



**City of Grand Island**  
**Tuesday, July 13, 2021**  
**Council Session/Budget Work Session**

**Item -2**

**Presentation of Utilities Department Budget for Fiscal Year 2021-2022**

**Staff Contact: Timothy Luchsinger**

# **Council Agenda Memo**

**From:** Timothy Luchsinger, Utilities Director  
**Meeting:** July 13, 2021  
**Subject:** Presentation of the Utilities Budget for 2021 – 2022  
**Presenter(s):** Timothy Luchsinger, Utilities Director

## **Background**

The recently completed Cost of Service study for the Electric Utility will be presented, followed by the proposed budgets for Electric Utility Enterprise Fund 520 and Water Utility Enterprise Fund 525 for the City's Fiscal Year 2021-2022 by Department management and financial staff.

## **Discussion**

This study and the budgets will be presented for preliminary discussion by Council.

## **Conclusion**

This item is presented to the City Council in a Study Session to allow for any questions to be answered and to create a greater understanding of the issue at hand.

It is the intent of City Administration to bring this issue to a future council meeting for the Council's consideration.

# Electric Cost of Service / Rate Design Study

Grand Island City Council  
July 13, 2021

Presented by:  
John A. Krajewski, P.E.



## Overview of Presentation

- Introduction
- Projected Financial Results
- Cost of Service
- Rate Design
- Comparisons to City's Peer Group
- Recommendations



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## Background

- Grand Island Utilities Department (GIUD or Utility) last completed Electric Cost of Service / Rate Design Study in 2018
- Several changes since 2018 have occurred
  - Refinancing of outstanding debt
  - Risk factors associated with events like February 2021 weather
  - Need to ensure adequate reserves while funding operating costs and capital project needs



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## Purpose of Study

- Review financial performance
- Develop rates that reflect the cost of service and accomplish other goals established by the Utility
  - Rates that are competitive
  - Rates that provide sufficient revenues to cover projected operating expenses
  - Rates that reflect the cost of service for each rate class



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## Projected Financial Results

- Purpose
  - Compare revenues and expenses for current budget and future years through FY 2025
  - Determine need for future rate increases
- On a cash basis, deficits are projected to increase from \$4.2 million in FY 2021 to \$10.5 million by FY 2025
- Debt service coverage is in excess of that required by bond indenture



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## Projected Financial Results

- Projections are subject to uncertainty
  - February 2021 event with day-ahead energy prices of more than \$2,000/MWh illustrate potential volatility in markets
  - Recent increases in material and labor costs may be indicator of future inflation



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## Cost of Service

### ■ Purpose

- Determine which rate classes cause the Utility to incur costs
- Compare cost of service to revenue under existing rates
- Determine need for rate changes
  - By rate class
  - By season



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## Cost of Service

### ■ Findings

- Customer-related costs are higher than existing customer charge
- In general, all rate classes need rate increases for revenues to reflect the cost of service



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## Rate Design

- Goals

- Long-term financial integrity
- Fair, reasonable and non-discriminatory rates
- Competitive rates compared to City's peer group
- Encourage use during low cost periods
- Discourage use during high cost periods
- Recognize cost of service for each rate class and season



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## Rate Design

- Proposed changes to rate design

- Increase customer charges for most rate classes
  - This issue was identified in the 2018 COS Study
  - Residential customer charge would increase from \$8.00 to \$10.00 in FY 2022
- Remaining increases recovered from energy charges

- Typical Residential bill would increase \$2.73 in October 2021 and \$2.80 in October 2022



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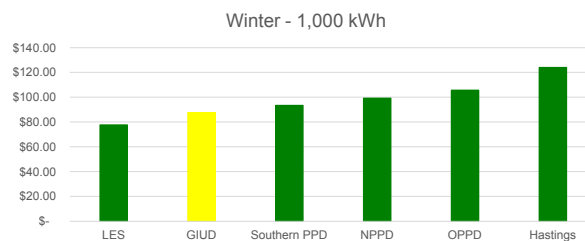
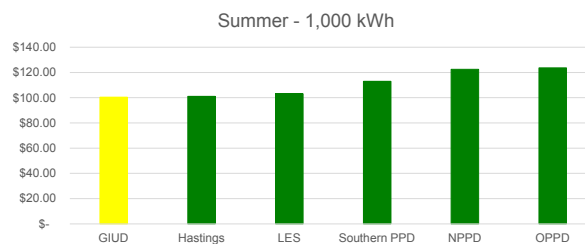
## Rate Comparisons

- With proposed rate changes, City's rates are still competitive with peer group, including NPPD, LES, OPPD, Southern PPD and the City of Hastings
  - Similar customer make-up
  - Own and operate vast majority of generating resources to supply retail customers, expect Southern PPD
  - Operate transmission (>100 kV) facilities, expect Southern PPD



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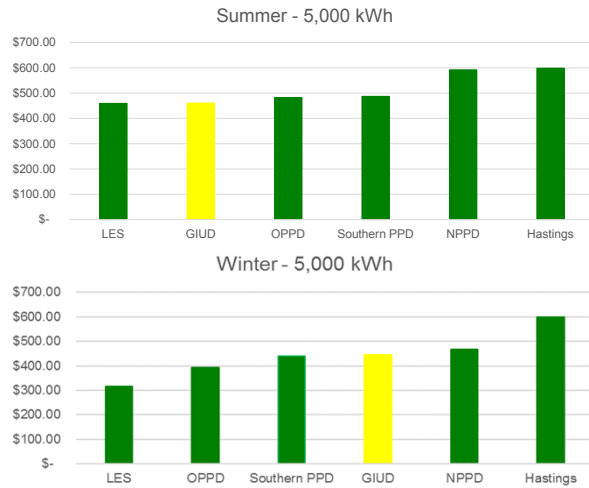
## Rate Comparisons - Residential



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## Rate Comparisons - Commercial



JK Energy Consulting LLC

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## Conclusions

- Rate increases of 3% in FY 2022 and FY 2023 necessary to ensure adequate revenue
- Customer charges are less than the calculated cost of services
- Additional rate changes of 3% in FY 2024 and FY 2025 may be necessary to maintain sufficient revenue to cover projected expenses

JK Energy Consulting LLC

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## Recommendations

- After discussions with Utility staff, the following is recommended
  - Observe actual results through end of fiscal year
  - Consider future rates based on report and year-end results
  - Consider customer charge increases even if rates aren't increased (revenue-neutral change)
  - Adjust rate ordinance accordingly



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## Contact Information

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## 2021-22 BUDGET OVERVIEW

Electric Department – Fund 520

Water Department – Fund 525

## Budget Guidelines

- Conservative (low) revenue forecast
  - Weather dependent
  - Ensure debt service coverage
- Conservative (high) operating costs
  - Generation fuel/purchased power
  - Allow potential production capacity
- Maintain adequate cash reserves
- Manage controllable operating expenses and capital expenditures

## Cash Reserve Guidelines

- ☛ Cash Reserve Considerations
  - ☛ Working Capital
  - ☛ Replacement Power
  - ☛ Asset Replacement
  - ☛ Capital Improvement Reserve
  - ☛ Debt Service Reserve
  
- ☛ Electric Fund - \$32,348,429
- ☛ Water Fund - \$2,797,897

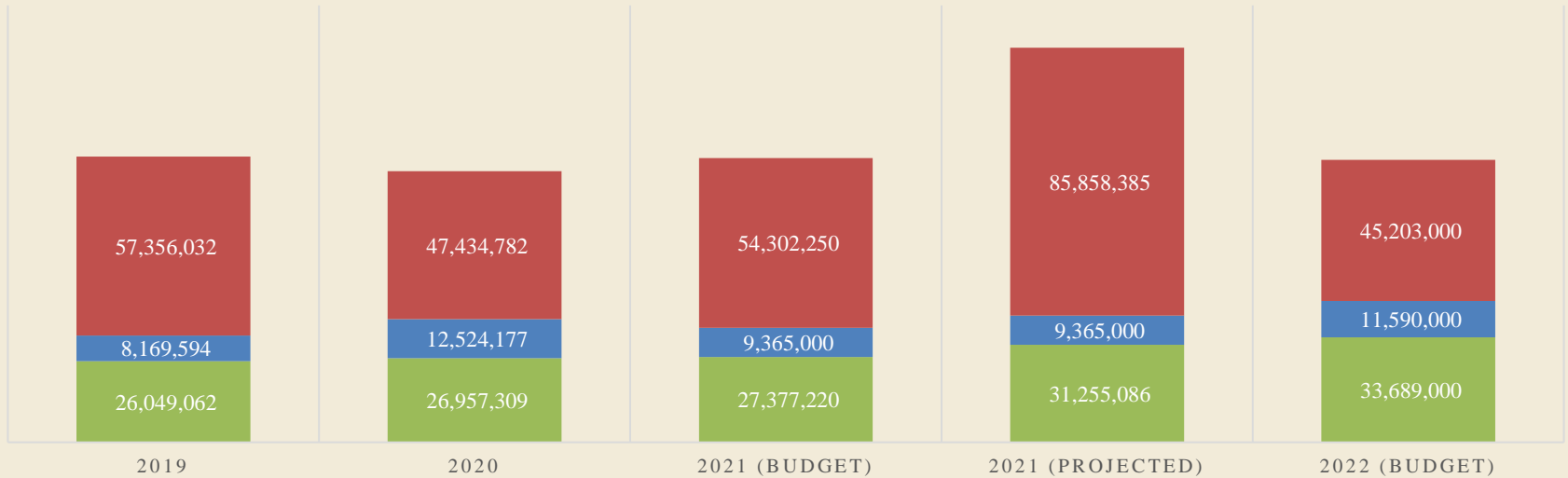
## Capital Improvement Budgets

- Electric and Water Master Plans recently completed
  
- 5 and 20 Year System Requirements
  - Technical Evaluation
  - No Financial Evaluation
  
- Recommendations included in 5 year capital improvement budget forecasts

**ELECTRIC DEPARTMENT  
FUND 520**

**ELECTRIC DEPARTMENT - FUND 520**

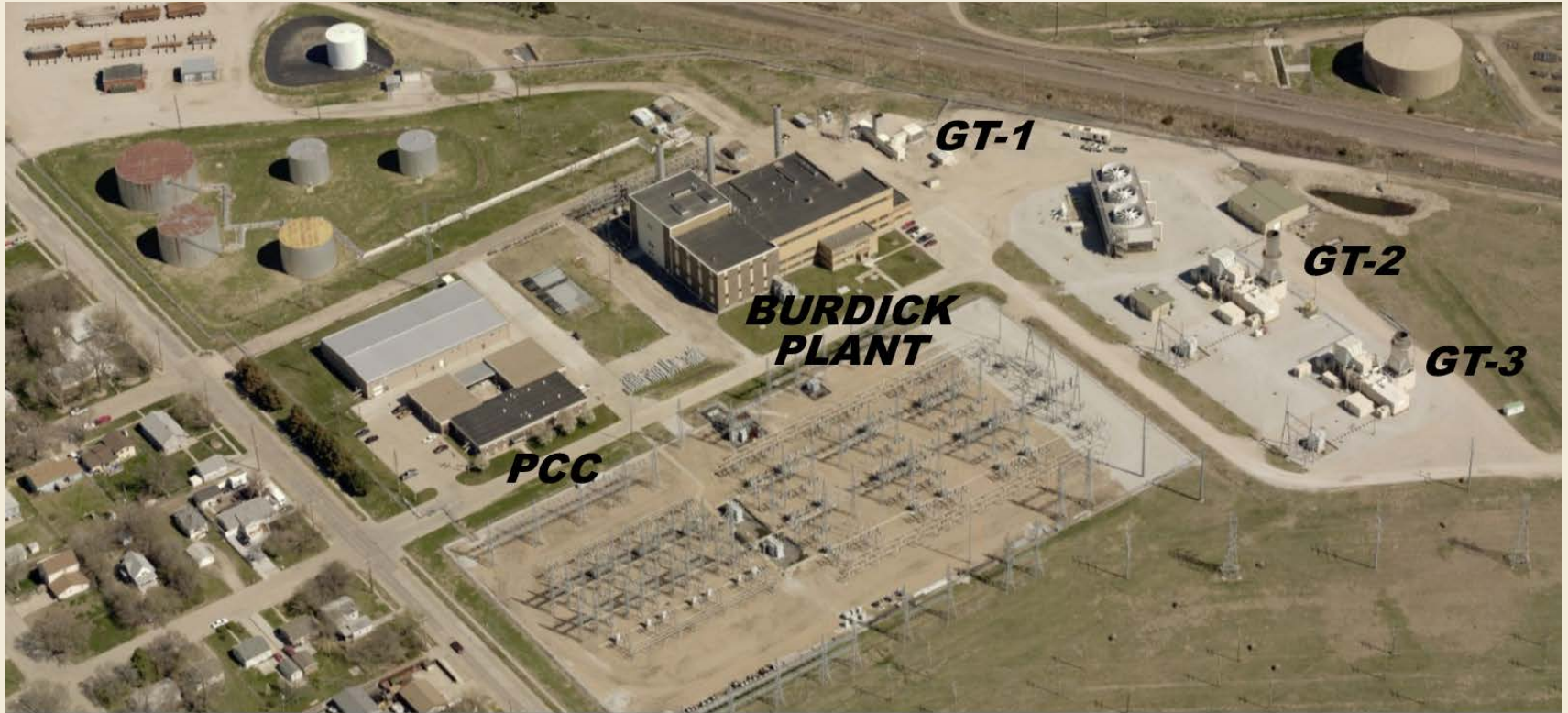
■ Admin and Operating   ■ Capital Expenditures   ■ Fuel, purchase power, debt service



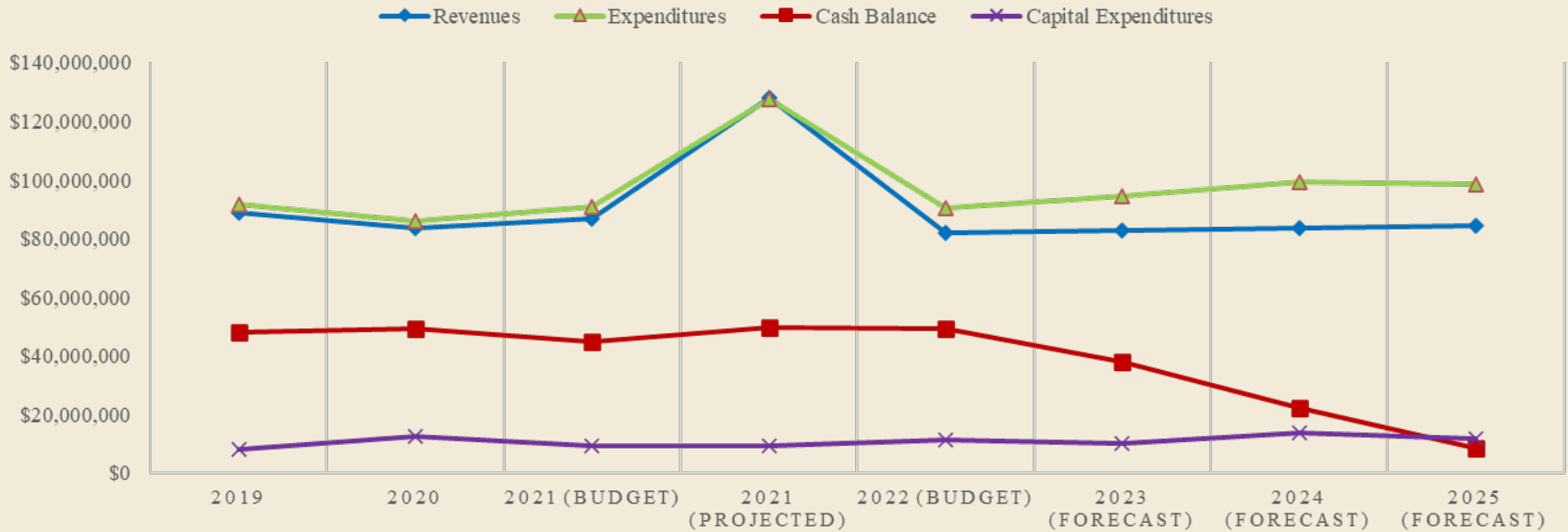


## Electric Capital Improvements

- ☛ Total Capital Budget - \$11,590,000
  - ☛ Transmission and Substation Upgrades - \$1,300,000
  - ☛ Bond payments - \$3,785,000
  - ☛ Distribution improvements - \$6,370,000
  - ☛ Power plant maintenance/improvements - \$135,000



**ELECTRIC DEPARTMENT - FUND 520**



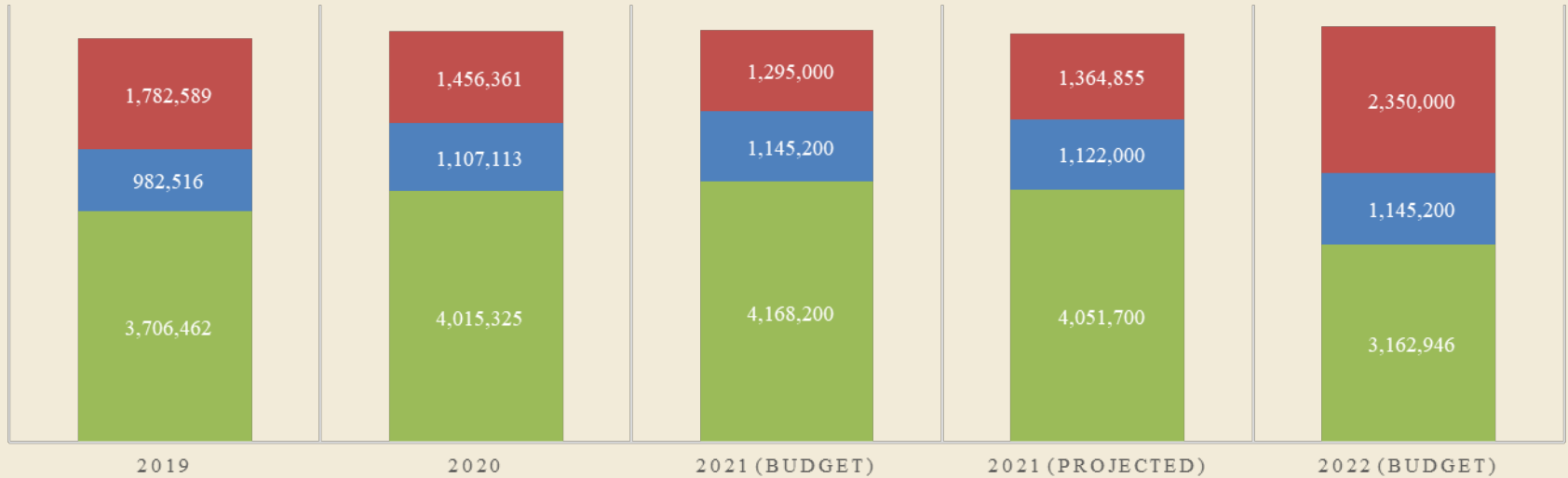


**WATER DEPARTMENT  
FUND 525**



**WATER DEPARTMENT - FUND 525**

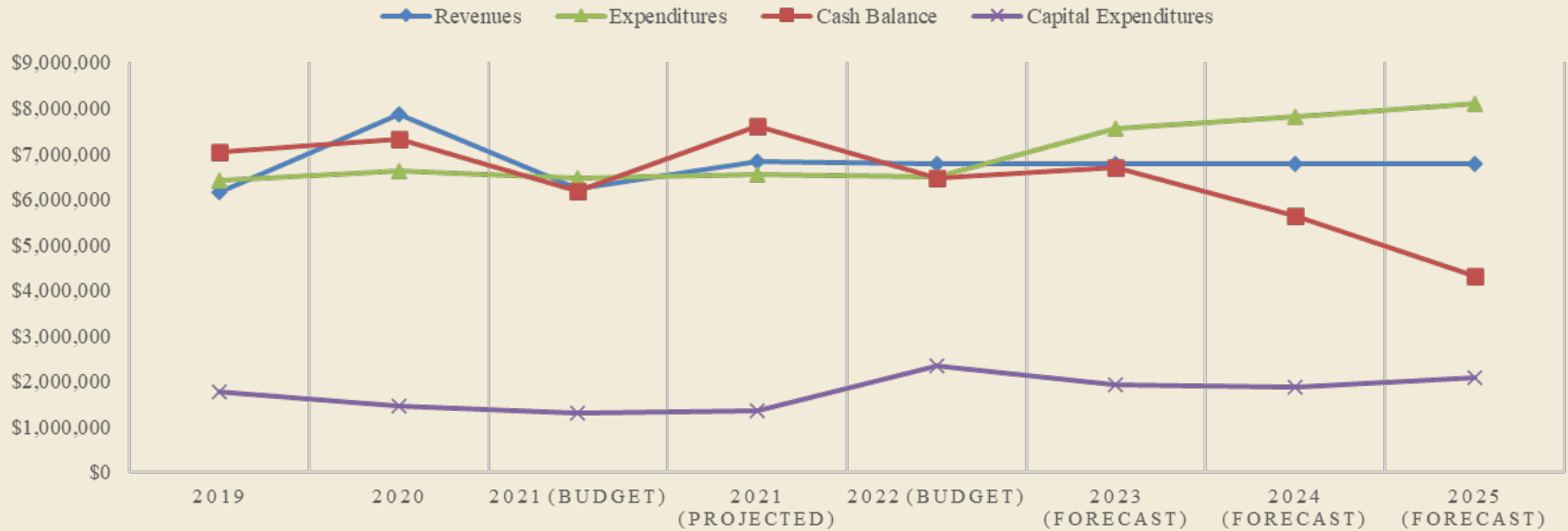
■ Admin and Operating    ■ Uranium Removal Operation Expense    ■ Capital Expenditures



## Water Capital Improvements

- ☛ Total Capital Budget - \$2,350,000
  - ☛ Bond payments - \$345,000
  - ☛ Distribution improvements- \$1,625,000
  - ☛ Production improvements - \$380,000

**WATER DEPARTMENT - FUND 525**





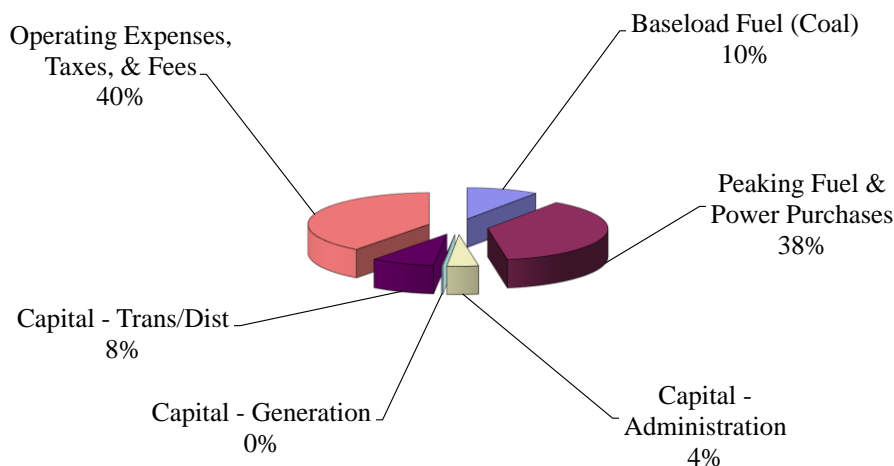
# Questions?



	ACCOUNT	2019-2020 ACTUAL	2020-2021 BUDGET	2020-2021 PROJECTED	2021-2022 BUDGET
<b>ENTERPRISE DEPARTMENT 520 - ELECTRIC UTILITY</b>					
ACCRUED EXPENSES					
METER READING EXPENSE	90200	373,916	345,000	352,000	363,000
RECORDS & COLLECTION	90300	542,066	600,000	638,000	654,000
RECORDS & COLLECTION-MIS	90301	601,749	520,000	623,000	649,000
CASH OVER & SHORT	90310	-	-	-	-
UNCOLLECTABLE ACCOUNTS	90400	100,118	145,000	115,000	115,000
ADMINISTRATIVE SALARIES	92000	740,378	630,000	634,000	653,000
OFFICE SUPPLIES & EXPENSE	92100	38,877	35,000	39,000	39,000
OUTSIDE SERVICES EMPLOYED	92300	1,180,438	1,280,000	1,251,000	1,251,000
INSURANCE	92400	457,928	475,000	591,000	738,000
INJURIES & DAMAGES	92500	172,985	285,000	175,000	175,000
EMPLOYEE BENEFITS	92600	1,126,125	1,325,000	1,100,000	1,250,000
MISCELLANEOUS GENERAL	93000	132,785	110,000	120,000	125,000
UTILITY OFFICE RENT	93101	6,142	7,370	6,000	6,000
MAINTENANCE OF GENERAL PROPERTY	93200	2,912	10,000	3,000	3,000
<b>GENERAL ADMINISTRATIVE SERVICE EXPENSE</b>		<b>5,476,419</b>	<b>5,767,370</b>	<b>5,647,000</b>	<b>6,021,000</b>
DEPRECIATION-PLANT	40310	6,608,280	6,950,000	6,608,004	6,645,000
DEPRECIATION-TRANSMISSION	40340	864,472	905,000	868,008	888,000
DEPRECIATION-DISTRIBUTION	40350	3,824,190	3,925,000	3,976,128	4,095,000
DEPRECIATION-GENERAL	40360	1,138,740	1,200,000	1,114,643	1,170,000
MERCHANDISE MATERIAL	41510	362,381	200,000	350,000	350,000
MERCHANDISE LABOR	41520	205,631	150,000	200,000	200,000
NON-UTILITY PROPERTY	41710	212	250	-	-
LOSS ON DISPOSITION OF PROPERTY	42120	-	100,000	1,000	-
INTEREST 2012 LONG TERM DEBT	42775	216,775	146,400	28,303	-
INTEREST 2013 LONG TERM DEBT	42785	1,350,650	1,285,850	230,285	-
INTEREST 2020 LONG TERM DEBT	42795	-	-	544,000	605,000
AMORTIZATION OF DEBT EXPENSE	42800	-	-	448,000	-
DEPOSIT INTEREST EXPENSE	43100	7,246	9,000	7,000	7,000
OPER SUPERVISION & ENG - PGS	50020	420,145	465,000	433,000	446,000
GENERATION FUEL - PGS	50120	8,301,821	9,700,000	8,300,000	8,700,000
STATION LABOR & MATERIAL - PGS	50220	1,710,003	1,610,000	1,688,000	1,663,000
GENERATION PRODUCTION - PGS	50520	1,832,084	1,790,000	1,805,000	1,776,000
GENERATION PRODUCTION - PGS LIME	50521	369,236	425,000	369,000	380,000
GENERATION PRODUCTION - PGS PAC	50522	71,985	105,000	72,000	100,000
OPERATION SUPPLIES - PGS	50620	516,875	525,000	517,000	513,000
MAINT SUPER & ENG - PGS	51020	178,361	220,000	221,000	227,000
MAINT OF STRUCTURES - PGS	51120	957,484	1,100,000	917,000	933,000
MAINT OF BOILER PLANT - PGS	51220	3,043,284	3,500,000	4,100,000	5,229,000
MAINT OF AQCS - PGS	51225	557,258	680,000	557,000	570,000
MAINT OF GENERATION EQUIP - PGS	51320	591,670	460,000	762,000	779,000
OPER SUPERVISION & ENG - BURDICK CT'S	54630	353,417	360,000	364,000	374,000
GENERATION FUEL - BURDICK CT'S	54730	283,414	450,000	983,000	306,000
GENERATION PRODUCTION - BURDICK CT'S	54830	1,444,891	1,200,000	1,375,000	1,205,000
OPERATION SUPPLIES - BURDICK CT'S	54930	285,537	300,000	331,000	294,000
MAINT SUPER & ENG - BURDICK CT'S	55130	74,987	80,000	75,000	77,000
MAINT OF STRUCTURES - BURDICK CT'S	55230	149,945	155,000	95,000	98,000
MAINT OF GENERATION EQUIP - BURDICK CT'S	55330	704,287	575,000	650,000	725,000
PURCHASED POWER-NPPD	55500	-	-	-	-
PURCHASED POWER-WAPA	55510	808,844	875,000	820,000	820,000
PURCHASED POWER-OPPD	55520	9,515,424	9,500,000	9,415,000	9,604,000

ACCOUNT	2019-2020 ACTUAL	2020-2021 BUDGET	2020-2021 PROJECTED	2021-2022 BUDGET
PURCHASED POWER-PPGA	55530	4,533,574	4,900,000	4,434,000
PURCHASED POWER-WIND	55540	702,691	900,000	703,000
PURCHASED POWER-WIND / INVENERGY	55541	4,152,380	4,000,000	3,990,000
PURCHASED POWER-MEAN	55550	-	-	-
PURCHASED POWER-TENASKA	55560	13,063,355	18,200,000	50,500,000
PURCHASED POWER-SOLAR	55570	138,895	125,000	140,000
OPER SUPERVISION & ENG-TRANS	56000	713,576	750,000	741,000
LOAD DISPATCHING-TRANS	56100	493,510	475,000	494,000
PURCHASED POWER - TRANSMISSION	56110	3,506,225	3,800,000	3,756,000
MAINT OF SUBSTATION-TRANS	57000	458,909	200,000	45,000
MARKET EXPENSE- TRANS	57500	218,070	220,000	352,000
OPER SUPERVISION & ENGINEERING-DIST	58000	233,885	255,000	238,000
LOAD DISPATCHING-DIST	58100	817,143	735,000	817,000
OPER OF SUBSTATION-DIST	58200	425	600	1,000
OVERHEAD LINE-DIST	58300	343,518	190,000	308,000
UNDERGROUND OPERATION - DIST	58400	46,151	115,000	113,000
METER OPERATING-DIST	58600	102,785	125,000	55,000
MAINT OF SERV ON CUST PROP-DIST	58700	246,338	290,000	250,000
OFFICE SUPPLIES-DIST	58800	1,304,275	1,450,000	1,298,000
MAINT OF STATION EQUIP-DIST	59200	725,160	810,000	737,000
MAINT OF LINES-DIST	59300	919,831	865,000	920,000
MAINT OF UNDERGROUND LINES-DIST	59400	816,063	750,000	787,000
MAINT OF TRANSFORMER-DIST	59500	31,250	20,000	15,000
MAINT OF METERS-DIST	59700	-	-	-
MAINT OF MISC PLANT-DIST	59800	173,084	350,000	177,000
<b>TOTAL OPERATING EXPENSE</b>		<b>80,490,620</b>	<b>88,472,100</b>	<b>119,095,371</b>
ACCRUED ADMIN & OPERATING EXPENSES		85,967,039	94,239,470	124,742,371
TOTAL CAPITAL EXPENSES		12,524,177	9,365,000	10,066,674
<b>ACCRUED &amp; CAPITAL EXPENSE</b>		<b>98,491,216</b>	<b>103,604,470</b>	<b>134,809,045</b>
OTHER USES OF FUNDS - IN LIEU OF TAX	40800	449,059	420,000	1,100,000
LESS DEPRECIATION		(12,435,683)	(12,980,000)	(12,566,783)
FINAL ACCRUED EXPENSE		86,504,593	91,044,470	123,342,262
ACCRUAL RECONCILIATION		(411,676)	-	4,251,100
<b>TOTAL APPROPRIATION</b>		<b>86,092,916</b>	<b>91,044,470</b>	<b>127,593,362</b>

### Electric Department Appropriation

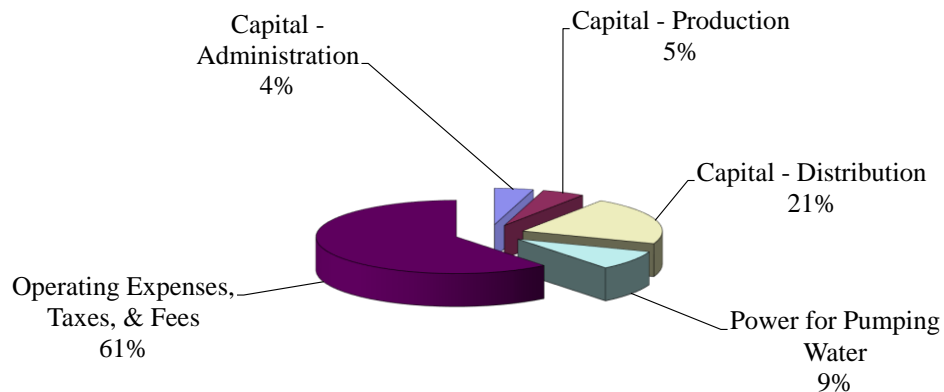


ACCOUNT	2019-2020 ACTUAL	2020-2021 BUDGET	2020-2021 PROJECTED	2021-2022 BUDGET
<b>ACCRUAL REVENUE</b>				
MERCHANDISE SALES	41500	934,957	500,000	895,000
REVENUE NON-UTILITY PROPERTY	41700	-	-	-
INTEREST & DIVIDEND	41900	1,147,626	1,250,000	99,000
MISC NON-OPERATING	42100	1,037	1,100	1,000
WATER SYSTEM OPERATING REVENUE	42105	220,542	225,000	221,000
GAIN ON DISPOSITION OF PROP	42110	32,970	25,000	30,000
AMORTIZATION OF DEBT PREMIUM	42900	366,593	330,902	28,000
RESIDENTIAL SALES	44000	21,919,730	20,900,000	21,030,000
DUSK TO DAWN SALES	44020	113,315	116,500	113,000
COMMERCIAL & INDUSTRIAL SALES	44200	40,419,110	39,885,000	38,671,000
WHOLESALE ENERGY - NPPD	44700	179,237	187,000	409,000
WHOLESALE ENERGY - TENASKA	44730	14,655,262	19,500,000	61,655,000
WHOLESALE ENERGY - NE CITY	44750	564,315	393,000	524,000
WHOLESALE ENERGY - NELIGH	44760	161,233	112,000	141,000
WHOLESALE ENERGY - WAPA	44770	610,277	915,000	1,800,000
INTERDEPARTMENTAL SALES	44800	1,958,443	2,362,000	1,923,000
FORFEITED DISCOUNTS	45000	194,719	190,000	190,000
SERVICE SALES	45100	11,100	9,500	10,000
RENT FROM PROPERTY	45400	151,130	145,000	150,000
<b>TOTAL ACCRUAL REVENUE</b>		<b>83,641,596</b>	<b>87,047,002</b>	<b>127,890,000</b>
ACCRUAL RECONCILIATION		(366,593)	(330,902)	(28,000)
<b>TOTAL REVENUE</b>		<b>83,275,003</b>	<b>86,716,100</b>	<b>127,862,000</b>
BOND & LOAN PROCEEDS		-	-	-
<b>TOTAL REVENUE &amp; BOND PROCEEDS</b>		<b>83,275,003</b>	<b>86,716,100</b>	<b>127,862,000</b>
OPERATING EXCESS (DEFICIT)		9,706,264	5,036,630	10,335,312
CAPITAL EXPENDITURES		(12,524,177)	(9,365,000)	(10,066,674)
BEGINNING FUND BALANCE		52,232,870	49,414,956	49,414,956
ENDING UNRESTRICTED BALANCE		41,168,894	37,196,469	46,178,671
ENDING RESTRICTED BALANCE		8,246,062	7,890,117	3,504,924

	ACCOUNT	2019-2020 ACTUAL	2020-2021 BUDGET	2020-2021 PROJECTED	2021-2022 BUDGET
<b>ENTERPRISE DEPARTMENT 525 - WATER OPERATIONS</b>					
<b>ACCRUED EXPENSES</b>					
METER READING	78100	179,983	142,000	195,000	180,000
CUSTOMER BILLING & ACCOUNTING	78200	305,451	315,000	315,600	326,000
DATA PROCESSING	78250	96,965	66,400	102,500	106,000
UNCOLLECTABLE ACCOUNTS	78400	14,319	12,000	16,500	17,000
ADMINISTRATIVE SALARY EXPENSE	79000	56,396	64,900	69,000	71,000
OFFICE SUPPLIES	79300	7,081	10,900	7,200	7,300
SPECIAL SERVICES	79500	119,999	120,000	120,000	120,000
INSURANCE	79800	14,163	15,000	18,300	20,100
INJURIES & DAMAGES	79900	2,538	8,000	3,200	3,200
EMPLOYEE BENEFITS	80010	68,136	109,900	65,000	75,000
PENSIONS	80020	4,599	15,000	5,000	5,000
MISCELLANEOUS	80100	17,958	15,000	15,000	15,000
MAINT OF GENERAL PROPERTY	80200	86,272	106,500	100,000	105,000
UTILITY OFFICE RENT	80300	3,025	3,630	3,000	3,000
BACKFLOW PROTECTION PROGRAM	81000	138,123	147,200	142,000	144,000
<b>GENERAL ADMINISTRATIVE SERVICE EXPENSE</b>		<b>1,115,006</b>	<b>1,151,430</b>	<b>1,177,300</b>	<b>1,197,600</b>
DEPRECIATION-SUPPLY	50310	73,212	76,000	73,400	73,700
DEPRECIATION-PUMPING EQUIP	50320	25,625	27,000	25,600	25,800
DEPRECIATION-TREATMENT PLANT	50330	151,452	158,000	151,500	151,800
DEPRECIATION-DISTRIBUTION	50340	710,241	735,000	782,000	846,000
DEPRECIATION-GENERAL	50350	191,357	205,000	189,200	207,000
INTEREST EXPENSE - 2017 BONDS	53010	189,601	183,189	33,300	-
INTEREST EXPENSE - 2020 BONDS	53020	-	-	124,000	136,000
DEBT EXPENSE ON BONDS	53100	-	-	98,900	-
MERCHANDISE-MATERIAL	61610	100,187	120,000	110,000	110,000
MERCHANDISE-LABOR	61620	87,610	110,000	110,000	110,000
OPERATION SUPPLIES	70300	14,072	23,200	15,000	15,000
MAINT OF WELLS & STRUCTURES	70500	40,087	65,000	65,200	66,400
OPERATION LABOR	72200	372,183	240,000	230,000	236,900
POWER FOR PUMPING	72300	663,229	675,000	665,000	665,000
MAINT OF PUMPING EQUIP	72700	298,298	280,000	300,000	470,000
PURIFICATION SUPPLIES	74300	1,107,113	1,050,000	1,122,000	1,145,200
MAINT OF PURIFICATION EQUIP	74600	19,870	23,000	20,000	20,400
OPERATION SUPERVISION & ENG	75100	298,238	324,000	302,400	311,500
OFFICE EXPENSE-DIST	75200	72,575	65,000	74,300	76,100
OPERATION OF MAINS	75300	189,487	196,900	196,400	203,000
OPERATION OF METERS	75400	162,556	152,000	145,600	150,900
MAINT OF DIST MAINS	75800	198,466	206,800	207,300	211,700
MAINT OF FIRE HYDRANTS	75900	115,201	238,700	118,300	122,700
<b>OPERATIONS TOTAL</b>		<b>5,080,657</b>	<b>5,153,789</b>	<b>5,159,400</b>	<b>5,355,100</b>
ACCRUED ADMIN & OPERATING EXPENSES		6,195,663	6,305,219	6,336,700	6,552,700
TOTAL CAPITAL EXPENSES		1,456,361	1,295,000	1,364,855	2,350,000
<b>ADJUSTED ACCRUED EXPENSES</b>		<b>7,652,024</b>	<b>7,600,219</b>	<b>7,701,555</b>	<b>8,902,700</b>
OTHER USES OF FUNDS - IN LIEU OF TAX	53300	78,661	65,000	78,700	78,700
LESS DEPRECIATION		(1,151,886)	(1,201,000)	(1,221,700)	(1,304,300)
FINAL ACCRUED EXPENSE		6,578,799	6,464,219	6,558,555	7,677,100
ACCRUAL RECONCILIATION		41,029	-	-	-
<b>TOTAL APPROPRIATION</b>		<b>6,619,829</b>	<b>6,464,219</b>	<b>6,558,555</b>	<b>7,677,100</b>

ACCOUNT	2019-2020 ACTUAL	2020-2021 BUDGET	2020-2021 PROJECTED	2021-2022 BUDGET
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## Water Department Appropriation



### ACCRUAL REVENUE

WATER TAP FEES	52000	-	10,000	-	-
WATER MAIN CONTRIBUTIONS	52010	963,773	-	-	-
RENT FROM PROPERTY	52200	-	-	-	-
INTEREST & DIVIDEND	52400	98,703	10,000	15,000	15,000
MISC NON-OPERATING	52600	258	500	250	250
GAIN ON DISPOSITION-PROP	52610	-	-	-	-
METERED SALES	60100	6,280,067	5,700,000	6,280,000	6,250,000
PRIVATE FIRE PROTECTION	60400	88,740	85,000	89,000	90,000
INTERDEPARTMENTAL SALES	60800	198,134	180,000	200,000	185,000
SALE OF WATER SERVICES	61400	52	75	50	50
MERCHANDISE SALES	61600	236,329	250,000	250,000	225,000
<b>TOTAL ACCRUAL REVENUE</b>		<b>7,866,056</b>	<b>6,235,575</b>	<b>6,834,300</b>	<b>6,765,300</b>
ACCRUAL RECONCILIATION		(963,773)	-	-	-
<b>TOTAL REVENUE</b>		<b>6,902,283</b>	<b>6,235,575</b>	<b>6,834,300</b>	<b>6,765,300</b>
BOND PROCEEDS					
<b>TOTAL REVENUE &amp; BOND PROCEEDS</b>		<b>6,902,283</b>	<b>6,235,575</b>	<b>6,834,300</b>	<b>6,765,300</b>
OPERATING EXCESS (DEFICIT)		1,738,816	1,066,356	1,640,600	1,438,200
CAPITAL EXPENDITURES		(1,456,361)	(1,295,000)	(1,364,855)	(2,350,000)
BEGINNING FUND BALANCE		7,030,426	7,312,881	7,312,881	7,588,626
ENDING UNRESTRICTED BALANCE		6,891,480	6,657,519	7,285,973	6,374,491
ENDING RESTRICTED BALANCE		421,400	426,718	302,653	302,335