MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown
FROM:	Rod Price, Matt Barton, Tyler Nice and Wally McCullough
DATE:	June 27, 2019
SUBJECT:	Water and Electric 10-Year Capital Improvement Plans (CIP)
OBJECTIVE:	Direction – Feedback of 2019 Water and Electric 10 Year CIPs

Issue

On July 9, 2019 EWEB staff will present to the Board the 10-Year (2020-2029) Water and Electric Capital Improvement Plans (CIP) for review and discussion. Staff is requesting direction on the 10 year CIPs for the Water and Electric Utilities as part of the financial planning process, with 2020 Capital expenditures included in the 2020 Budget(s), and approval occurring in December of 2019.

Background

At the June 2019 EWEB Board meeting, staff prepared a memo and delivered a presentation around inputs that shape capital budgeting, categorization of projects, and benchmarking for the Electric and Water utility's 10 year CIPs. The board agreed with the presented approach around the inputs and to the plan and project categories. This backgrounder will further detail the assumptions that go into the capital plan around allocated expenditure totals, project categories and present a 10 year CIP for each utility for the 2020 budget process.

Discussion

Assumptions and Priorities

As part of the 10 year CIP process and analysis, the following assumptions and targets are used:

- Yearly expenditure totals are managed to sustain targeted reserves and rate impacts.
- Electric yearly totals:
  - Yearly rate funded base amount $22.7 million per year average
  - Total CIP yearly funding amount includes bond expenditures. (Carmen Smith $75 million over first five years, $81 million over ten year)
  - Estimated yearly deprecation = $22 million
  - Target Capital reserve level = $22 million
- Water yearly :
  - Yearly rate funded base amount $13.2 million per year average
  - Estimated yearly deprecation $6.2 million
  - Target Capital reserve level = $ 7 million
- Estimated construction cost inflation rate is included in the plan. (3% yearly is modeled)

- Funding from customer work, grants (i.e.: FEMA), and other sources is included in base amount, estimated from available historical information. Estimated expenses due to customer work:
  - Electric 5.3%
  - Water 8.7%
- Total system depreciation, Age of System (AOS) (financial metric with a target of less than 60%) is used to help track financial effectiveness of spending trajectories.
  - Electric 2019 AOS = 56%, estimated 2024 AOS = 56%
  - Water 2019 AOS = 43%, estimated 2024 AOS = 38%
- Expenditures will be 1.5 - 2.0 times the depreciation value. The ratio is higher than 1.0 to address the actual replacement costs being greater than the original depreciated costs.
- Assuming current staffing levels are maintained to be able to complete the CIP.
- Projects are planned with yearly estimated expenditures totaling yearly targets with coordination between Finance and Engineering.
- Board review and direction is for five year total amount. Staff will manage to the five year totals, but yearly variations may occur within individual year totals. Board policies will be used to govern yearly allocations and variations, including budget approvals and budget amendments.

Following tables summarize the overall proposed Water and Electric 10 year CIPs for the 2020 LTFP budget.

Electric Capital Improvement Plan: 2020-2029

For review and direction for 2020 budget			For reference and place holder in LTFP	
	2020	**5-Year Total 2020-2024**	5-Year Total 2025-2029	10 Year Total
Total Expenditures	$ 48,405,000	$ 205,155,000	$ 120,101,005	$ 325,256,005
Yearly Reserve target	$ 22,000,000			
Estimated Expenditure to Depreciation ratio	2.20	1.87	target : 1.5 - 2.0	
Estimated Age of System	56%	56%	target: less than 60%	

Water Capital Improvement Plan: 2020-2029

For review and direction for 2020 budget			For reference and place holder in LTFP	
	2020	**5-Year Total 2020-2024**	5-Year Total 2025-2029	10 Year Total
Total Expenditures	$17,835,000	$93,744,000	$149,853,000	$243,597,000
Yearly Reserve target	$7,800,000			
Estimated Expenditure to Depreciation ratio	2.92	3.07	target : 1.5 - 2.0	
Estimated Age of System	46%	38%	target: less than 60%	

To help determine yearly capital plan contents, projects are proposed by various inputs. To aide in prioritization, projects are looked at in three broad categories. As a recap from the previous board meeting the three categories are:

- *Compulsory Work*
  This work is mandatory to ensure EWEB meets minimum service, regulatory and safety requirements. Compulsory work is typically either Type 1 or 2, depending on the project size and profile.

- *Strategic Projects/Programs*
  This work is driven mainly by the strategic priorities. Although some strategic execution occurs within Type 1 project categories, it is typical that distinct Type 2 or 3 projects represent the organization's fulfillment of strategically-driven capital. These projects are typically multiyear and multimillion dollar efforts.

- *Risk-Based Opportunity and Elective Improvement Projects*
  These projects make up the balance of the CIP and differ from the previous categories in their priority. Projects in this category are elective in that Staff can plan and schedule them ("Turning the Dials"). The amount of this category is chosen to be within the boundaries of the long term financial plan (LTFP), and is sized to match the capability of staffing and resources available. This work is driven by the goal to maintain system condition and "Age of Asset" metrics in order to maintain reliability. Reducing the level of work in this area will ultimately result in the increase of compulsory work and reduction in reliability ("run to failure").

For both utilities, the overall process to include projects in the CIP includes prioritizing and stacking in the following order:

1. Compulsory work
2. Strategic Projects/Programs
3. Risk-Based Opportunity Projects

Projects and their expected expenditures are then placed in a CIP spreadsheet under the Type 1, 2 and 3 categories. Then the CIP for each utility is entered into a LTFP model to determine rate and reserve impact over a 10 year period. Details for the resulting CIPs for each utility are presented next.

Utility CIP Targeted Outcomes & Results

Electric

The 10 year Electric CIP has a total expenditure of approximately $337M between 2020 and 2029. The following is a high level summary of the work represented in the plan. Over the first 5 year period of the CIP, it is expected that approximately 60% of the 10 year plan will be completed, representing approximately $204M of the 10 year total. Major efforts completed in the first 5 years of the plan will include:

- Carmen Power Plant Upgrades – includes Turbine-Generator replacements, Trail Bridge Overhauls, Balance of Plant Work and with license required resource, recreation and

environmental obligations continuing until 2027.

- Electric AMI Deployment – completion in 2022 (including IS required upgrades), with end of life meter replacement efforts starting in 2025for meters greater than 10 years of age.
- Leaburg Canal Repair – it is expected this repair is to occur in 2020 or 2021 depending on FERC approval timelines.
- Upriver Electric Reconfiguration – includes completion of Leaburg changes, Thurston Substation Expansion, and conversion of Walterville Power Plant to Distributed generation.
- Currin Substation Rebuild – asset renewal for key connection point of EWEB electric system (part of Resilient Spine) to maintain equipment operation (currently at end of life); will include resiliency upgrades (additional critical feeds, seismic upgrades).
- Distribution Resiliency and Reliability Upgrades – completion of FEMA projects, replacement and upgrade of the Downtown Network, and additional resiliency and reliability projects will be completed throughout the plan.
- Enterprise IS Upgrades or Replacements – Asset Management, Customer, and Financial systems will be upgraded or replaced. EWEB's Wide Area Network (WAN) in progress replacement will be completed.

The 2020 year CIP accounts for 15% of the 10 year plan and will result in $48.4M of expenditures. Key projects to be completed in 2020 include:

Compulsory

- Customer connection projects (residential and commercial distribution and fiber installations)
- PUC corrections based on inspections and findings
- Emergent outage restoration; based on historical experience for equipment failure, car hit pole, etc.
- Generation improvements related to FERC requirements (Leaburg Canal repairs; Carmen Relicensing fish, resource, and recreation improvements)

Strategic

- AMI Deployment and associated IT and Communications upgrades
- Construct new dispatch and trading floor backups at Hayden Bridge Filtration Plant
- Distribution enhancement and addition projects (i.e.: Goodpasture Island Road looping and switch replacements, upriver voltage regulators, Downtown Network Improvements)
- Electric and Generation Facility seismic upgrades
- Enterprise IS Projects to increase internal and customer capabilities (i.e.: Asset Management, Customer Self-Serve)
- Resilient Spine Program work (i.e.: Upriver Configuration, Thurston Substation Expansion Design & Planning)

Risk-Based

- ROC Facility work (HVAC, etc.)
- Electric System asset replacement based on age and condition (i.e.: breaker, cable, transformer replacements, line rebuilds)
- Fleet equipment replacement due to age and condition
- Carmen Power Plant equipment replacement (Turbine Generator Upgrade)

- IS Support System hardware refreshes

Over the 10 year plan, the composition of the plan changes depending on what large efforts are underway. Figure 2 below shows a categorical progression of the plan over the course of the 10 years. The 2020 budget year has a comparatively large component of strategic work due to a focus on resiliency and modernization. This component lowers in the 5 year plan to accommodate additional compulsory pressures related mainly to obligations related to the Carmen License. As noted, Carmen Type 3 work comprises over half of the compulsory category, and approximately 18% of risk based work overall. Over the entire 10 year plan, about of half of the investment is to the Risk-Based improvement category to address end of life equipment, in order to maintain asset life, with the remaining Strategic and Compulsory categories split.

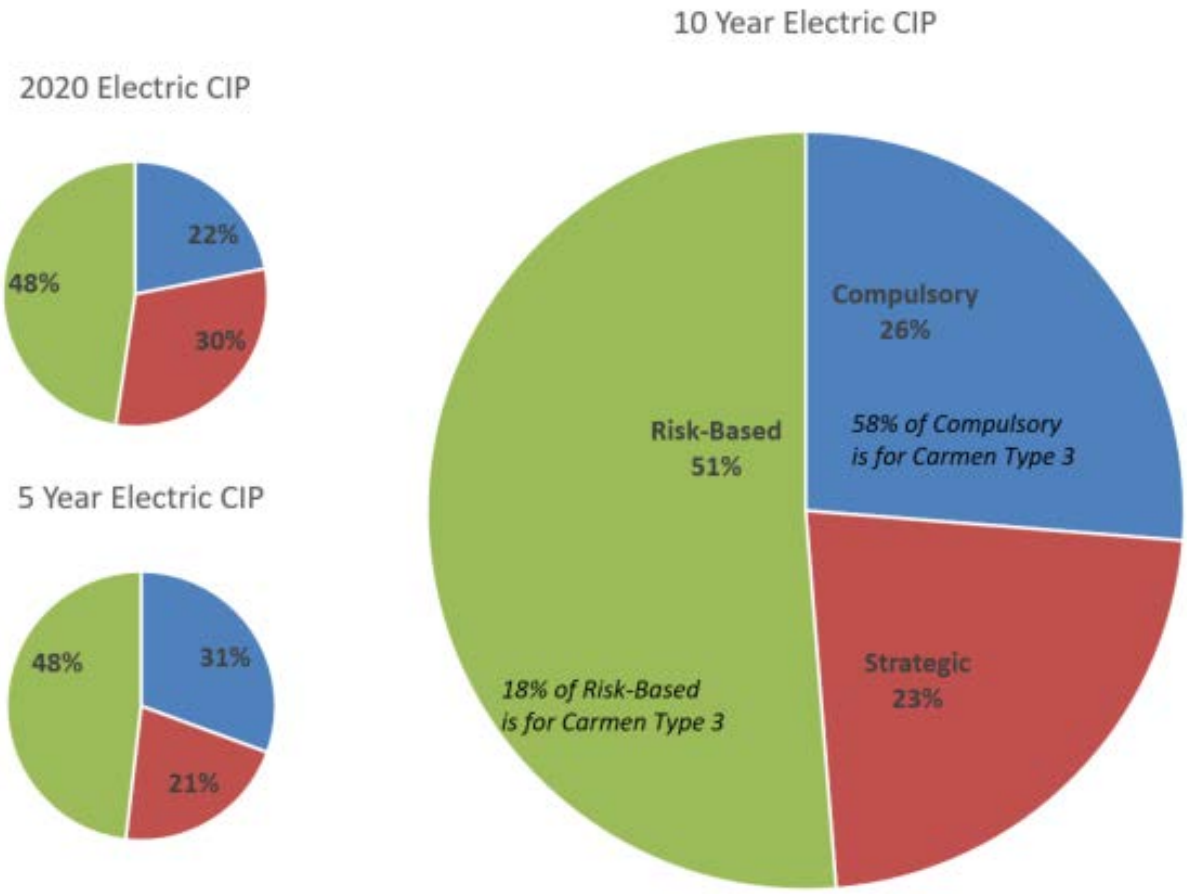

Figure 2: CIP Spending by Category (2020, First 5 years, 10 years)

Water

The water ten year CIP totals approximately $240M and its categorization is shown in Figure 3 along with that of the CIP for the first five years and 2020.

For compulsory work the water CIP includes such things as:

- Customer work for new services and development.
- Pipeline replacements where conflicts exist with City street projects.

- Replacement of failed critical infrastructure.
- Projects necessary to meet regulatory requirements or to maintain compliance

The percentage of the CIP that is compulsory is higher in 2020 primarily due to the inclusion of a new base level reservoir to replace the College Hill Reservoir. While new reservoirs would normally be considered a Risk Based improvement, the timing of the College Hill Reservoir replacement is being driven by an Oregon Health Authority requirement to address issues with the aging reservoir. As such, its replacement is considered compulsory.

In 2020 and the First Five Years, the strategic portion of the CIP includes the completion of the distributed (neighborhood) emergency water sites along with continued progress of AMI. As a placeholder, and dependent on a potential partnership with Springfield, the Second Source project is included in the second five years and makes up the majority of the Strategic Category in the 10 Year CIP.

Approximately half of the projects in the CIP are considered "Risk Based", primarily associated with reliability and resiliency enhancements.

The Risk Based category includes the Water Utility projects to improve its "Resilient Spine". This work, largely driven by Master Planning efforts, in the last ten years has focused on the upgrade of the Hayden Bridge Intakes and Filtration Plant. For the next ten years this effort is being directed to our Base Level Reservoirs and transmission system. Specific projects in the next ten years include 5 new seismically robust water reservoirs to replace the College Hill, Hawkins and Santa Clara Reservoirs.

The five year CIP accounts for approximately 38% of the ten year plan. Specific projects included in the first five years include:

- Two New Base Level Reservoirs – As previously mentioned, 5 new base level reservoirs are planned over the next ten years. The CIP for the next five years includes two new 7.5 million gallon reservoirs. One at our College Hill site and a second at either our Hawkins site or our E 40th (Elliot) site.
- Completion of the AMI project. The duration of this project has been extended by two years for water but will still be completed within the 5 year CIP.
- Communication Upgrades for Water Pump Stations and Reservoirs. Driven both by aging equipment and the need to shift communications from the fourth floor at Headquarters to our Roosevelt Operations Center, a new multi-year project is included to upgrade communications and control at water pump stations and reservoirs.
- Pump Station and Upper Level Reservoir Replacements. Three of EWEB's 27 pump stations are planned for replacement in the next five years. In addition, one of the two Willamette 800 reservoirs is planned for replacement in 2023 and 2024. This replacement is driven by structural issues with the existing reservoir which is part of our second tier resilient spine.

The 2020 CIP accounts for approximately 7 percent of the ten year plan and includes:

- Compulsory work as listed previously which for 2020 includes design and construction work on a new base level reservoir to allow the aging College Hill Reservoir to be taken out of service.
- Construction of a new water quality laboratory and backup services building at Hayden Bridge. The new laboratory will replace the existing 50 year old lab in the Headhouse and will provide sufficient space and equipment to meet the analytical requirements created by new and emerging regulations and water quality issues.
- The second year of AMI deployment. Given lessons learned to date, the second year AMI will proceed at a slower pace than the first year incorporating process improvements to enhance the value to both EWEB and its customers.
- The replacement of the City View 1150 pump station. This upper level constant run pump station serves approximately 450 customers and a replacement is required to address capacity and reliability issues.

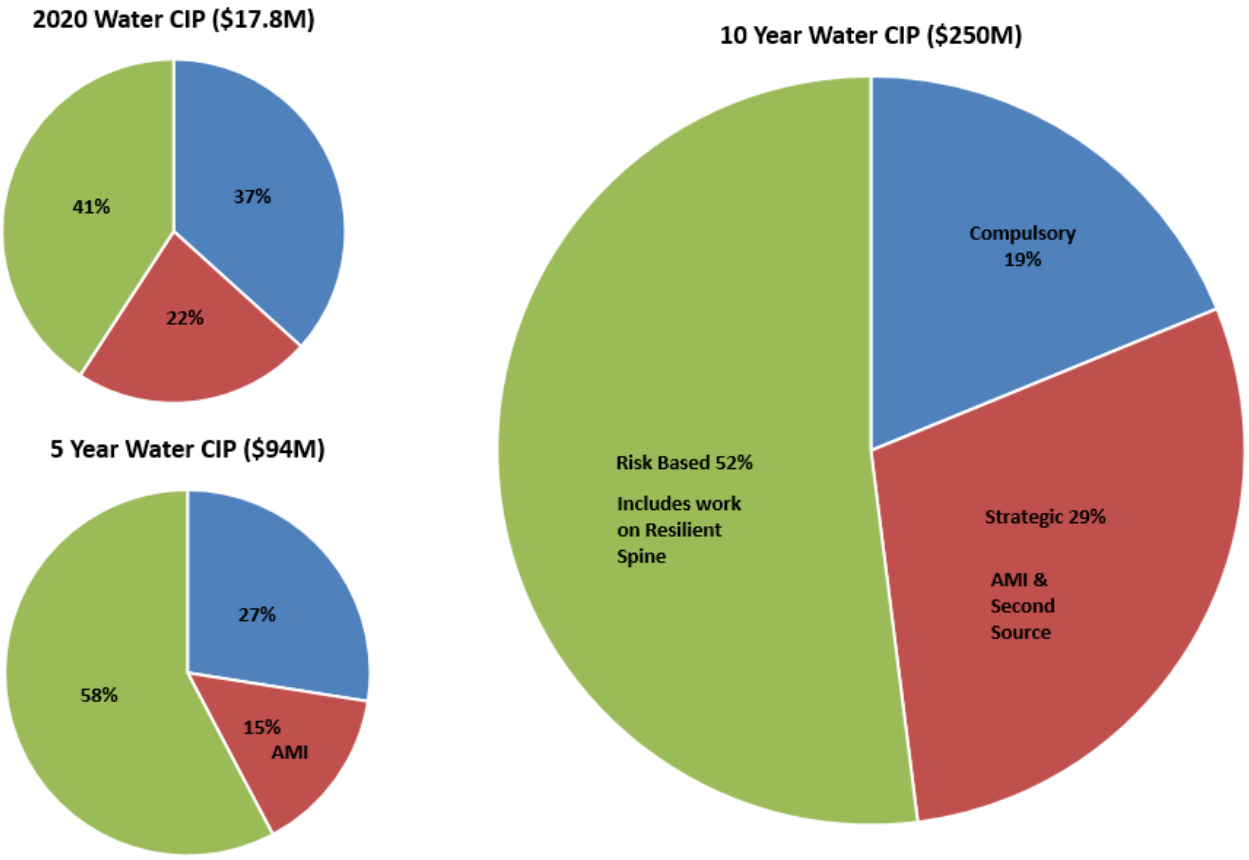

Figure 3: Water CIP Spending by Category (2020, First 5 years, 10 years)

Requested Board Action
Management requests review and feedback, as part of the budget approval process, for the first five years of the 2020 Water and Electric Utility 10-Year CIP (2020-2029) and the Water and Electric Capital Budget for 2020 as outlined in the first year of the CIP.

If you have any questions please contact Rod Price, Chief Engineering and Operations Officer at 541-685-7122 or email rod.price@eweb.org.

Attachments:

1. 2020-2029 Water CIP
2. 2020-2029 Electric CIP

Attachment 1

Water Capital Improvement Plan: 2020-2029

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Total 2019-2023	5 Year Total 2024-2028	10 Year Total
Funds Available													
Capital Reserve Balance	$ 9,050,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000			
Funding Sources													
Water Rates and Reserves	$ 12,493,000	$ 15,975,000	$ 15,908,000	$ 16,490,000	$ 6,709,000	$ 5,648,000	$ 8,467,000	$ 29,696,000	$ 10,696,000	$ 10,643,000			
AWS Funds	$ 424,000	$ 437,000	$ 450,000	$ 464,000	$ 478,000	$ 4,086,000	$ -	$ -	$ -	$ -			
Bond Proceeds	$ -	$ -	$ -	$ -	$ 8,000,000	$ 25,000,000	$ 22,000,000	$ 8,000,000	$ 8,000,000	$ 8,000,000			
Draw on Capital Reserve	$ 1,250,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
Customer Contributions	$ 1,143,000	$ 1,178,000	$ 1,213,000	$ 1,249,000	$ 1,287,000	$ 1,325,000	$ 1,365,000	$ 1,406,000	$ 1,448,000	$ 1,492,000			
SDC	$ 2,525,000	$ 3,678,000	$ 1,466,000	$ 459,000	$ 468,000	$ 484,000	$ 499,000	$ 516,000	$ 532,000	$ 550,000			
Total Funds	$ 17,835,000	$ 21,268,000	$ 19,037,000	$ 18,662,000	$ 16,942,000	$ 36,543,000	$ 32,331,000	$ 39,618,000	$ 20,676,000	$ 20,685,000			
Expenditures													
Type 1 - General Capital (rate funded)													
Source - Intake and Hayden Bridge	$ 283,000	$ 398,000	$ 191,000	$ 197,000	$ 203,000	$ 209,000	$ 215,000	$ 222,000	$ 228,000	$ 235,000	$ 1,272,000	$ 1,109,000	$ 2,381,000
Distribution - Pump Stations & Reservoirs	$ 1,195,000	$ 1,125,000	$ 1,574,000	$ 608,000	$ 626,000	$ 645,000	$ 664,000	$ 684,000	$ 705,000	$ 726,000	$ 5,128,000	$ 3,424,000	$ 8,552,000
Distribution - Pipelines	$ 4,223,000	$ 4,350,000	$ 4,480,000	$ 4,615,000	$ 4,753,000	$ 4,896,000	$ 5,042,000	$ 5,194,000	$ 5,350,000	$ 5,510,000	$ 22,421,000	$ 25,992,000	$ 48,413,000
Distribution - Services & Meters	$ 1,545,000	$ 1,591,000	$ 1,639,000	$ 1,688,000	$ 1,739,000	$ 1,791,000	$ 1,845,000	$ 1,900,000	$ 1,957,000	$ 2,016,000	$ 8,202,000	$ 9,509,000	$ 17,711,000
Distribution - Post AMI Meter Replacements/Upgrades					$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 1,750,000	$ 2,100,000
Information Technology	$ 180,000	$ 285,000	$ 201,000	$ 297,000	$ 203,000	$ 209,000	$ 240,000	$ 221,000	$ 338,000	$ 235,000	$ 1,166,000	$ 1,243,000	$ 2,409,000
Buildings & Land	$ 21,000	$ 13,000	$ 9,000	$ 7,000	$ 14,000	$ 14,000	$ 55,000	$ 73,000	$ 52,000	$ 231,000	$ 64,000	$ 425,000	$ 489,000
Fleet	$ 556,000	$ 573,000	$ 590,000	$ 608,000	$ 626,000	$ 645,000	$ 664,000	$ 684,000	$ 705,000	$ 726,000	$ 2,953,000	$ 3,424,000	$ 6,377,000
Total Type 1 Expenditures	$ 8,003,000	$ 8,335,000	$ 8,684,000	$ 8,020,000	$ 8,514,000	$ 8,759,000	$ 9,075,000	$ 9,328,000	$ 9,685,000	$ 10,029,000	$ 41,556,000	$ 46,876,000	$ 88,432,000
Type 2 - Rehabilitation & Expansion Projects (rate & bond funded)													
Rate Funded Type 2 Projects													
Information Technology	$ 670,000	$ 557,000	$ 806,000	$ 720,000	$ 371,000	$ 858,000	$ 380,000	$ 394,000	$ 552,000	$ 576,000	$ 3,124,000	$ 2,760,000	$ 5,884,000
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal - Rate Funded Projects	$ 670,000	$ 557,000	$ 806,000	$ 720,000	$ 371,000	$ 858,000	$ 380,000	$ 394,000	$ 552,000	$ 576,000	$ 3,124,000	$ 2,760,000	$ 5,884,000
Bond Eligible Type 2 Projects													
Source - Intake and Hayden Bridge	$ 2,060,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,688,000	$ 2,060,000	$ 2,688,000	$ 4,748,000
Distribution - Pump Stations & Reservoirs	$ 3,090,000	$ 8,752,000	$ 6,010,000	$ 6,472,000	$ 7,593,000	$ 7,224,000	$ 1,476,000	$ 8,487,000	$ 7,829,000	$ 4,704,000	$ 31,917,000	$ 29,720,000	$ 61,637,000
Distribution - Pipelines	$ -	$ -	$ -	$ -	$ -	$ 1,313,000	$ 2,460,000	$ 1,900,000	$ 2,088,000	$ 2,150,000	$ -	$ 9,911,000	$ 9,911,000
Advanced Meters (Water)	$ 3,600,000	$ 3,200,000	$ 3,100,000	$ 3,000,000	$ -	$ -	$ -	$ -		$ -	$ 12,900,000	$ -	$ 12,900,000
Subtotal - Bond Eligible Projects	$ 8,750,000	$ 11,952,000	$ 9,110,000	$ 9,472,000	$ 7,593,000	$ 8,537,000	$ 3,936,000	$ 10,387,000	$ 9,917,000	$ 9,542,000	$ 46,877,000	$ 42,319,000	$ 89,196,000
Total Type 2 Expenditures	$ 9,420,000	$ 12,509,000	$ 9,916,000	$ 10,192,000	$ 7,964,000	$ 9,395,000	$ 4,316,000	$ 10,781,000	$ 10,469,000	$ 10,118,000	$ 50,001,000	$ 45,079,000	$ 95,080,000
Type 3 - Strategic Projects & Programs (bond funded)													
Emergency Water Supply	$ 412,000	$ 424,000	$ 437,000	$ 450,000	$ 464,000	$ 478,000	$ 492,000	$ 507,000	$ 522,000	$ 538,000	$ 2,187,000	$ 2,537,000	$ 4,724,000
Second Source Treatment Plant						$ 17,911,000	$ 18,448,000	$ 19,002,000			$ -	$ 55,361,000	$ 55,361,000
Total Type 3 Expenditures	$ 412,000	$ 424,000	$ 437,000	$ 450,000	$ 464,000	$ 18,389,000	$ 18,940,000	$ 19,509,000	$ 522,000	$ 538,000	$ 2,187,000	$ 57,898,000	$ 60,085,000
Total Expenditures	$ 17,835,000	$ 21,268,000	$ 19,037,000	$ 18,662,000	$ 16,942,000	$ 36,543,000	$ 32,331,000	$ 39,618,000	$ 20,676,000	$ 20,685,000	$ 93,744,000	$ 149,853,000	$ 243,597,000
Predicted YE Capital Reserve Balance	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000	$ 7,800,000			

Electric Capital Improvement Plan: 2020-2029 FINAL

TNICE 062719

Attachment 2	Contact	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	5-Year Total 2020-2024	5-Year Total 2025-2029	10-Year Total
General Funding														
Capital Reserve Balance		$25,355,000	$22,079,000	$22,100,000	$23,402,000	$22,234,000	$22,048,000	$22,077,000	$22,012,000	$22,092,000	$22,007,000			
Electric Rates - Operational Funding		$22,765,000	$26,886,000	$18,665,000	$21,265,000	$24,615,000	$22,815,000	$19,465,000	$20,765,000	$19,115,000	$19,865,000			
Customer-Driven Capital Re-Imbursement		$2,273,000	$2,246,000	$2,091,000	$2,153,000	$2,218,000	$2,284,000	$2,352,000	$2,423,000	$2,496,000	$2,571,000			
Customer Connections	FATOOH	$1,581,000	$1,628,000	$1,677,000	$1,727,000	$1,779,000	$1,832,000	$1,887,000	$1,944,000	$2,002,000	$2,062,000			
Precapitalized Transformer Reimbursement	FATOOH	$290,000	$299,000	$308,000	$317,000	$327,000	$337,000	$347,000	$357,000	$368,000	$379,000			
Telecom	NEVINS	$402,000	$319,000	$106,000	$109,000	$112,000	$115,000	$118,000	$122,000	$126,000	$130,000			
FEMA Grant Funding	BALMER	$681,000	$0	$500,000	$500,000	$0	$0	$0	$0	$0	$0			
Total Funds:		**$51,074,000**	**$51,211,000**	**$43,356,000**	**$47,320,000**	**$49,067,000**	**$47,147,000**	**$43,894,000**	**$45,200,000**	**$43,703,000**	**$44,443,000**			
Type 1 - General Capital														
Electric Infrastructure - Generation	ZINNIKER	$2,100,000	$2,950,000	$2,020,000	$1,170,000	$550,000	$550,000	$560,000	$580,000	$580,000	$580,000	$8,790,000	$2,850,000	$11,640,000
Customer-Driven Capital Expense		$2,273,000	$2,246,000	$2,091,000	$2,153,000	$2,218,000	$2,284,000	$2,352,000	$2,423,000	$2,496,000	$2,571,000	$10,981,000	$12,126,000	$23,107,000
Electric Infrastructure - Transmission & Distribution		$6,560,000	$6,144,000	$6,678,000	$6,872,000	$6,498,000	$6,039,000	$6,844,000	$7,045,000	$7,261,000	$7,483,000	$32,752,000	$34,672,000	$67,424,000
Telecom Fiber - EWEB Driven	NEVINS	$346,000	$1,250,000	$110,000	$550,000	$114,000	$550,000	$118,000	$120,000	$122,000	$122,000	$2,370,000	$1,032,000	$3,402,000
Telecom - Radio	ZINNIKER	$0	$0	$0	$0	$200,000	$300,000	$300,000	$300,000	$0	$0	$200,000	$900,000	$1,100,000
Precapitalized AMI Meter Capital subtotal (post-deployment)	MCELROY	$0	$0	$0	$546,000	$563,000	$250,000	$250,000	$250,000	$500,000	$500,000	$1,109,000	$1,750,000	$2,859,000
Information Services (IS) - Shared & Electric	BARTON	$1,590,000	$1,342,000	$764,000	$1,187,000	$831,000	$1,095,000	$1,235,000	$1,320,000	$1,338,000	$940,000	$5,714,000	$5,928,000	$11,642,000
General Plant - Buildings & Land	WAHTO	$80,000	$48,000	$32,000	$24,000	$48,000	$48,000	$180,000	$229,000	$260,000	$688,000	$232,000	$1,405,000	$1,637,000
General Plant - Fleet	LENTSCH	$730,000	$840,000	$1,150,000	$1,150,000	$1,250,000	$920,000	$938,000	$957,000	$976,000	$0	$5,120,000	$3,791,000	$8,911,000
Total Type 1 Net Expenditures		**$13,679,000**	**$14,820,000**	**$12,845,000**	**$13,652,000**	**$12,272,000**	**$12,036,000**	**$12,777,000**	**$13,224,000**	**$13,533,000**	**$12,884,000**	**$67,268,000**	**$64,454,000**	**$131,722,000**
Total Type 1 Net Expenditures Not including Customer Reimbursable														
Type 2 - Rehabilitation & Expansion Projects														
Type 2 - Bond (Non-Rate) Funds Allocated														
Total Type 2 Bond (Non-Rate) Funds		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	$0	$0
Type 2 - Rehabilitation & Expansion Project Expenditures														
Downtown Distribution Network	NICE	$1,700,000	$1,030,000	$1,060,000	$1,094,000	$1,576,000	$1,160,000	$1,194,000	$1,230,000	$1,267,000	$1,304,000	$6,460,000	$6,155,000	$12,615,000
Distribution Resiliency Upgrades	FATOOH	$931,000	$0	$600,000	$600,000	$0	$0	$0	$0	$0	$0	$2,131,000	$0	$2,131,000
Advanced Meters (Electric)	MCELROY	$5,555,000	$3,737,000	$1,524,000	$0	$0	$0	$0	$0	$0	$0	$10,816,000	$0	$10,816,000
Generation - Type 2 Strategic Project(s)	ZINNIKER	$2,000,000	$0	$0	$1,100,000	$2,000,000	$1,000,000	$1,375,000	$0	$0	$0	$5,100,000	$2,375,000	$7,475,000
Electric System Modernization	NICE	$400,000	$100,000	$200,000	$456,000	$462,000	$718,000	$225,000	$100,000	$0	$0	$1,618,000	$1,043,000	$2,661,000
Electric T & D - Type 2 Strategic Project(s)	NICE	$1,250,000	$7,200,000	$500,000	$5,386,000	$7,828,000	$6,144,000	$3,550,000	$5,750,000	$4,034,000	$5,871,000	$22,164,000	$25,349,000	$47,513,000
Information Technology - Type 2 Strategic Project(s)	BARTON	$2,680,000	$2,224,000	$3,225,000	$2,798,000	$2,881,000	$3,432,000	$1,567,000	$1,574,000	$2,229,000	$2,296,000	$13,808,000	$11,098,000	$24,906,000
Buildings & Land - Type 2 Strategic Project(s) Total		$800,000	$0	$0	$0	$0	$580,000	$1,194,000	$1,230,000	$633,000	$0	$800,000	$3,637,000	$4,437,000
Type 2 Capital Expenditures (Bond, Customer, & Rate Funded)		**$15,316,000**	**$14,291,000**	**$7,109,000**	**$11,434,000**	**$14,747,000**	**$13,034,000**	**$9,105,000**	**$9,884,000**	**$8,163,000**	**$9,471,000**	$62,897,000	$49,657,000	$112,554,000
Type 2 - Rate-Funded Capital Expenditures		**$15,316,000**	**$14,291,000**	**$7,109,000**	**$11,434,000**	**$14,747,000**	**$13,034,000**	**$9,105,000**	**$9,884,000**	**$8,163,000**	**$9,471,000**	$62,897,000	$49,657,000	$112,554,000
Type 1 + Type 2 Rate-Funded Capital Expenditures		**$28,995,000**	**$29,111,000**	**$19,954,000**	**$25,086,000**	**$27,019,000**	**$25,070,000**	**$21,882,000**	**$23,108,000**	**$21,696,000**	**$22,355,000**	$130,165,000	$114,111,000	$244,276,000
Type 3 - Strategic Projects & Programs														
Type 3 - Bond (Non-Rate) Funds Allocated														
Carmen-Smith Dedicated Funds	ZINNIKER/BOYLE	$19,410,000	$22,950,000	$9,870,000	$11,220,000	$11,540,000	$3,180,000	$1,460,000	$1,350,000	$0	$0	$74,990,000	$5,990,000	$80,980,000
Type 3 - Expenditures														
Carmen-Smith Expenditures	ZINNIKER/BOYLE	$19,410,000	$22,950,000	$9,870,000	$11,220,000	$11,540,000	$3,180,000	$1,460,000	$1,350,000	$0	$0	$74,990,000	$5,990,000	$80,980,000
Total Expenditures		**$48,405,000**	**$52,061,000**	**$29,824,000**	**$36,306,000**	**$38,559,000**	**$28,250,000**	**$23,342,000**	**$24,458,000**	**$21,696,000**	**$22,355,000**	$256,747,000	$120,101,000	$325,256,000
Predicted Year-End Reserve Balance		**$22,079,000**	**$22,100,000**	**$23,402,000**	**$22,234,000**	**$22,048,000**	**$22,077,000**	**$22,012,000**	**$22,092,000**	**$22,007,000**	**$22,088,000**	$155,952,000	$110,276,000	$222,139,000
(a) - Capital Reserve Uses Starting Value		$22,079,000	$22,100,000	$23,402,000	$22,234,000	$22,048,000	$22,077,000	$22,012,000	$22,092,000	$22,007,000	$22,088,000	**End of 2024**	**End of 2029**	**End of 2029**
Reserve Transfer Required To Meet $22M Minimum		($79,000)	($100,000)	($1,402,000)	($234,000)	($48,000)	($77,000)	($12,000)	($92,000)	($7,000)	($88,000)	($1,863,000)	($276,000)	($2,139,000)