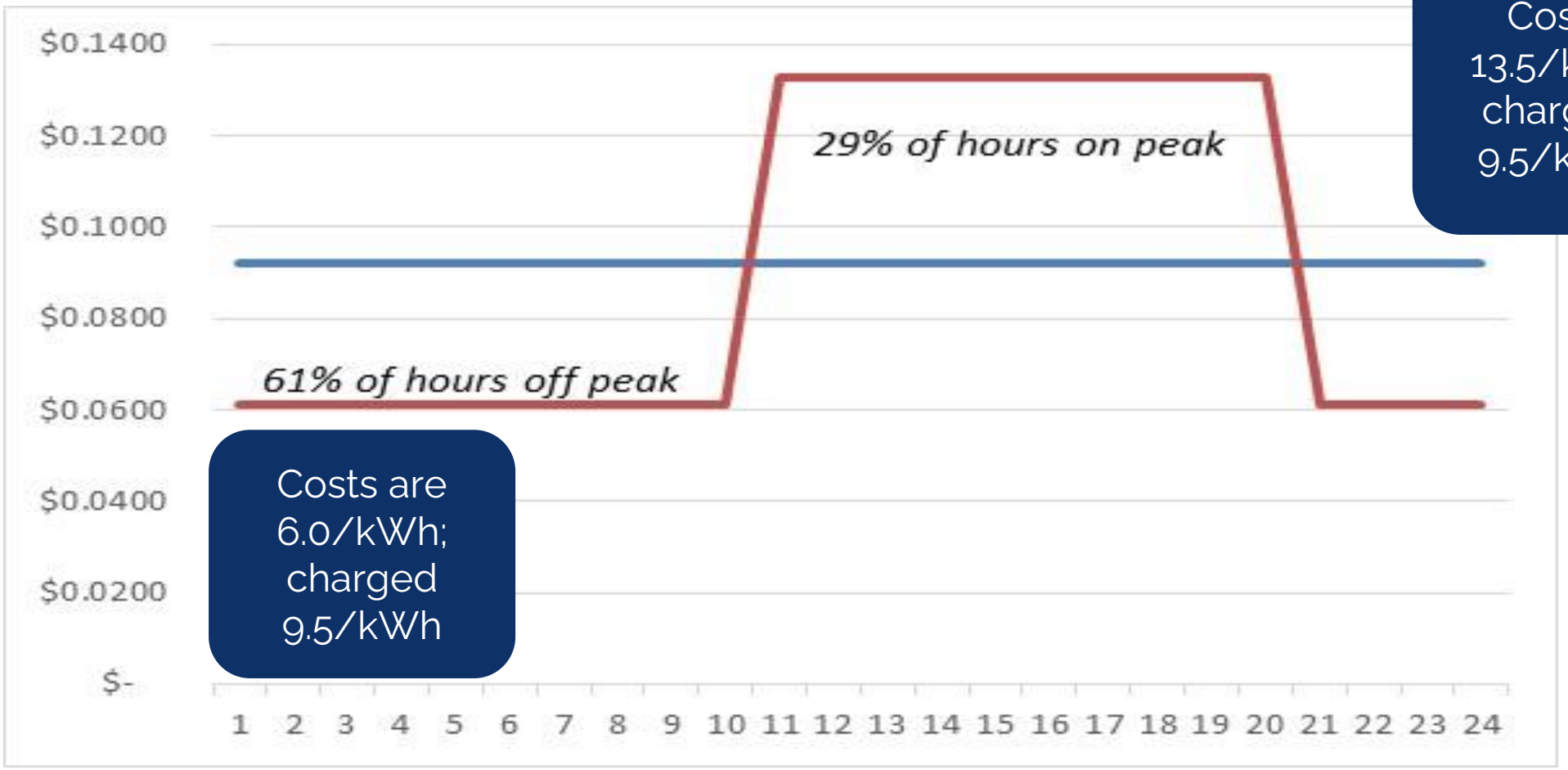
Modernizing Rate Structures

Utility Costs Compared to Rates

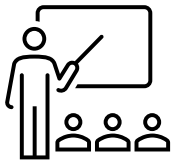


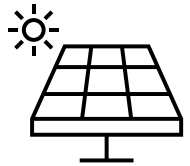
Costs 13.5/kWh charged 9.5/kWh

Costs are 6.0/kWh; charged 9.5/kWh

Concerns About Time Differentiated Rates

- Investment needed for AMI, database management and billing system
- Customer education (Acceptance of rate?)
- Customer bill impacts?
- Will solar customers benefit or be adversely impacted?
- Do we have the technology in place for billing?
- Should we offer a PILOT program to work out any potential issues?




Time of Use is Becoming the Standard

Why? As of 2020 EIA data…

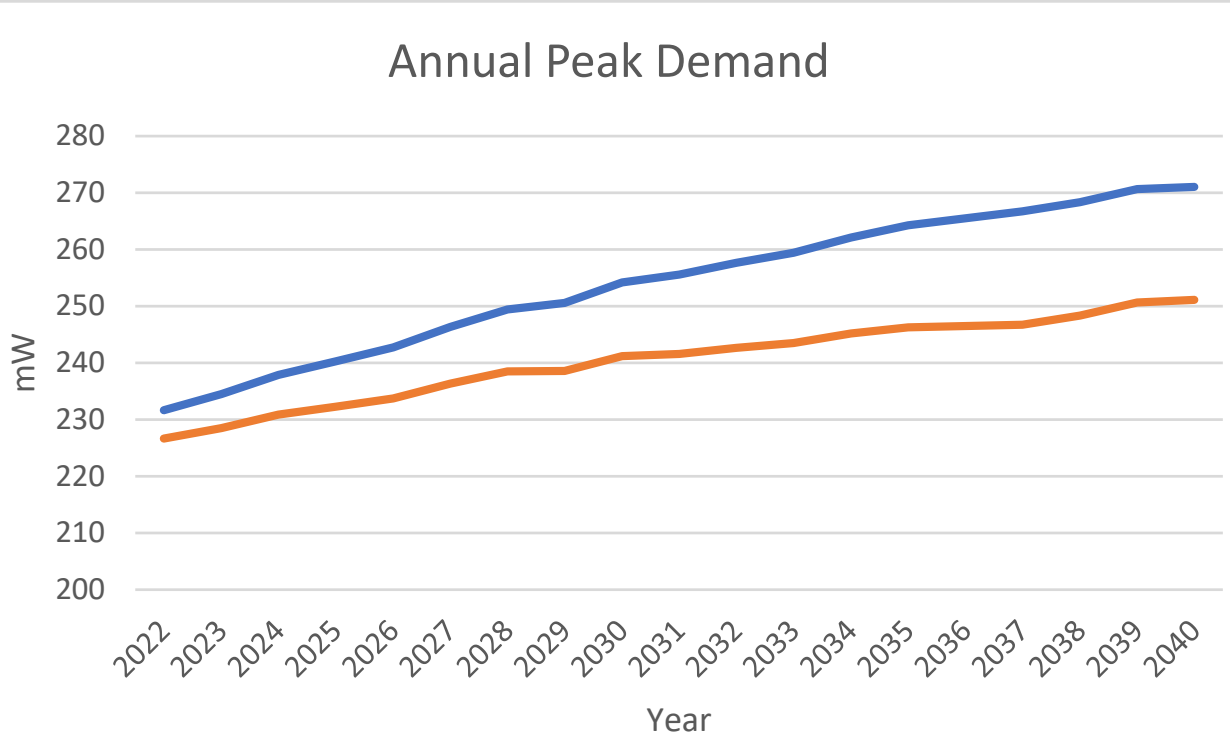
- 73% of residential customers have AMI metering
- 13% of utilities currently offer TOU pricing to residential
- 8% of residential customers are on time-based rates

What will time based rates do for utilities?

- Improve system load factors
- Promote electrification
- Reduce peak demands
- Lends itself to decarbonization

Potential Capacity Reductions

TOU vs Non-TOU



TOU vs. Non-TOU Rate

Residential rate differential -

on peak = 2x the off peak

Mandatory residential TOU program

Potential capacity reduction from TOU could be 20 MW, likely greater

Blue Line: Projected Peak (no TOU)

Orange Line: Projected Peak (with TOU)

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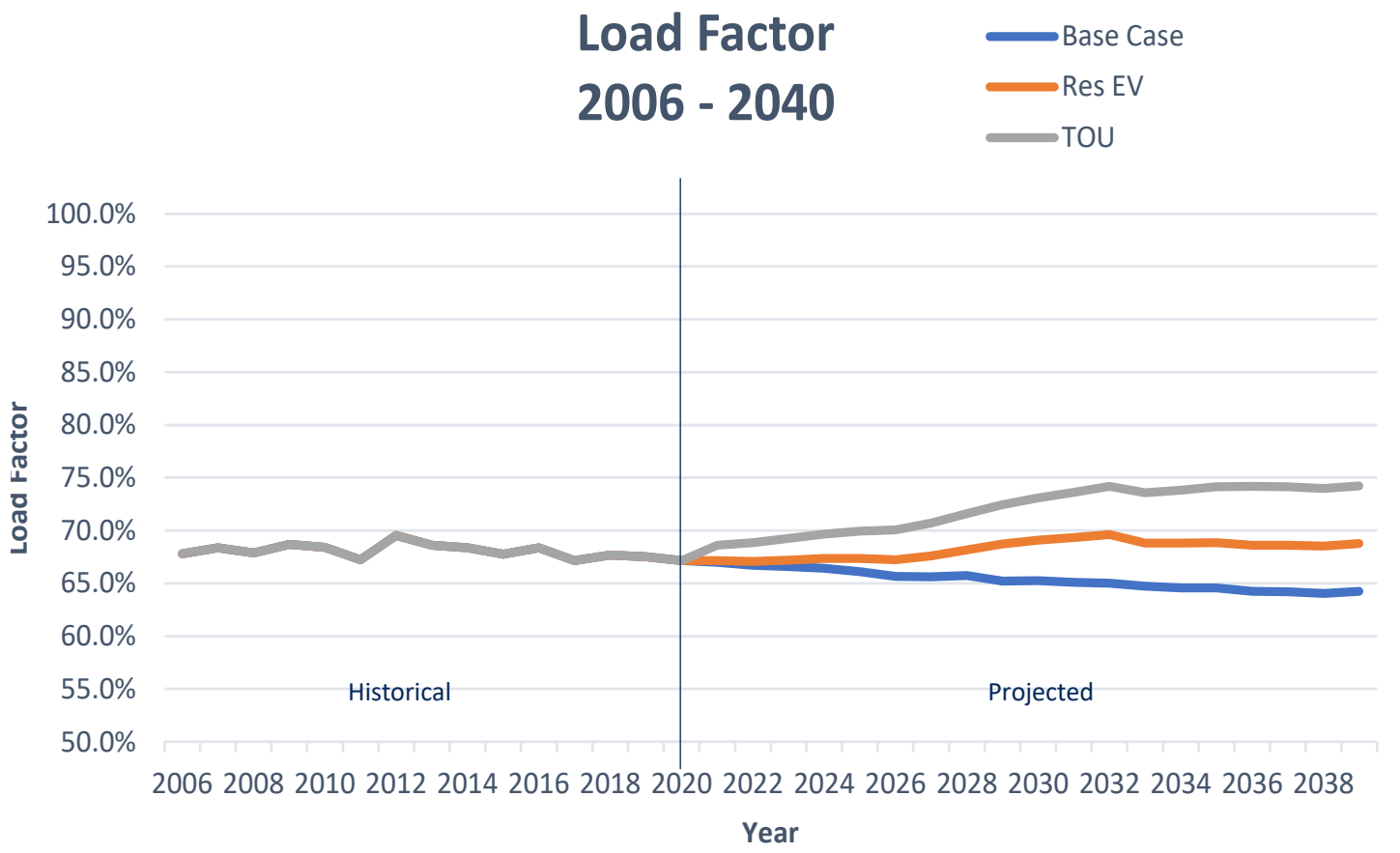
System Load Factor Improvements



- Improving system load factors reduces power supply cost for all customers
- Better use of substations, transmission system and generators
- Shifting usage to off peak time periods reduces the need for future capacity

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Residential Considerations in Future Rate Designs

- Short term - Creation of three residential rate options for customers
  - Standard residential rate
  - EV time of use rate
  - Residential time of use rate
- Long term – One residential time of use rate
- Demand charges may be several years away

Implementation of Time-Based Rates
Residential

Suggestions:

- Full implementation of Time of Use rate for residentials with electric vehicles
- Phase in for Residential Customers

✓ Develop a Long-Term Transition Plan

Rates	Current	Phase One	Phase Two	Phase Three
Monthly Facilities Charge:				
Single Phase	$ 15.50	$ 15.50	$ 15.50	$ 15.50
Three Phase	$ 27.75	$ 27.75	$ 27.75	$ 27.75
Energy Charge:				
Power Supply On-Peak Energy	$ 0.09800	$ 0.11900	$ 0.14000	$ 0.16100
Power Supply Off-Peak Energy	$ 0.09800	$ 0.09100	$ 0.08400	$ 0.07700
Revenue from Rate	$ 2,281,638	$ 2,281,139	$ 2,280,640	$ 2,280,141
Change from Previous		0.0%	0.0%	0.0%
Average Increase		**2.0%**	**1.9%**	**1.9%**
Average Decrease		**-2.1%**	**-2.2%**	**-2.3%**

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Getting the Wheels In Motion for EV Rates

Topics

- Commercial Installed Charging Stations
- Utility installed charging stations
- Residential Home Charging

- Other considerations
  - Load Management
  - Installation Costs

Growth of Electric Vehicles Depend on:

- Availability of **working** Charging Stations
- Time to charge vehicles
- Cost of Vehicle
- Cost of Electricity
- Cost of Upgrades to homes or commercial stations for Charging

How do Residential EV's Impact Electric Sales?

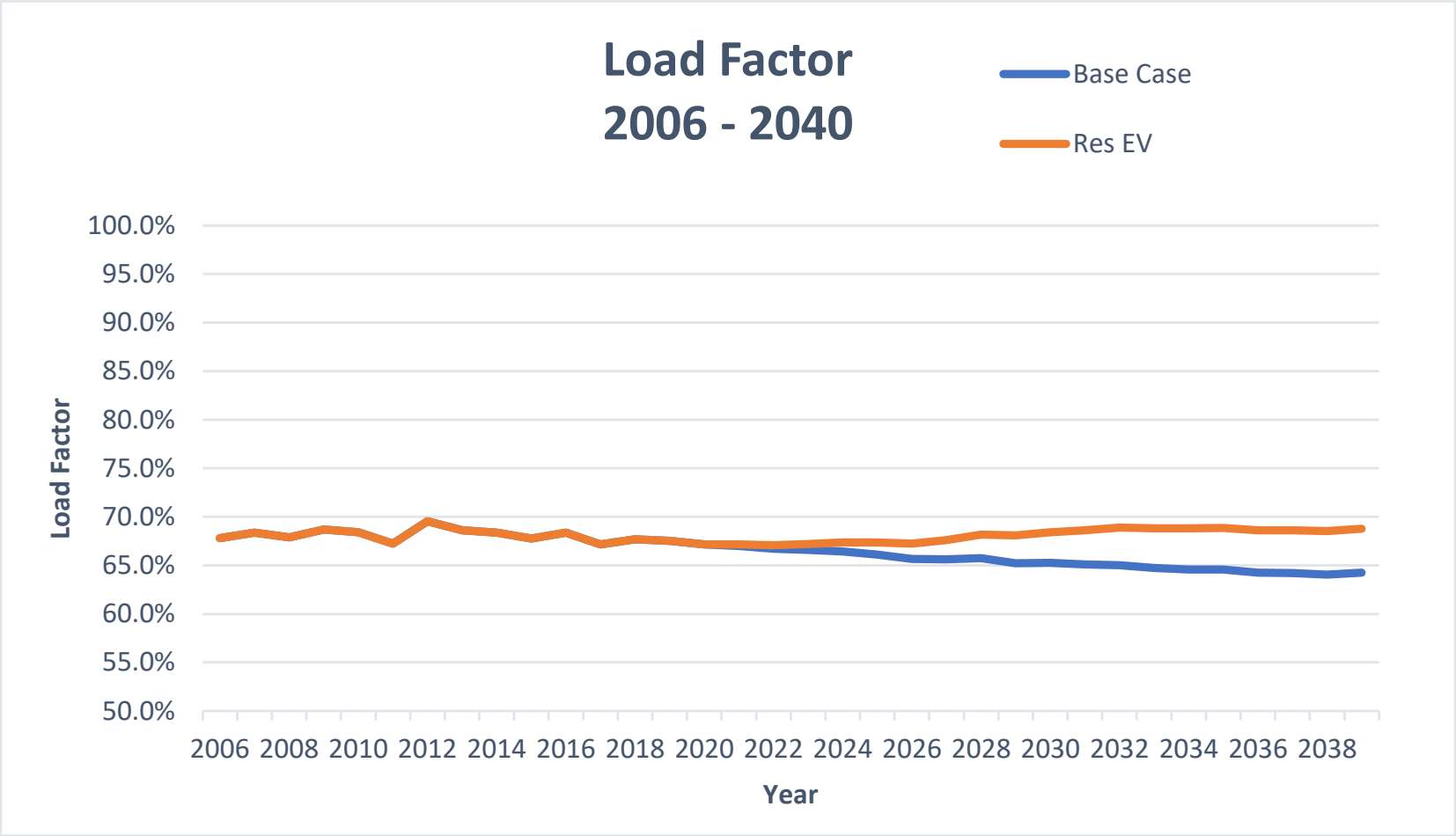
- kWh's per vehicle: (1 mile = 0.25 kWh)

Annual Miles	kWh's	Number of homes	Additional kWh Sales
15,000	3,750	1,000	3,750,000
10,000	2,500	1,000	2,500,000
5,800	1,450	1,000	1,450,000

- Additional 300 kWh/month per residential home
- EV's are projected to represent between 25% - 50% of new car purchases by 2030

Transportation is projected to account for 21% of electric sales by 2050

Residential EV's will Improve System Load Factors If provided correct incentives



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Charging Station Characteristics

Level 1 – (1 to 2 kW)

Level 2 – Homeowner, commercial & utility owned (6 to 20 kW)

DC Fast Charger – (50kW - 350kW)

- Commercial charges tend to be low load factors, often less than 10%
  - Very sensitive to demand charges
  - May need substantial distribution investments

Load Factor and Average Cost

Relationship to Rate Design

Demand Charge	$	15.80
Energy Rate	$	0.084

Load Factor		Average Cost per kWh
5%	$	0.52
10%	$	0.30
20%	$	0.19
40%	$	0.14
60%	$	0.12

Infrastructure	Basis for Charge
Power Supply	Customers contribution toward Peak
Transmission	Customers contribution toward Peak
Sub-Transmission	Customers contribution toward Peak
Distribution	Customer Peak

- Rates tend to be developed based on class averages
- The load factor of car charging stations often results in greater diversity and may result in charging rates above costs when based on the general service rate tariff

Commercial/GS Charging Station Rate Tariff

Rate Component	General Service Rate Tariff	EV Charging Rate Tariff
Customer Charge	$ 40.00	$ 40.00
Demand Charge (per kW)	$ 15.80	$ 2.30
Power Supply	9.00	-
Transmission	3.00	-
Sub-Transmission	1.50	-
Distribution	2.30	2.30
Energy Rate (per kWh)		
Off Peak	$ 0.084	$ 0.060
On Peak	0.084	0.167
Critical Peak	0.084	0.234

Load Factor	General Service Rate Tariff	EV Charging Rate Tariff
5.0%	$ 795	$ 322
10.0%	$ 917	$ 512
20.0%	$ 1,163	$ 893
40.0%	$ 1,653	$ 1,653
60.0%	$ 2,144	$ 2,414

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Line Extension Policy (CIAC)

What is Line Extension (CIAC)?

- Line extension is the amount a new customer would contribute for the extension of service
- Also referred to as “Contribution In Aid of Construction”

Having a policy answers the question

“What should the Utility pay and what should the customer pay?”

Line Extension Observations

- Some Public Power Systems follow extension policies of Investor-Owned Utilities and are not reflective of the public utility's objectives or costs
- Many polices were determined arbitrarily or designed to achieve objectives defined many years ago, often results in un-economical investments made by utility
- Line extension policies may be updated periodically, but methodology is rarely changed

Assessment of Existing Polices

- Does your line extension policy benefit all customers and fair to new customers?
- Is policy consistent with community objectives?
- Does the staff understand the policy?
- Are the economics periodically reviewed?

Assessment of Existing Polices

Electric Services			
Residential & Apt. Service	$	952	per customer connection
Residential & Apt. Service Space Heating	$	1,485	per customer connection
Residential & Apt Heat Pump	$	1,967	per customer connection
Residential Combined	$	1,127	per customer connection
Reduction per KW of installed Solar Generation	$	114	per customer connection
Small General Service	$	0.0800	per KWh X total annual kWh's
Demand Metered Combined	$	12.21	per KW X total annual kW's
Developer Contribution	$	675	Per Lot
Customer Extension Portion	$	400	In Development, per lot

To Avoid Rate Challenges…

- Have a defendable cost of service study that is based on marginal cost
- Provide a reasonable rate transition plan
- Base policies on defendable assumptions
- Ensure pole attachment fees are based on FCC
- Develop PURPA rates based on avoided cost

Questions

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Opportunities and Challenges

- Define short term and long term goals
- Assess how technology can be leveraged to meet goals
  - Improve Load Factor
- Future Rate Considerations:
  - Time of Use
  - Electric Vehicle Charging – Residential and Commercial
  - Line Extension

Maximizing the Value of Distributed Energy Resources

Virtual Peaker

Prepared for:
MPUA Annual Conference

Agenda

- Current Trends & Challenges
- Landscape of Approaches to DSM
- DSM Programs & Their Success
- Summary
- Q/A

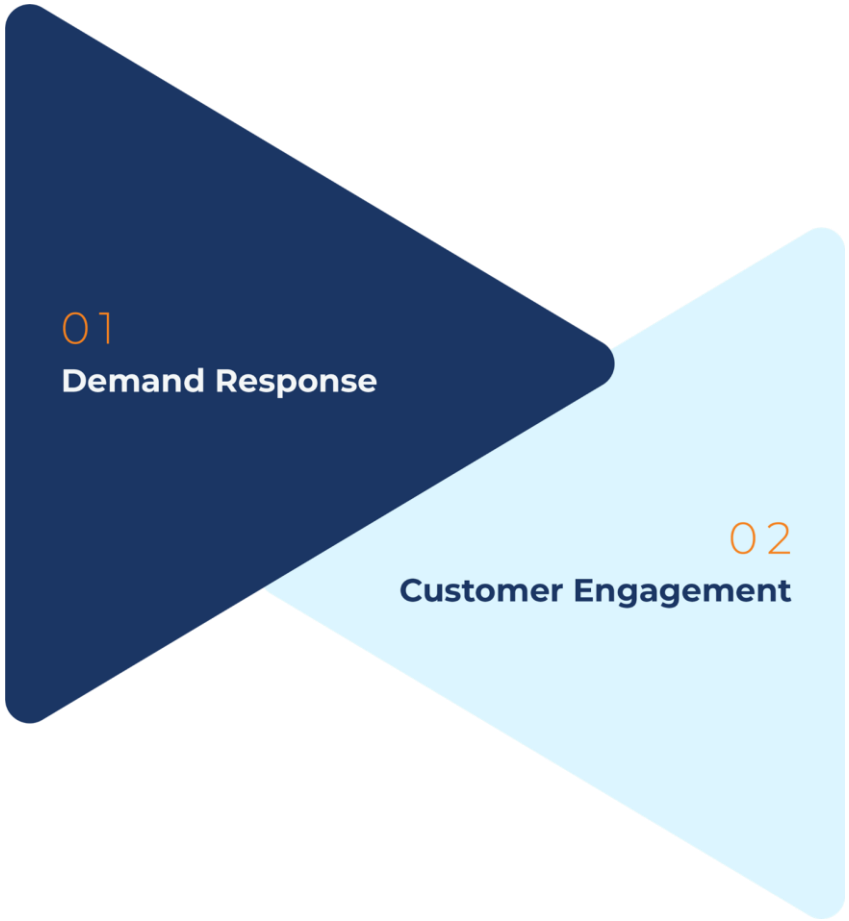
Current Trends

- **Distributed Energy Resource (DER) adoption + proliferation of smart technologies**
  - Landscape of devices/tech constantly changing
  - Leverage DERs for peak load management
- **Avoidance of new investments in generation + T&D upgrades**
  - Retirement of traditional generation sources
  - Alleviate pressure to upgrade T&D infrastructure
- **Market dynamics**
  - Allow consumers to adjust usage based on price signals
  - Offer DR capacity as a resource

Challenges

Risk of Misalignment

Clear expectations for customers and ongoing engagement leads to persistent program participation and load shedding, shifting, and shaping



Challenges

Demand Response & Customer Engagement: Two Opposing Forces

- **Demand Response**
  - Measureable
  - Well Trodden-Trail
  - Risky with Poor Customer Experience
- **Customer Engagement**
  - Vague / “Soft” Concept
  - Tough to Measure
  - Utilities not Historically Well-Equipped

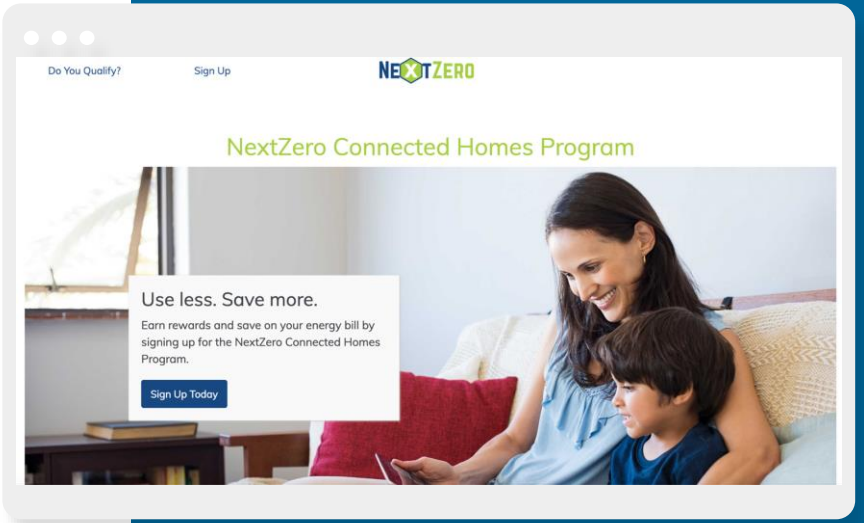
Providers that manage DERs are structured to meet different needs for different audiences.

	Developer	Implementer	Utility with SaaS
Leading Entity	• Launch time slower due to custom software development • Limited integrations (since each is custom) • Works well with larger utilities with substantial IT support	• Offers Turnkey Solution • Works well when expanding on existing program sets (such as Energy Efficiency) • Increased personnel requirements on the vendor side • Works well with organizations with more budget than personnel resources	• Quickest launch, easy to iterate • Customer-driven: the most devices types • Utility owns the customer relationship • Works well with utilities that want their personnel managing the program
Target audience	You have a vision for how you want this done and other approaches aren't reaching your end goal.	You want insights from the standard approach and don't want to spend too much time and effort on this work.	You know your challenges, your customers, and you want your staff to do this work directly.

Massachusetts Municipal Wholesale Electric Company

▸ Joint Action Agency managing a multi device DR program for all 12 member utilities

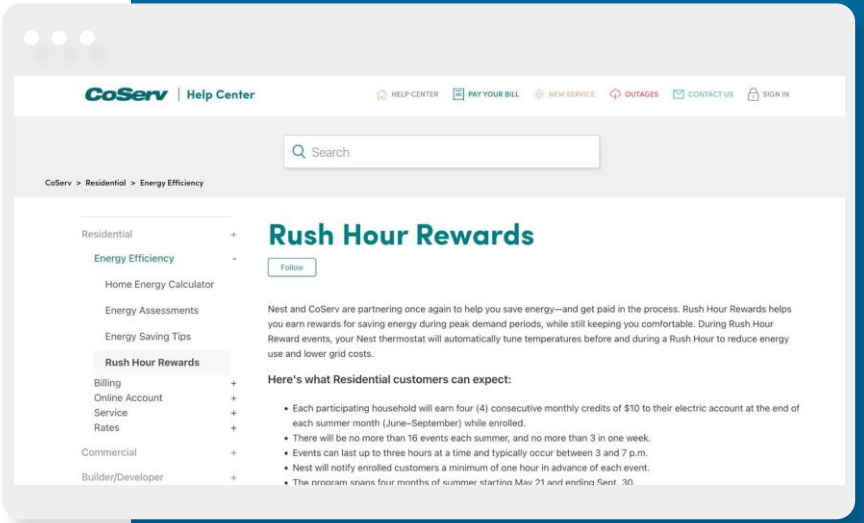
- Thermostats, HWH, EV chargers, mini split systems, residential batteries, and behavioral DR
- Using multi layered grouping for dispatch and customer data management
- $60 bill credit enrollment incentive + up to $30 annually for ongoing participation



CoServ's Rush Hour Rewards Program

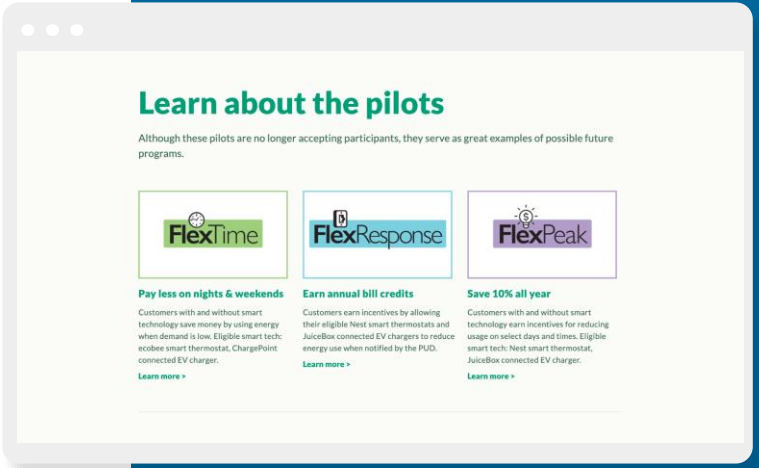
▸ **One of the largest rural electric cooperative thermostat-based DR programs in the US**

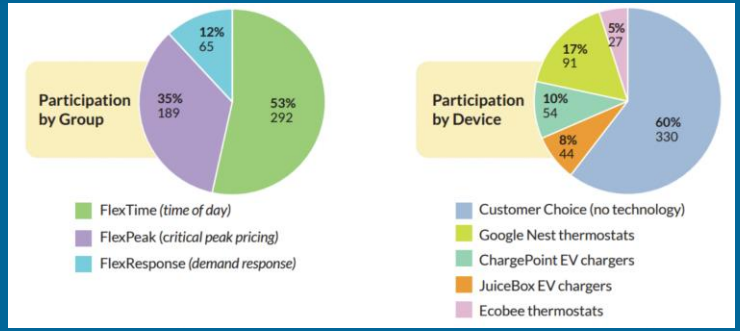
- ~20,000 active Google Nest devices
- Shifting ~22 MW of load during summer events
- Leveraging Virtual Peaker's Envision forecasting suite to make informed decisions about dispatch
- Uses customer auto-approval to scale program management seamlessly and easily
- Focused on manual DR signals, but looking towards price-based dispatch using the ERCOT real-time market



SnoPUD's FlexEnergy Pilots

- **Multiple programs managed in one place: TOU rate optimization, peak shaving, and behavioral demand response for EVs and thermostats**
  - Customer choice of rate design and device; enrolling thermostats, electric vehicle chargers, or simply receiving in behavioral notifications
  - Consolidated and simplified behavioral and device-control demand response events
  - CIS system integration for semi-automated customer enrollment review
  - During the winter season, FlexEnergy customers shifted a total of 43 megawatt hours of energy





DSM programs are a powerful tool for municipalities to harness the benefits of connected devices.

- With various rapidly evolving industry trends, selecting an adaptable and future-proofed approach to DSM is essential.

- Customer education and incentivization is key to successful program management and results.

- Numerous utilities nationwide are currently implementing effective demand response initiatives to shift load, reduce costs, and connect with consumers.

New Utility Service Requests for Water and Sewer Outside City Boundaries

1. Require an irrevocable petition to annex if adjacent to city boundaries, or
2. If property owner chooses to not annex, water and sewer rates are 1.5X, and:
    a. Require new out of city customers to pay 100% of the cost to physically extend service to their residence.
    b. The City Administrator shall have the authority to approve or deny a request for water and sewer service outside the city boundaries.
        i. City reserves the right to deny service if it is determined the cost of maintaining the services and/or servicing the account is not fiscally responsible for the City. For example, if a new subdivision of four houses wants water service a mile from our nearest tap, even if they pay to run the main, we might not feel it is fiscally responsible to maintain a mile of pipe for four houses, thus we may deny the request or we may enter into a contract with the homeowners getting it in writing that it is their responsibility to maintain the line and treating it like a mile-long service tap.
    c. All requests for water and sewer service must be in compliance with any existing Missouri State Statute or other Missouri Law regarding territorial or jurisdictional boundaries for municipal or other utility services.

Electric service territory changes that affect municipal utilities

by Terry M. Jarrett, Healy Law Offices

In 2021, Governor Parson signed into law HB 734, which made several changes to the process surrounding disputes of the electric service territories between municipal utilities, rural electric cooperatives, and investor-owned utilities.

The last major rewrite of the requirements for the transfer of electric service territories between electric service providers was in 1991. The requirements laid out in the 1991 law worked well for many years, but by 2021, territorial disputes between electric service providers began to increase, so much so that complaints to the state legislature generated support for changes to make the process fairer. The interested parties began negotiations to improve the law, which led to a compromise and HB 734 was adopted and became law.

It is important for municipal utilities to be acquainted with these changes because they altered the process that utilities must utilize to make changes to service territorial boundaries, service to existing structures after annexation, purchase by a municipal utility of a rural electric cooperative's facilities in an annexed area, and other items. Following is a summary of the changes:

Territorial Agreements. Perhaps the most important changes wrought by HB 734 affect territorial agreements between electric service providers, especially in municipal annexations where another electric supplier currently is not providing permanent service to a structure. Under the prior law, that area became the exclusive service territory of the municipal utility. Under the new law, if a rural electric cooperative has existing electric service facilities in the area proposed to be annexed, the majority of the existing developers, landowners, or prospective electric customers in that area may, anytime within forty-five days prior to the effective date of the annexation, submit a written request to the governing body of the annexing municipality to invoke mandatory good faith negotiations as provided in the bill. These provisions shall also apply in the event an electrical corporation rather than a municipally owned electric utility is providing electric service in the municipality.

The new law includes a "Mandatory Good Faith Negotiations Process":

The negotiation period is 45 days. In such negotiations the following factors shall be considered, at a minimum:

1. The preference of landowners and prospective electric customers;
2. The rates, terms, and conditions of service of the electric service suppliers;
3. The economic impact on the electric service suppliers;
4. Each electric service supplier's operational ability to serve all or portions of the annexed area within three years of the date the annexation becomes effective;
5. Avoiding the wasteful duplication of electric facilities;
6. Minimizing unnecessary encumbrances on the property and landscape within the area to be annexed; and
7. Preventing the waste of materials and natural resources.

If the municipally owned electric utility and rural electric cooperative are unable to negotiate a territorial agreement within forty-five days, then they may submit proposals to those submitting the original written request, whose preference shall control. The governing body of the annexing municipality shall not reject the petition requesting annexation based on such preference. This does not apply to municipally owned property in any newly annexed area. (*Section 386.800.2, RSMo.*)

Service to Existing Structures. Under the old scheme, if a retail electric supplier was providing service to a structure located within a municipality that was previously a rural area, and the structure was demolished and replaced by a new structure, the municipal utility had the right to provide electric service to the new structure. Under the new law, if a retail electric supplier is providing service to a structure located within a municipality that was previously a rural area, and the structure is demolished and replaced by a new structure, **the retail electric service supplier may provide permanent service to the new structure upon the request of the owner of the new structure.** (*Sections 91.025 and 394.315, RSMo.*)

Purchasing co-op facilities in annexed areas. When a municipal utility is purchasing a rural electric cooperative's facilities in an annexed area, the new law provides a formula for determining the fair and reasonable compensation for the purchase. HB 734 changes the term "fair and reasonable compensation" to **200%,** rather than 400% of gross revenues less gross receipts taxes received by the affected electric service supplier from the 12-month period preceding the approval of the municipality's governing body. This potentially lowers the purchase price for municipal utilities of the rural electric cooperative's facilities. (*Section 386.800.6(3), RSMo.*)

Settling Disputes at the Public Service Commission. HB 734 also made changes relating to the process when the municipal utility and the rural electric cooperative are unable to reach an agreement on the purchase. In the event the parties are unable to reach an agreement, within sixty days after the expiration of the time specified for negotiations, the municipally owned electric utility **or the affected electric service supplier** may apply to the commission for an order assigning exclusive service territories within the annexed area and a determination of the fair and reasonable compensation amount to be paid to the affected electric service supplier. The change makes it clear that either the municipal utility or the rural electric cooperative can apply to the commission. (*Section 386.800.7, RSMo.*)

Public Service Commission jurisdiction not expanded. Historically, The Public Service Commission has had little regulatory authority over municipal utilities and rural electric cooperatives. A provision was added to HB 734 clarifying that nothing in the bill expands Commission jurisdiction over municipal utilities and rural electric cooperatives. Nothing in HB 734 shall be construed as otherwise conferring upon the Public Service Commission jurisdiction over the service, rates, financing, or management of any rural electric cooperative or any municipally owned electric utility. (*Section 386.800.9, RSMo.*)

Definition of Rural Area. HB 734 included a change to the population limit for the definition of a "rural area." In the old law, the population limit was 1,500, where it had been since the 1930s. Now, the current limit is **1,600, and it will be increased by 6% every 10 years after each census beginning in 2030**. (*Section 394.020, RSMo.*)

Clean Up Provisions. HB 734 contained a few clean-up provisions, including changing the term "a rural electric cooperative" to an "electric supplier" in the definition of "structure" or "structures" to make clear that it can also include municipal utilities and investor-owned utilities. (*Section 394.315, RSMo.*)

The changes contained in HB 734 have been in effect for almost two years, and by all accounts, they appear to be successful in dealing with territorial disputes between electric providers. If you have any territorial disputes with another electric provider, consult with your attorney to determine your rights under the law.

###

Terry M. Jarrett is an attorney with Healy Law Offices, and is a nationally recognized leader in energy, utility, and regulatory issues. Jarrett formerly served as a Commissioner on the Missouri Public Service Commission. Before serving the Missouri PSC, he was Chief Legal Counsel to Missouri Governor Matt Blunt.