

Fiscal Year 2020 Fees/Rates, Operating and Capital Budgets



# 2020 Rates/Fees

### **Fees**

Description	Amount	Comments
Billing/Office Fees		
Convenience Fee	3%	Used on Impact Fee and Work Order credit card payments only
Late Payment Charge (Compounded)	1.5%	Applied on any past due amounts
Returned Payment Charge	15.00	
Reconnect Fee	20.00	
Service Application Fee	20.00	
Seasonal Disconnect Fee	50.00	
Construction Fees		
Impact Fee	Amperage Calc	Included in current schedule
Line Extension/New Development - Installation	Bid Estimate	Estimate for Labor, Materials, and Overhead provided upon request
Initiation/Will Serve	200.00	Check only
Design Fee	300.00	This is a per development phase fee
Design Fee (resubmit)	20.00	Per residential/commercial unit
Truck Roll Fee	50.00	Set fee for extra vehicle trips, i.e. reinspection, meter verification, troubleshooting customer side, etc
New Service / Meter Related Fees		
Wire Pull (up to 400 amps)	300.00 plus meter	Customer responsible for wire on services larger than 400 amps.
Meter Installation Fee – Single Phase	235.00	All new meter issuances regardless of reason, does not
Meter Installation Fee – 3-Phase	470.00	include replacement meters.
Meter - Nonstandard Meter - Monthly Meter Reading Charge	20.00	Typically those meters that must be manually read
Net Metering - Application Fee	300.00	Included in current schedule.
Device Fees		
Generation Transfer Switch - Preliminary Inspection Fee	100.00	Verification trip for sizing and device appropriateness
Generation Transfer Switch - Installation Fee	100.00	Installation and meter re-installation
Outside Lighting (Yard Lights)	\$6.50/Month	Set fee regardless of consumption levels
Outside Lighting Maintenance	25.00 plus parts	

### Rates

Residential	
Base/Customer Charge	13.70
1st 1,000 kWh	$0.0833/\mathrm{kWh}$
All Additional	0.1037/kWh
Residential/Small Commercial - Pumping	
Base/Customer Charge	13.70
Demand Rate	$8.90/\mathrm{kW}$
1st 500 kWh	0.061/kWh
All Additional	0.061/kWh
General Service - Small (1kW <x<= (single="" 30kw)="" phase)<="" td=""><td></td></x<=>	
Base/Customer Charge	11.00
Demand Rate	$9.50/\mathrm{kW}$
1st 500 kWh	0.084/kWh
All Additional	0.049/kWh
General Service - Small (1kW <x<= (3-phase)<="" 30kw)="" td=""><td></td></x<=>	
Base/Customer Charge	13.00
Demand Rate	$9.50/\mathrm{kW}$
1st 500 kWh	$0.084/\mathrm{kWh}$
All Additional	0.049/kWh
General Service - Medium (>30kW & <= 250kW)	
Base/Customer Charge	40.00
Demand Rate	$10.80/\mathrm{kW}$
1st 500 kWh	$0.0574/\mathrm{kWh}$
All Additional	0.0457/kWh
General Service - Medium (>30kW) - Pumping	
Base/Customer Charge	40.00
Demand Rate	$8.90/\mathrm{kW}$
1st 500 kWh	0.061/kWh
All Additional	0.061/kWh
General Service - Large (> 250kW)	
Base/Customer Charge	77.00
Demand Rate	14.10/kW
All kWh	0.046/kWh

# Heber Light & Power Company

2020 Budget – Executive Summary (State Format)

	2018 Actual	2019 Budget	2019 Projected	2020 Budget	
REVENUES					
Electricity Sales	\$18,476,656	\$18,872,341	\$18,673,107	\$19,735,227	
Connect Fees	35,195	51,000	37,460	41,000	
Receivables Penalty Income	46,700	70,000	48,062	50,000	
Other / Miscellaneous Income	304,423	451,815	313,947	189,815	
Total Revenues	\$18,862,784	\$19,445,156	\$19,072,576	\$20,016,042	
COST OF ELECTRIC SERVICE					
Power Production Expense	(894,387)	(957,475)	(1,079,230)	(896,274)	
Cost of Purchased Power	(9,354,189)	(10,412,664)	(10,275,339)	(10,839,007)	
Dist Expense – Operations	(307,870)	(343,659)	(348,898)	(356,448)	
Dist Expense – Maintenance	(2,070,554)	(1,884,272)	(2,288,402)	(2,423,943)	
Customer Account Expense	(8,087)	(25,000)	(1,597)	(1,200)	
Admin & General Expense	(3,291,564)	(3,891,306)	(2,097,648)	(2,685,580)	
Total Operating & Maint. Expense	(15,926,651)	(17,514,376)	(16,091,114)	(17,202,452)	
5	(2.002.222)	(2.400.000)	(2.222.200)	(2.520.255)	
Depreciation	(2,082,223)	(2,100,000)	(2,322,399)	(2,530,355)	
Interest on Long-Term Debt	(498,354)	(493,229)	(486,140)	(1,047,482)	
Other Deductions	(32,181)	(38,800)	(21,165)	(24,400)	
Total Cost of Electric Service	(18,763,434)	(20,146,405)	(18,920,818)	(20,804,689)	
OPERATION MARGIN	99,875		151,758	(788,647)	
Interest Income	82,000	81,000	125,337	125,000	
Non-Operating Margins-Other	2,913,563	2,850,000	3,314,582	2,500,000	
Dividends	(300,000)	(300,000)	(300,000)	(300,000)	
OPERATING MARGIN	2,795,438	1,929,751	3,291,677	1,536,353	
CADITAL EXPENDITURES					
CAPITAL EXPENDITURES	6.240	96 100	1 722	15,000	
Generation - Hydro Generation – Gas Plant	6,249 (157,107)	86,100	1,723 53,716	15,000	
Distribution	(157,197)	487,000		1,398,000	
	2,181,702	2,381,000	2,639,309	4,375,000	
Substation	631,049	3,189,000	139,170	8,531,000	
Metering	102,208	133,200	21,949	25,000 1,027,000	
Buildings Validae	(174,750)	1,353,000	173,423	1,027,000	
Vehicles Tools	495,649	1,160,000	417,511	540,000	
Tools Task release IT	(166,108)	199,000	42,700	240,000	
Technology – IT	196,363	88,000	34,586	99,000	
Total Capital	3,112,165	9,076,300	3,524,087	16,250,000	

# Heber Light & Power Company

2020 Budget – Executive Summary (Actuals Format)

	2017 Actual		2019 Projected	2020 Budget	
REVENUES Electricity Sales Connect Fees Receivables Penalty Income Other / Miscellaneous Income	\$17,750,435 41,975 49,187 432,387	\$18,476,656 35,195 46,700 304,423	\$18,673,107 37,460 48,062 313,947	\$19,735,227 41,000 50,000 189,815	
Total Revenues	\$18,273,984	\$18,862,784	\$19,072,576	\$20,016,042	
COST OF ELECTRIC SERVICE Power Production Expense Cost of Purchased Power Dist Expense – Operations Dist Expense – Maintenance Customer Account Expense Admin & General Expense	(919,330) (8,754,285) (309,696) (1,831,416) (24,776) (3,828,996)	(894,387) (9,354,189) (307,870) (2,070,554) (8,087) (3,291,564)	(1,079,230) (10,275,339) (348,898) (2,288,402) (1,597) (2,097,648)	(896,274) (10,839,007) (356,448) (2,423,943) (1,200) (2,685,580)	
Total Operating & Maint. Expense	(15,668,499)	(17,514,376)	(16,091,114)	(17,202,452)	
Depreciation Interest on Long-Term Debt Other Deductions Total Cost of Electric Service	(1,908,270) (525,008) (14,815) (18,116,592)	(2,082,223) (498,354) (32,181) (18,763,434)	(2,322,399) (486,140) (21,165) (18,920,818)	(2,530,355) (1,047,482) (24,400) (20,804,689)	
, and the second			,	,	
OPERATION MARGIN  Interest Income Non-Operating Margins-Other Dividends	157,392 46,982 2,682,978 (300,000)	99,875 82,000 2,913,563 (300,000)	151,758 125,337 3,314,582 (300,000)	(788,647) 125,000 2,500,000 (300,000)	
OPERATING MARGIN	2,587,352	2,795,438	3,291,677	1,536,353	
CAPITAL EXPENDITURES Generation - Hydro Generation - Gas Plant Distribution Substation Metering Buildings Vehicles Tools Technology - IT	22,389 130,133 1,634,883 229,304 120,592 44,716 24,187 11,713 117,096	6,249 (157,197) 2,181,702 631,049 102,208 (174,750) 495,649 (166,108) 196,363	1,723 53,716 2,639,309 139,170 21,949 173,423 417,511 42,700 34,586	15,000 1,398,000 4,375,000 8,531,000 25,000 1,027,000 540,000 240,000 99,000	
Total Capital	2,335,013	3,112,165	3,524,087	16,250,000	

### **Operating Expenditures Budget**

#### **Revenues**

The 2020 electricity revenues are budgeted to increase 5.8% over the projected 2019 revenues for residential and 6.9% for general service accounts. This represents a conservative estimate for the trended load growth and implementation of a rate increase adopted during 2019.

Revenues associated with Capital in Aid of Construction and Impact Fees are not included as these revenues are not regular and are typically subject to external economic conditions.

	2018 Actual	2019 Budget	2019 Projected	2020 Budget
REVENUES				
Electricity Sales	\$18,476,656	\$18,872,341	\$18,673,107	\$19,735,227
Connect Fees	35,195	51,000	37,460	41,000
Receivables Penalty Income	46,700	70,000	48,062	50,000
Other / Miscellaneous Income	304,423	451,815	313,947	189,815
Total Revenues	\$18,862,784	\$19,455,156	\$19,072,576	\$20,016,042

### **Expenses**

### **Power Purchased**

Power Purchased expense is calculated by analyzing supply requirements, identifying the cost of supply from individual sources and adding contingency pricing for market fluctuations.

### Wages and Board Compensation

Included in the wages and board compensation expense are amounts for the current complement of employees.

### **Board Compensation**

Board <u>Position</u>	Stipend <u>Amount</u>
Chair	7,295.04
Member 1	5,703.84
Member 2	5,703.84
Member 3	5,703.84
Member 4	5,703.84
Member 5	<u>5,703.84</u>
	\$35,814.24

### Repairs & Maintenance

Repairs and maintenance are anticipated to continue in 2020.

### Travel & Training

To maintain the advanced technical knowledge required in the industry, various training initiatives for staff are included in the 2020 Budget.

# Capital Expenditures Budget

The Capital Budget for 2020 totals \$16,250,000. Heber Light & Power anticipates utilizing revenue from energy sales, debt financing, capital in aid of construction and through impact fees to complete the 2020 capital program. In the event these resources are insufficient to meet these anticipated capital addition expenditures, Heber Light & Power has two other payment mechanisms at its disposal. The first, Heber Light & Power can use additional debt-financing in the event additional funds are required to complete the needed capital expansion projects. The second is through reserve accounts of which Heber Light & Power maintains two such funds. The first such fund is a contingency fund with a current balance of roughly \$2.7 million which is available to address certain large capital purchases and /or reserve requirements associated with internal generation, rate stabilization and power market escalation. The second such fund is a capital reserve fund meant to supply quick access to funds in order to complete major projects considered in the Company's current Strategic Plan.

Also included in the table below are principal payments relating to the Company's long-term debt.

Classification	Expenditure	<b>Impact</b>	<u>CIAC</u>	Net Amount
Generation - Hydro	15,000	-	-	15,000
Generation – Gas Plant	1,398,000	-	-	1,398,000
Distribution	4,375,000	(2,640,000)	(1,500,000)	235,000
Substation	8,531,000	(7,620,000)	-	911,000
Metering	25,000	-	(25,000)	0
Buildings	1,027,000	<b>7</b> - A	-	1,027,000
Vehicles	540,000	-	-	540,000
Tools	240,000	-	-	240,000
Technology – IT	99,000	-	-	99,000
	Т	otal Capital E	expenditures:	\$4,465,000
	Principal Paym	ents on Long	-Term Debt:	585,000
		Total Cash R	equirements:	\$5,050,000

Detailed capital project descriptions in support of these amounts are included on the following pages.



# **Buildings**

- 1) Generator Fire Suppression System
- 2) New Office Building
- 3) Cold Storage Replacement
- 4) Plant 3 Roof Replacement
- 5) Plant 1 Electrical Upgrades
- 6) Plant HVAC Upgrades

### Project Analysis Form

Project Name:	Generator Fire Suppression System
Project Driver:	Safety
Priority Level:	Medium

### Purpose & Necessity:

Small fires are occasionally generated on and around the generators as a result of the excessive amounts of heat, fuel and available catalysts. As a result, the dispatchers and generation employees are using handheld extinguishing tools to extinguish these fires when they arise. Our insurance reviews are frequently critical of the lack of suppression systems on our generators and thus this project will increase safety as well as increase our insurability.

Plant 1: \$161,000 Plant 2: \$213,000 Plant 3: \$110,000 System: \$46,000

#### Risk Assessment:

Potential exists to have a major fire that either drastically damages the structure, equipment, or both. The damage can result from the fire itself or from the firefighting methods that will be employed by the local fire department with their water-based fighting technology. A larger risk exists in that employees are typically called upon to be the first line of defense to which they are woefully under supplied and un-trained.

	<u>2019</u>	<u>2020</u>	2	021	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Overall</u>
Internal Labor	-	6,000.00		-	-	-	-	6,000.00
Materials	-	-		-	-	-	-	-
Subcontractor	-	150,000.00		-	213,000.00	161,000.00	-	524,000.00
Miscellaneous	-	-		- /	-	-	-	-
(CIAC) Reim	-			-	_	-	-	
Subtotal:	\$ -	\$ 156,000.00	\$	-	\$ 213,000.00	\$ 161,000.00	\$ -	\$ 530,000.00
Impact Fee %	0%	0%		0%	0%	0%	0%	0%
Net Amount:	\$ -	\$ 156,000.00	\$		\$ 213,000.00	\$ 161,000.00	\$ -	\$ 530,000.00

### Project Analysis Form

Project Name: New Office Building	
Project Driver: Upgrade	
Priority Level: Medium	

#### Purpose & Necessity:

Heber Light & Power has outgrown the existing work space for administrative operations. In addition, the building is older and not ADA compliant. Furthermore the division of Administration from Operations has made communications less-effective between departments. The building is currently surrounded on all four sides with rights-of-ways for other entities which causes expansion limitations. Parking for employees and customers is extremely limited. Finally, numerous secondary elements such as IT structure, and building security cannot be adequately addressed in the current state.

#### Risk Assessment:

Efficiency is the main advantage to combining all of the administrative functions under one roof. In addition, by remaining non-compliant with appropriate ADA standards, the company remains at risk of not accommodating customer needs. Furthermore the transition to 138kV service in the valley also opens the company to additional cyber-security scrutiny and controls. The current building set-up will require extensive adjustments to obtain compliance with NERC CIPS requirements.

	<u>2020</u>	<u>2021</u>	<u>2022</u>		20	023	<u>2024</u>	<u> </u>	20	<u> 25</u>	<u>Overall</u>
Internal Labor	-	-		-		-		-		-	-
Materials	-	-		-		-		-		-	-
Subcontractor	-	-		- /		-		-		-	-
Miscellaneous	500,000.00	1,500,000.00		- / /		-		-		-	2,000,000.00
(CIAC) Reim	_	_		-				-		-	
Subtotal: \$	500,000.00	\$ 1,500,000.00	\$	-/	\$	-	\$	-	\$	-	\$ 2,000,000.00
Impact Fee %	0%	0%		0%							
Net Amount:\$	500,000.00	\$1,500,000.00	\$ .		\$	-	\$	<u>.</u>	\$	-	\$ 2,000,000.00

### Project Analysis Form

Project Name:	Cold Storage Replacement
Project Driver:	Upgrade
Priority Level:	Medium

### Purpose & Necessity:

Cold storage is an underutilized building space on the operations campus. As such, the time has come to better utilize the space currently occupied by the cold storage building. This project would remove the existing structure and replace it with a new structure that is insulated and fitted with appropriate equipment to support operations purposes.

### Risk Assessment:

Without this project, HLP will continue to place critical assets in harms way as the growth of the company has increased the number of vehicles and other necessary tools that merit protection from the elements and theft.

	<u>2020</u>	2	2021	20	022	 <u> 2023</u>	<u>20</u>	<u>)24</u>	<u>20</u>	<u> 25</u>	<u>Overall</u>
Internal Labor	-		-		-	-		-		-	-
Materials	-		-		-	-		-		-	-
Subcontractor	167,000.00		-		-	-		-		-	167,000.00
Miscellaneous	-		-		- (	-		-		-	-
(CIAC) Reim	_		-		-	-		-		-	
Subtotal:	\$ 167,000.00	\$	-	\$	-	\$ -	\$	-	\$	-	\$ 167,000.00
Impact Fee %	0%										
Net Amount:	\$ 167,000.00	\$	-	\$	-	\$ -	\$	-	\$		\$ 167,000.00

### Project Analysis Form

Project Name:	Gas Plant 3 Roof Replacement
Project Driver:	Replacement
Priority Level:	High
TD 0 3-1	•

#### Purpose & Necessity:

Gas Plant 3 is the facility that houses the Caterpillar Test Engines. The exchange of different test engines have generated enough alterations in the roof for the various engine peripherals that a new roof needs to be installed to protect the facility and its equipment.

### Risk Assessment:

Risk exists that equipment not intended to be in the weather is regularly exposed to the weather due to holes in the roof. Roof mounted equipment is also at risk of failure due to the need of a stable roof structure for such.

	<u>2020</u>	2	2021	<u>20</u>	<u>22</u>	2	<u> 2023</u>	<u>20</u>	<u> 24</u>	<u>20</u>	<u> 25</u>	Ove	<u>rall</u>
Internal Labor	-		-		-		-		-		-		-
Materials	-		-		-		-		-		-		-
Subcontractor	150,000.00		-		-		-		-		-	150,0	00.00
Miscellaneous	-		-		- (				-		-		-
(CIAC) Reim	_		-		-		-		-				
Subtotal:	\$ 150,000.00	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 150,0	00.00
Impact Fee %	0%												0%
Net Amount:	\$ 150,000.00	\$	-	\$	-	\$	-	\$	<u>-</u>	\$	-	\$ 150,0	00.00

### Project Analysis Form

Project Name:	Plant 1 Electrical Upgrade
Project Driver:	Upgrade
Priority Level:	Medium
D 0.37	

#### Purpose & Necessity:

The electrical system in Plant 1 reflects multiple decades of different generator types and configurations. As a result there is legacy wiring throughout the plant that is in the way of current operations. In addition, some of the electrical equipment is rather aged and is in need of an upgrade. Furthermore, the electrical panel is overloaded and could use additional space for plant operations.

#### Risk Assessment:

Electrical shortages that will limit the effectiveness of the plant as well as run the risk of equipment failure due to overloaded circuits. The largest risk is that of an electrical fire.

	<u>2020</u>	2	2021	<u>2</u> (	022	2	023	<u>2024</u>	202	<u> 25</u>	<u>Overall</u>
Internal Labor	-		-		-		-	-		-	-
Materials	-		-		-		-	40,000.00		-	40,000.00
Subcontractor	-		-		- /		<i>-</i> <	10,000.00		-	10,000.00
Miscellaneous	-		-		-		-	-		-	_
(CIAC) Reim			-					-			 -
Subtotal:	\$ -	\$	-	\$	-	\$	-	\$ 50,000.00	\$	-	\$ 50,000.00
Impact Fee %	0%										0%
Net Amount:	\$ _	\$	-	\$		\$		\$ 50,000.00	\$ .		\$ 50,000.00

### Project Analysis Form

Project Name:	Plant HVAC Upgrades
Project Driver:	Upgrade
Priority Level:	High

### Purpose & Necessity:

The generation plants are presently cooled through the use of numerous evaporative coolers. These coolers are prone to failure and inefficient due to their advancing age. This project would provide for the replacement of multiple evaporative coolers with a more energy efficient newer evaporative cooler. These updates will happen over the course of multiple years. The first such upgrade happened in 2019. Each year an additional set of coolers will be replaced until all have been taken care of.

#### **Risk Assessment:**

Generators require cooling in order to maintain optimal efficiency and reduce the risk of fire caused by excessive heat.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	-	-	-
Subcontractor	70,000.00	70,000.00	80,000.00	80,000.00	80,000.00	-	380,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-		_	_	-		
Subtotal:	\$ 70,000.00	\$ 70,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ -	\$ 380,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	\$ 70,000.00	\$ 70,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ -	\$ 380,000.00



# Generation

- 1) Annual Generation Capital Improvements
- 2) Lower Snake Creek Plant Upgrade
- 3) Upper Snake Creek Capital Improvements
- 4) Lake Creek Capital Improvements
- 5) Gas Plant 2 Switchgear Upgrade
- 6) New Generator
- 7) Unit Overhauls
- 8) Gas Plant 1 Transformer Upgrade
- 9) Gas Plant 3 Switchgear Upgrade

### Project Analysis Form

Project Name:	Capital Improvements - Generation
Project Driver:	Reliability
Priority Level:	High

### Purpose & Necessity:

Each year various generation related assets are needed in order to prolong the life, meet additional environmental requirements, and increase capacity. As such a blanket amount is approved in order to increase response time when upgrades are required. Furthermore it eliminates the multiple approvals that could present themselves during the course of a year for minor capital asset additions.

2024 has additional funds for Plant 1 roof replacement, exhaust fans, and a new gas line in Plant 2

#### Risk Assessment:

Equipment will wear down to a point of non-function thus requiring additional expense to restore them to functionality again. An additional risk is that of an environmental penalty or sanction resulting from tardiness installing needed equipment. The gas line in plant 2 is a fire hazard as presently constituted.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>20</u>	025	<b>Overall</b>
Internal Labor	10,000.00	10,000.00	10,000.00	10,000.00	25,000.00		-	65,000.00
Materials	40,000.00	40,000.00	40,000.00	40,000.00	175,000.00		-	335,000.00
Subcontractor	-	-	-		-		-	-
Miscellaneous	-	-	-	-	-		-	-
(CIAC) Reim	-			-	-		-	
Subtotal: \$	50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 200,000.00	\$	-	\$ 400,000.00
Impact Fee %	0%	0%	0%	0%	0%			0%
Net Amount:\$	50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$ 200,000.00	\$	-	\$ 400,000.00

### Project Analysis Form

Project Name:	Lower Snake Creek Plant Upgrade
Project Driver:	Reliability
Priority Level:	Medium

#### Purpose & Necessity:

Each year various generation related assets are needed in order to prolong the life, meet additional environmental requirements, and increase capacity. As such a blanket amount is approved in order to increase response time when upgrades are required. Furthermore it eliminates the multiple approvals that could present themselves during the course of a year for minor capital asset additions.

#### Risk Assessment:

The facility will become unusable and thus eliminate the generating capacity that it provides to our system.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	2023	<u>2024</u>	2	025	<u>Overall</u>
Internal Labor	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00		-	5,000.00
Materials	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00		-	20,000.00
Subcontractor	-	-	-	-	-		-	-
Miscellaneous	-	-	-	-	-		-	-
(CIAC) Reim	_	-	_		-		-	 _
Subtotal:	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$	-	\$ 25,000.00
Impact Fee %	0%	0%	0%	0%	0%			
Net Amount:	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$	-	\$ 25,000.00

### Project Analysis Form

Project Name:	Upper Snake Creek Plant Upgrade
Project Driver:	Reliability
Priority Level:	Medium

#### Purpose & Necessity:

Each year various generation related assets are needed in order to prolong the life, meet additional environmental requirements, and increase capacity. As such a blanket amount is approved in order to increase response time when upgrades are required. Furthermore it eliminates the multiple approvals that could present themselves during the course of a year for minor capital asset additions.

#### Risk Assessment:

The facility will become unusable and thus eliminate the generating capacity that it provides to our system.

	<u>2020</u>	<u>2021</u>	<u>2022</u>		2023	<u>2024</u>	2	025	<b>Overall</b>
Internal Labor	1,000.00	1,000.00	1,000.00		1,000.00	1,000.00		-	5,000.00
Materials	4,000.00	4,000.00	4,000.00		4,000.00	4,000.00		-	20,000.00
Subcontractor	-	-	-		-	-		-	-
Miscellaneous	-	-	-		-	-		-	-
(CIAC) Reim	-	-	-	4	_	_		-	_
Subtotal:	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$	5,000.00	\$ 5,000.00	\$	-	\$ 25,000.00
Impact Fee %	0%	0%	0%		0%	0%			
Net Amount: _	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$	5,000.00	\$ 5,000.00	\$	-	\$ 25,000.00

### Project Analysis Form

Project Name:	Lake Creek Improvements
Project Driver:	Reliability
Priority Level:	Medium

### Purpose & Necessity:

Each year various generation related assets are needed in order to prolong the life, meet additional environmental requirements, and increase capacity. As such a blanket amount is approved in order to increase response time when upgrades are required. Furthermore it eliminates the multiple approvals that could present themselves during the course of a year for minor capital asset additions.

### Risk Assessment:

The facility will become unusable and thus eliminate the generating capacity that it provides to our system.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	2	025	Overall
Internal Labor	1,000.00	1,000.00	1,000.00	1,000.00	3,000.00		-	7,000.00
Materials	4,000.00	4,000.00	4,000.00	4,000.00	12,000.00		-	28,000.00
Subcontractor	-	-	-	7	-		-	-
Miscellaneous	-	-	- /	-	-		-	-
(CIAC) Reim	-	-	-		-		-	 _
Subtotal: \$	5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 15,000.00	\$	-	\$ 35,000.00
Impact Fee %	0%	0%	0%	0%	0%			0%
Net Amount: \$	5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 15,000.00	\$	-	\$ 35,000.00

### Project Analysis Form

Project Name:	Plant 2 Switchgear Upgrade
Project Driver:	Upgrade
Priority Level:	High

### Purpose & Necessity:

The switchgear system in Plant 2 is no longer sufficient to adequately operate effectively to protect the generators. This project will upgrade the switchgear for SCADA controlled protection scheme.

### Risk Assessment:

In the event a system failure occurs, the generators in Plant 2 are protected only by an outdated manual system. Thus the generators could be significantly damaged if an event happens on the grid.

	<u>2020</u>	<u>20</u>	21	2	<u>022</u>	2	2023	<u> 2024</u>	<u>20</u>	<u> 025</u>	<u>Overall</u>
Internal Labor	2,000.00		-		-		-	-		-	2,000.00
Materials	18,000.00		-		-		-	-		-	18,000.00
Subcontractor	-		-		- /		-	-		-	-
Miscellaneous	-		-		- (		-	-		-	-
(CIAC) Reim	-		-		-		-	-		-	 -
Subtotal:	\$ 20,000.00	\$	-	\$	-	\$	-	\$ -	\$	-	\$ 20,000.00
Impact Fee %	0%									>	
Net Amount:	\$ 20,000.00	\$	-	\$	-	\$	-	\$ -	\$	-	\$ 20,000.00

### Project Analysis Form

Project Name: New Generator (	3 MW)	
Project Driver: Growth		
Priority Level: Medium		

### Purpose & Necessity:

The current generation portfolio will be heavily strained by 2022 without the procurement of other generating sources. Load growth is projected to be regular and consistent. The generator portfolio is used regularly to defer the market risk that is inherent with the increasing resource needs of the company.

#### Risk Assessment:

Heber Light & Power is regularly attempting to diversify the generation portfolio. Without the acquisition of additional resources, the Company will be forced to purchase more energy from the market at the prevailing rates which may not favor the Company.

	2020	<u>2021</u>	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	15,000.00	-	15,000.00	15,000.00	-	-	45,000.00
Materials	1,105,000.00	-	1,105,000.00	1,105,000.00	-	-	3,315,000.00
Subcontractor	80,000.00	-	80,000.00	80,000.00	-	-	240,000.00
Miscellaneous	-	-	-		-	-	-
(CIAC) Reim	-						
Subtotal:	\$ 1,200,000.00	\$ -	\$ 1,200,000.00	\$ 1,200,000.00	\$ -	\$ -	\$ 3,600,000.00
Impact Fee %							
Net Amount:	\$1,200,000.00	\$ -	\$1,200,000.00	\$ 1,200,000.00	\$ -	\$ -	\$ 3,600,000.00

### Project Analysis Form

Project Name:	Unit Overhauls
Project Driver:	Reliability

### Purpose & Necessity:

Priority Level: Medium

The generating units are operated as needed until a requisite number of engine hours have been expired. As a measure of standard preventative maintenance, the engine is taken out of service and the engine is overhauled. The following engines are scheduled to reach their operating hours as follows:

Unit 11 - 2020 Unit 12 - 2021 Unit 4 - 2022 Unit 1 - 2024 Unit 2 - 2025

### **Risk Assessment:**

Equipment will wear down to a point of non-function thus requiring additional expense to restore them to functionality again. An additional risk is that of an untimely outage of either of these two units. By scheduling the overhaul, control of the outage/loss of production can be managed.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	8,000.00	8,000.00	8,000.00	-	8,000.00	8,000.00	40,000.00
Materials	-	-	-	-	-	-	-
Subcontractor	120,000.00	120,000.00	120,000.00	- /	120,000.00	120,000.00	600,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-				_		
Subtotal:	\$ 128,000.00	\$ 128,000.00	\$ 128,000.00	\$ -	\$ 128,000.00	\$ 128,000.00	\$ 640,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	\$ 128,000.00	\$ 128,000.00	\$ 128,000.00	\$ -	\$ 128,000.00	\$ 128,000.00	\$ 640,000.00

### Project Analysis Form

Project Name:	Gas Plant 1 Transformer Upgrade
Project Driver:	Growth
Priority Level:	Low

### Purpose & Necessity:

Gas Plant 1 currently sits with an open generator bay. Growth in the valley will necessitate the placement of a generator in the vacant position. The current transformer is only rated for 7 MW. Additional generator load will require an upgraded transformer capable of handling 10 MW.

### Risk Assessment:

The largest risk associated with the failure to complete this project is the inability to place a needed generator in the open bay of Plant 1. Projected loads will not be adequately met by the company unless the generator portfolio is maintained at the proper level

	20	020	2	<u>021</u>	2022	2	023	<u>2024</u>	2	025	<u>Overall</u>
Internal Labor		-		-	-		-	45,000.00		-	45,000.00
Materials		-		-	-		-	455,000.00		-	455,000.00
Subcontractor		-		-	-		-	-		-	-
Miscellaneous		-		-	-			-		-	-
(CIAC) Reim		-		-	 		-	-		-	
Subtotal:	\$	-	\$	-	\$ -	\$		\$ 500,000.00	\$	-	\$ 500,000.00
Impact Fee %		0%		0%	0%		0%	0%		0%	0%
Net Amount:	\$		\$		\$ 	\$		\$ 500,000.00	\$		\$ 500,000.00

### Project Analysis Form

Project Name:	Plant 3 Switchgear Upgrade
Project Driver:	Upgrade
Priority Level:	Low

### Purpose & Necessity:

The switchgear system in Plant 3 will no longer be adequate to operate effectively to protect the generators within Plant 3. This project will upgrade the switchgear for SCADA controlled protection scheme.

### Risk Assessment:

In the event a system failure occurs, the generators in Plant 3 are protected only by an outdated system. Thus the generators could be significantly damaged if an event happens on the grid.

	20	<u>)20</u>	2	2021	20	022	2	023	<u>2024</u>	<u>202</u>	<u>25</u>	<u>Overall</u>
Internal Labor		-		-		-		-	6,000.00		-	6,000.00
Materials		-		-		-		-	74,000.00		-	74,000.00
Subcontractor		-		-		-		-	-		-	-
Miscellaneous		-		-		-		-7	-		-	-
(CIAC) Reim				-		-			-		-	 -
Subtotal:	\$	-	\$	-	\$	-	\$	-	\$ 80,000.00	\$	-	\$ 80,000.00
Impact Fee %		0%		0%		0%		0%	0%		0%	
Net Amount:	\$		\$	-	\$		\$	_	\$ 80,000.00	\$		\$ 80,000.00



# Distribution

- 1) Reconductor PR 201: Substation to River Road
- 2) Midway Substation Get Aways
- 3) Tie from 702 up to 500 East in Heber (HB304)
- 4) 2nd Point of Interconnect (POI) Transmission Line
- 5) Additional Circuits out of Jailhouse to the East
- 6) Underground System Improvements
- 7) Aged & Environmental Distribution Replacement / Upgrade
- 8) Additional Circuits out of College to South and East
- 9) Fault Indicator Underground System
- 10) Reconductor HB305\_600 West Substation to 300 South
- 11) Rebuild PR 201: Main Street to Burgi Lane
- 12) Install Voltage Regulators at Timber Lakes Gate
- 13) Heber Substation Additional Circuits (South & West)
- 14) Load to Parsons (Reconductor)
- 15) Reconductor Heber City Main Street: 600 South to 1000 South
- 16) 1200 South Transmission Line
- 17) Reconductor Pine Canyon Road Midway
- 18) Reconductor JH 502/503: Old Mill Drive 800 South to 1200 South
- 19) Reconductor MW 101/102: 4/0 to 477
- 20) Rebuild CL 402: 600 West to Tate Lane

# Project Analysis Form

Project Name: R	econductor PR 201: Substation to River Road
Project Driver: U	lpgrade
Priority Level: H	ligh
· _	

### Purpose & Necessity:

Growth along River Road has began to exceed the acceptable conductor size for the existing assets. In order to continue to provide uninterrupted service along this feeder, the conductor needs to be upgraded.

### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2020</u>	20	<u>021</u>	2	2022	2023	<u>2024</u>	<u>20</u>	<u>)25</u>	<u>(</u>	Overall
Internal Labor	25,000.00		-			-	-		-		25,000.00
Materials	125,000.00		-		-	- ,	-		-	1	25,000.00
Subcontractor	-		-		-	- 4	-		-		-
Miscellaneous	-		-		-		-		-		-
(CIAC) Reim	_		-		-	 -	<u> </u>		-		-
Subtotal:	\$ 150,000.00	\$	-	\$	-	\$ -	\$ -	\$	-	\$ 1	50,000.00
Impact Fee %	100%										60%
Net Amount:	\$ -	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-

### Project Analysis Form

Project Name:	Midway Substation - Get Aways
Project Driver:	Upgrade
Priority Level:	High

### Purpose & Necessity:

The current get aways from the Midway Substation are becoming undersized and aged. This project will replace the existing get aways with new, more appropriately sized conductor and other necessary equipment.

#### Risk Assessment:

Imminent failure due to the age and under-sized nature of the existing get aways. Outage and repair efforts will be determined by the type of failure which could be extensive.

	<u>2020</u>	<u>20</u>	<u>)21</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<b>Overall</b>
Internal Labor	-		-	32,000.00	-	-	-	32,000.00
Materials	-		-	128,000.00	-	-	-	128,000.00
Subcontractor	-		-	-	-	-	-	-
Miscellaneous	-		-	-	-	-	-	-
(CIAC) Reim	-	-	-		-	-		
Subtotal:	\$ -	\$	-	\$ 160,000.00	\$ -	\$	\$ -	\$ 160,000.00
Impact Fee %	0%		0%	50%	0%	0%	0%	50%
Net Amount:	\$ -	\$		\$ 80,000.00	\$ -	\$ -	\$ -	\$ 80,000.00

### Project Analysis Form

Project Name:	Tie From 702 up to 500 East in Heber (HB304)
Project Driver:	Growth
Priority Level:	High

#### Purpose & Necessity:

This tie will complete a necessary loop on the North end of Heber City to enhance the system reliability brought upon by the growth in that area of the system.

By completing this project in 2020, the customer intends on providing an easement to enable the building of this line.

#### Risk Assessment:

Without completing this tie, an outage in North Heber City could result in an extended outage due to the current strain on the system capacity. A series of careful switching maneuvers would be necessary to shed the load sufficient to bring this area back online while increasing the risk of failure in other areas of the system. This project is 100% customer driven and thus it has slipped from year to year as the development is still pending.

	<u>2020</u>	<u>2021</u>	2	2022	2023	<u>2024</u>	2	<u> 2025</u>	<u>Overall</u>
Internal Labor	55,000.00	-		-	-	-		-	55,000.00
Materials	100,000.00	-		-	-	-		-	100,000.00
Subcontractor	95,000.00	-		-	- ^	-		-	95,000.00
Miscellaneous	-	-		-/	-	-		-	-
(CIAC) Reim		-		-	-			-	 -
Subtotal:	\$ 250,000.00	\$ -	\$	-	\$ -	\$ -	\$	-	\$ 250,000.00
Impact Fee %	100%	100%							100%
Net Amount:	\$ -	\$ 	\$	-	\$ -	\$ -	\$	-	\$ -

### Project Analysis Form

Project Name: 2nd Point of Interconnect (POI) Transmission Line	
Project Driver: Upgrade	
Priority Level: High	

### Purpose & Necessity:

The transmission system that is currently used to energize the HLP distribution system is undersized and aged in most locations. This project will replace those structures that are in an advanced state of pre-failure while increasing capacity for the next quarter-century.

#### **Risk Assessment:**

The conductor itself will be out of capacity in the next 5 years as a result of regional growth. A risk of prolonged outage as a result of failure due to aged and dilapidated poles is also present.

	<u>2018</u>	2019	2	<u> 2020</u>	2	<u> 2021</u>	2	022	20	023	<u>O</u>	<u>verall</u>
Internal Labor	55,260.21	35,000.00	1	0,000.00		-		-		-	10	00,260.21
Materials	127,194.39	115,000.00	12	0,000.00		-		-		-	30	52,194.39
Subcontractor	1,228,687.89	563,000.00	1,97	0,000.00		-		-		-	3,76	61,687.89
Miscellaneous	-	-		-		_		-		-		-
(CIAC) Reim		-		-				-		-		-
Subtotal:	\$ 1,411,142.49	\$ 713,000.00	\$ 2,10	0,000.00	\$	-	\$	-	\$	-	\$ 4,22	24,142.49
Impact Fee %	100%	100%		100%								100%
Net Amount:	\$ -	\$ -	\$		\$	-	\$	-	\$	-	\$	

### Project Analysis Form

Project Name:	Additional Circuits out of Jailhouse to the East
Project Driver:	Growth
Priority Level:	Medium
Purpose & Nec	cessity: ent of the South end of Heber City, and the East side of Wasatch County have necessitated additional

### Risk Assessment:

circuits out of the Jailhouse Substation.

Insufficient capacity to serve the numerous additional customers seeking service on the South side of Heber City and the East side of Wasatch County. This project is 100% customer driven and thus it has slipped from year to year as the development is still pending.

	2019	<u>2020</u>	<u>2021</u>	2022	<u>2023</u>	<u>2024</u>	<u>Overall</u>
Internal Labor	56,000.00	28,000.00	28,000.00	-	-	-	112,000.00
Materials	224,000.00	112,000.00	112,000.00		-	-	448,000.00
Subcontractor	-	-		-	-	-	-
Miscellaneous	-	-	7	-	-	-	-
(CIAC) Reim	-		_				
Subtotal:	\$ 280,000.00	\$ 140,000.00	\$ 140,000.00	\$ -	\$ -	\$ -	\$ 560,000.00
Impact Fee %	100%	100%	100%	0%	0%	0%	100%
Net Amount:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Project Analysis Form

Project Name:	Underground System Improvements
Project Driver:	Reliability
Priority Level:	Low

### Purpose & Necessity:

Underground equipment becomes subject to the elements and thus begin to show signs of aging and breakdown. Thus HL&P monitors the underground equipment for aging and periodically retires worn out assets by replacing them.

#### **Risk Assessment:**

By refusing to correct the installation issues in the underground assets, HL&P is at risk of unintentional outages and potential hazardous conditions for both employees and customers.

Cuon i iow cenedan							
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Overall</u>
Internal Labor	17,000.00	17,000.00	17,000.00	17,000.00	17,000.00	17,000.00	102,000.00
Materials	33,000.00	33,000.00	33,000.00	33,000.00	33,000.00	33,000.00	198,000.00
Subcontractor	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	150,000.00
Miscellaneous	-	-	-		-	-	-
(CIAC) Reim	-				-		
Subtotal:	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 450,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$450,000.00

### Project Analysis Form

Project Name: Aged & Environmental Distribution Replacement/Upgrade
Project Driver: Reliability

#### Purpose & Necessity:

Priority Level: Medium

Distribution poles are subject to aging and decomposition. In addition, the equipment framing on some of the structures are of such an age in which proper safeguards were not put into to place to ensure raptor protection and safety. After having recently completed an avian study on the entire system as well as a pole density test on 50% of the system, it is imperative that replacement structures are installed in place of those identified as failing on either of the two studies.

#### Risk Assessment:

By refusing to correct the failing structures, HL&P is at risk of unintentional outages and potential hazardous conditions for both employees, customers, and wildlife.

Cash 1 low beneda	<u>2019</u>	<u>2020</u>	2021	<u>2022</u>	2023	<u>2024</u>	<u>Overall</u>
Internal Labor	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	120,000.00
Materials	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00	780,000.00
Subcontractor	-	-		-	-	-	-
Miscellaneous	-	-	-	- ^	-	-	-
(CIAC) Reim	_	_			-		
Subtotal:	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 900,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$900,000.00

### Project Analysis Form

Project Name: A	dditional Circuits out of College to South and East
Project Driver: C	browth
Priority Level: N	<u>Iedium</u>
Purpose & Nece	ssity:
The developmen	t of the North end of Heber City has necessitated additional circuits out of the College Substation.

### Risk Assessment:

Insufficient capacity to serve the numerous additional customers seeking service on the North side of Heber City. This project is 100% customer driven and thus it has slipped from year to year as the development is still pending.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	56,000.00	28,000.00	28,000.00	-	-	-	112,000.00
Materials	224,000.00	112,000.00	112,000.00	-	-	-	448,000.00
Subcontractor	-	-		-	-	-	-
Miscellaneous	-	-	7	-	-	-	-
(CIAC) Reim	-			-	-		
Subtotal:	\$ 280,000.00	\$ 140,000.00	\$ 140,000.00	\$ -	\$ -	\$ -	\$ 560,000.00
Impact Fee %	100%	100%	100%	0%	0%	0%	100%
Net Amount:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Project Analysis Form

Project Name:	Fault Indicator - Underground System
Project Driver:	Reliability
Priority Level:	Low

### Purpose & Necessity:

Underground equipment becomes subject to the elements and thus begin to show signs of aging and breakdown. Thus HL&P monitors the underground equipment for aging and periodically retires worn out assets by replacing them. This project would put into place an annual amount that can be added to the system to help identify where faults are occurring on the underground portions of the distribution schedule.

#### **Risk Assessment:**

By refusing to correct the installation issues in the underground assets, HL&P is at risk of unintentional outages and potential hazardous conditions for both employees and customers.

Cucii i ion cenega	<u></u>						
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Overall</u>
Internal Labor	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	12,000.00
Materials	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	48,000.00
Subcontractor	-	-	-		-	-	-
Miscellaneous	-	-	-		-	-	-
(CIAC) Reim					-		
Subtotal:	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 60,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 60,000.00

### Project Analysis Form

Project Name: Reconductor Heber 305 (600 West Substation to 300 South)	
Project Driver: Reliability	
,	
Priority Level: High	

### Purpose & Necessity:

The current circuit engineering study has demonstrated that the stretch of Heber 305 from the Substation to 300 South along 600 West will be undersized after 2021. In order to remedy this issue, the circuit will need to be reconductored through this section of the line.

#### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	-	8,000.00	-	-	-	-	8,000.00
Materials	-	17,000.00			-	-	17,000.00
Subcontractor	-	-	-	<b>7</b> - • • • • • • • • • • • • • • • • • •	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-			_	_		
Subtotal:	\$ -	\$ 25,000.00	\$ -	\$ -	\$ -	\$ -	\$ 25,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Project Analysis Form

Project Name:	Reconductor Provo River 201 (Main Street to Burgi Lane)
Project Driver:	Reliability
Priority Level:	High

### Purpose & Necessity:

The current circuit engineering study has demonstrated that the stretch of Provo River 201 from Main Street to Burgi Lane will be undersized after 2021. In order to remedy this issue, the circuit will need to be reconductored through this section of the line.

### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	-	25,000.00	-	-	-	-	25,000.00
Materials	-	175,000.00	-	-	-	-	175,000.00
Subcontractor	-	-	-	<b>7</b> -A	-	-	-
Miscellaneous	-	-	- /	-	-	-	-
(CIAC) Reim	-		_		-		
Subtotal:	\$ -	\$ 200,000.00	\$ -	\$ -	\$ -	\$ -	\$ 200,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Project Analysis Form

Project Name:	Install Voltage Regulators at Timber Lakes Gate
Project Driver:	Reliability
Priority Level:	Medium

### Purpose & Necessity:

The continual growth in the Timber Lakes Subdivision along with the relative distance from the Jailhouse substation has the voltage within the subdivision subject to irregular fluctuations. These irregularities create a power quality issue for HLP customers.

#### **Risk Assessment:**

By refusing to correct the installation issues in the Timber Lakes Subdivision, customer satisfaction will decrease. In addition, customer equipment stands the chance of being damaged thus driving up insurance claims and premiums.

	<u>2020</u>	<u>)</u>	<u>2021</u>	<u>2022</u>	2023	<u>2024</u>	2	<u> 2025</u>	Ove	<u>erall</u>
Internal Labor		-	-	15,000.00	-	-		-	15,	00.000
Materials		-	-	85,000.00	-	-		-	85,	00.000
Subcontractor		-	-	-	-	-		-		-
Miscellaneous		-	-	-	- ^	-		-		-
(CIAC) Reim		-	-	-	-	-		-		-
Subtotal:	\$	-	\$ -	\$ 100,000.00	\$ -	\$ -	\$	-	\$ 100,	00.000
Impact Fee %		0%	0%	100%	0%	0%		0%		0%
Net Amount:	\$		\$ 	\$ -	\$ 	\$ _	\$	-	\$	

### Project Analysis Form

Project Name:	Heber Substation Additional Circuits (South & West)
Project Driver:	Upgrade
Priority Level:	Medium

#### Purpose & Necessity:

The system continues to grow and require additional feeders out of the substation. The recent addition of the 2nd transformer will facilitate the future energization of these feeders. These feeders will also facilitate the switching efforts required during outages, thus minimizing customer inconvenience.

### Risk Assessment:

Stranded energy as a result of the excess capacity brought on by the 2nd transformer in 2016/2017. Lengthened outages due to lack of looped feed on different circuits. Overloaded circuits of existing feeders as a result of continued growth in the area.

	2019	<u>)</u>	<u>20</u>	<u>)20</u>	<u>2</u>	021	2022	<u>20</u>	<u>)23</u>	<u>20</u>	<u>)24</u>	<u>(</u>	<u>Overall</u>
Internal Labor		-		-		-	55,000.00		-		-		55,000.00
Materials		-		-		-	225,000.00		-		-	2	25,000.00
Subcontractor		-		-		-			-		-		-
Miscellaneous		-		-		-	_		-		-		-
(CIAC) Reim				-		-					-		-
Subtotal:	\$	-	\$	-	\$	-	\$ 280,000.00	\$	-	\$	-	\$ 2	80,000.00
Impact Fee %							100%						100%
Net Amount:	\$		\$	-	\$	-	\$ 	\$	-	\$	-	\$	_

### Project Analysis Form

Project Name:	Load to Parsons (Reconductor)	)				
Project Driver:	Upgrade	_				
Priority Level:	High					
Purpose & Nec	-					

The feeder line that supplies energy to the Parson Gravel Pit and equipment is undersized and will need to be upgraded.

### Risk Assessment:

The customer has expensive equipment that requires regular and stable voltage at higher levels to satisfy their needs. If the line voltage drops, the customer stands to experience damaged equipment increasing the risk to HLP of expensive insurance claims.

	20	<u>019</u>	2	<u> 020</u>	<u>20</u>	<u>021</u>	<u>20</u>	22	<u>2023</u>	2	<u> 2024</u>	<b>Overall</b>
Internal Labor		-		-				-	-		-	-
Materials		-		-		-		-	100,000.00		-	100,000.00
Subcontractor		-		-		-		-	-		-	-
Miscellaneous		-		-		-		-	-		-	-
(CIAC) Reim		-		-		-		$\mathcal{L}$	-		-	
Subtotal:	\$	-	\$	-	\$	-	\$	-	\$ 100,000.00	\$	-	\$ 100,000.00
Impact Fee %		0%										0%
Net Amount:	\$	-	\$	-	\$	-	\$	-	\$ 100,000.00	\$	-	\$ 100,000.00

### Project Analysis Form

Project Name: Reconductor Heber City Main Street - 600 S - 1000 S	
Project Driver: Upgrade	
Priority Level: Low	

### Purpose & Necessity:

Growth on the south end of Heber City has began to exceed the acceptable conductor size for the existing assets. In order to continue to provide uninterrupted service along this feeder, the conductor needs to be upgraded.

#### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2019</u>	20	020	2	2021	2	022	2023	<u>3</u>	2024		Overa	<u>all</u>
Internal Labor	-		-		-		1 -		-		_		-
Materials	-		-		-		-	100,00	00.00		-	100,00	00.00
Subcontractor	-		-		-		-		-		-		-
Miscellaneous	-		-		-				_		-		-
(CIAC) Reim	-		-		-		- 4		-		-		-
Subtotal: \$	-	\$	-	\$	-	\$	-	\$ 100,00	00.00	}	-	\$ 100,00	00.00
Impact Fee %								Ÿ					
Net Amount: \$		\$	-	\$	-	\$	-	\$ 100,00	0.00	\$	-	\$ 100,00	0.00

### Project Analysis Form

Project Name:	1200 S Transmission Line
Project Driver:	Growth
Priority Level:	Medium

### Purpose & Necessity:

Growth on the East side of Heber City will begin to exceed the capacity of the existing substations within the next decade. This project will expand the transmission infrastructure to the East allowing for the development of an Eastern Substation.

### **Risk Assessment:**

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage.

	201	<u>9</u>	2	020	2	2021	2	2022	<u>2023</u>	<u> 2024</u>	<u>Overall</u>
Internal Labor		-		-		-		<b>-</b>	250,000.00	-	250,000.00
Materials		-		-		-		7	3,650,000.00	-	3,650,000.00
Subcontractor		-		-		-		<b>-</b>	-	-	-
Miscellaneous		-		-		-		-	-	-	-
(CIAC) Reim		-		-		-			-	 -	-
Subtotal:	\$	-	\$	-	\$	-	\$	-	\$ 3,900,000.00	\$ -	\$ 3,900,000.00
Impact Fee %										100%	100%
Net Amount:	\$	-	\$	-	\$	-	\$	-	\$ 3,900,000.00	\$ -	\$3,900,000.00

### Project Analysis Form

Project Name:	Reconductor Pine Canyon Road - Midway
Project Driver:	Upgrade
Priority Level:	Low

### Purpose & Necessity:

Growth in the vicinity of Pine Canyon Road has began to exceed the acceptable conductor size for the existing assets. In order to continue to provide uninterrupted service along this feeder, the conductor needs to be upgraded.

### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2020</u>	2	<u>021</u>	2	2022	<u>2</u>	2023	<u>2024</u>	2	<u> 2025</u>	<u>Overall</u>
Internal Labor	-		-		-		7 -	36,000.00		-	36,000.00
Materials	-		-				-	144,000.00		-	144,000.00
Subcontractor	-		-		-		-	-		-	-
Miscellaneous	-		-		-		-	-		-	-
(CIAC) Reim	-		-		-	<u> </u>	<u> </u>	-		-	 -
Subtotal:	\$ -	\$	-	\$	-	\$	-	\$ 180,000.00	\$	-	\$ 180,000.00
Impact Fee %			0%					60%			60%
Net Amount:	\$ -	\$	-	\$	_	\$	-	\$ 72,000.00	\$	_	\$ 72,000.00

### Project Analysis Form

Project Name: Reconductor Jailhouse 502/503 (Old Mill Drive from 800 S to 1200 S)
Project Driver: Reliability
Priority Level: Low
·

### Purpose & Necessity:

The current circuit engineering study has demonstrated that the stretch of Jailhouse 502/503 along Old Mill Drive from 800 South to 1200 South will be undersized after 2024. In order to remedy this issue, the circuit will need to be reconductored through this section of the line.

### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	2	<u> 2020</u>	<u>2021</u>	<u> 2022</u>	2	<u> 2023</u>	<u>20</u>	<u>24</u>	2	<u> 2025</u>	<u>C</u>	<u>verall</u>
Internal Labor		-	-	-		-	45,0	00.00		-	4	15,000.00
Materials		-	-	-		-	255,	00.00		-	25	55,000.00
Subcontractor		-	-	-		-		-		-		-
Miscellaneous		-	-	-		-		-		-		-
(CIAC) Reim		-	-	 -		_		-		-		-
Subtotal:	\$	-	\$ -	\$ -	\$	-	\$ 300,	00.00	\$	-	\$ 30	00,000.00
Impact Fee %		100%	100%	100%		100%		100%		100%		100%
Net Amount:	\$	-	\$ 	\$ 	\$		\$	-	\$		\$	

### Project Analysis Form

Project Name:	Reconductor Midway 101/102 from 4/0 to 477
Project Driver:	Reliability
Priority Level:	Low
Dumaga & Nac	

#### Purpose & Necessity:

The current circuit engineering study has demonstrated that the Midway 101/102 circuits will be undersized after 2024. In order to remedy this issue, the circuit will need to be reconductored.

### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2</u>	<u>020</u>	4	<u>2021</u>	2	2022	2	2023	<u>202</u>	<u> 24</u>	2	025	<u>O</u>	<u>verall</u>
Internal Labor		-		-		-		-	45,0	00.00		-	4	5,000.00
Materials		-		-		-		-	305,0	00.00		-	30	5,000.00
Subcontractor		-		-		-		-		-		-		-
Miscellaneous		-		-		-		-		-		-		-
(CIAC) Reim		-		-				-		-		-		-
Subtotal:	\$	-	\$	-	\$	-	\$	-	\$ 350,0	00.00	\$	-	\$ 35	60,000.00
Impact Fee %		100%		100%		100%		100%		100%		100%		100%
Net Amount:	\$		\$		\$		\$		\$		\$		\$	

### Project Analysis Form

Project Name:	Reconductor Cloyes 402 (600 West to Tate Lane)
Project Driver:	Reliability
Priority Level:	Low
D 0 N	

#### Purpose & Necessity:

The current circuit engineering study has demonstrated that the stretch of Cloyes 402 from 600 West to Tate Lane will be undersized after 2024. In order to remedy this issue, the circuit will need to be reconductored through this section of the line.

### Risk Assessment:

Failure of the existing assets will result in outages with a high likelihood of a prolonged outage. This project will achieve N-1 standard on this circuit. It is currently below this standard and as such the system reliability is at risk.

	<u>2</u>	<u>020</u>	2021	2	2022	2	2023	<u>2024</u>		<u>20</u>	<u> 25</u>	<u>O</u>	<u>verall</u>
Internal Labor		-	-		-		-	65,000.	00		-	6	55,000.00
Materials		-	-		-		-	485,000.	00		-	48	35,000.00
Subcontractor		-	-		-		-	-			-		-
Miscellaneous		-	-		-		-	-			-		-
(CIAC) Reim		-	 -				_	-			-		-
Subtotal:	\$	-	\$ -	\$	-	\$	-	\$ 550,000.	00	\$	-	\$ 55	50,000.00
Impact Fee %		100%	100%		100%		100%	10	0%		100%		100%
Net Amount:	\$	-	\$ 	\$		\$		\$ -		\$		\$	



# Substation

- 1) 2nd Point of Interconnect
- 2) Replacement Recloser for Joslyn Reclosers
- 3) Substation Bird Guard
- 4) Cloyes LTC Rebuild
- 5) Provo River Substation Rebuild
- 6) East Substation
- 7) Battery Replacement Program
- 8) Midway Substation High Side Rebuild
- 5) Heber Relay Upgrade

Project Analysis Form

Project Name:	2nd Point of Interconnect Substation(POI)

Project Driver: Growth

Priority Level: High

#### Purpose & Necessity:

Growth within the system has been steadily increasing for numerous years. The system is currently fed off of a single point of interconnect to the RMP system. This point of interconnect is fed from a radial (meaning single line) service line. In addition the transformer at the end of the radial line is quickly becoming undersized for the local load on our system. This project will provide a second interconnect substation thus reducing the loading on the existing substation transformer. Numerous engineering studies have been conducted on the system and each has drawn the conclusion that the current system will be over-capacity by 2022 at the latest.

#### Risk Assessment:

This point of interconnect has two significant risks associated with it; 1) risk of damage to the radial feed thus causing immediate outages to all customers, and 2) interconnect site is currently sized to be out of capacity by 2022. If the single interconnect transformer becomes overloaded, RMP will begin to remove load form the transformer which will result in regular prolonged rolling brown-outs. All customers in the system will have a daily outage lasting up to 6 hours during peak load windows.

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Overall</u>
Internal Labor	31,794.14	25,000.00	15,000.00	35,000.00	-	-	106,794.14
Materials	-	2,461,497.01	950,000.00	1,450,000.00	-	-	4,861,497.01
Subcontractor	81,708.85	300,000.00	235,000.00	5,250,000.00	-	-	5,866,708.85
Miscellaneous	-	-		50,000.00	-	-	50,000.00
(CIAC) Reim	-			_		-	
Subtotal:	\$ 113,502.99	\$ 2,786,497.01	\$ 1,200,000.00	\$ 6,785,000.00	\$ -	\$ -	\$ 10,885,000.00
Impact Fee %	70%	70%	70%	70%			70%
Net Amount:	\$ 34,050.90	\$ 835,949.10	\$ 360,000.00	\$ 2,035,500.00	\$ -	\$ -	\$ 3,265,500.00

### Project Analysis Form

Project Name:	Replacement Recloser for Joslyn Reclosers
Project Driver:	Replacement
Priority Level:	Medium

### Purpose & Necessity:

HL&P has a series of Joslyn Reclosers that have historically been less than reliable. The company has been swapping out these reclosers as they fail so as to maximize the usage of these reclosers. This program will spread the cost of replacement of these defective reclosers across multiple years.

### Risk Assessment:

Without a spare recloser, a failure of one of the remaining Joslyn Reclosers will see a prolonged outage for a series of HL&P circuits.

OMOIT I TO IT COTTOGG	<del></del>											
	<u>2020</u>	2	<u> 2021</u>	2	022	2	2023	2	<u> 2024</u>	<u>20</u>	25	<u>Overall</u>
Internal Labor	-		-		-		-		-		-	-
Materials	25,000.00		-				-					25,000.00
Subcontractor	-		-		-		-		-		-	-
Miscellaneous	-		-		-		-		_		-	-
(CIAC) Reim			-		-				-		-	 -
Subtotal:	\$ 25,000.00	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 25,000.00
Impact Fee %	0%		0%					•				0%
Net Amount:	\$ 25,000.00	\$	-	\$	-	\$	-	\$		\$	-	\$ 25,000.00

### Project Analysis Form

Project Name:	Substation Bird Guard
Project Driver:	Safety
Priority Level:	High

#### Purpose & Necessity:

In order to be more environmentally friendly, the company is undertaking efforts to add protective devices where reasonable. To be completed in phases by substation as follows:

2020 - College 2021 - Cloyes 2022 - Jailhouse

### Risk Assessment:

Higher than necessary mortality rates of wildlife accidentally located within the substation. Increased number of outages resulting from accidental wildlife exposure to the energized elements of the system.

	<u>2020</u>	<u>2021</u>	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	1,200.00	1,200.00	600.00	-	-	-	3,000.00
Materials	4,800.00	4,800.00	2,400.00	-	-	-	12,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-						
Subtotal: \$	6,000.00	\$ 6,000.00	\$ 3,000.00	\$ -	\$ -	\$ -	\$ 15,000.00
Impact Fee %	0%	0%	0%	C	0%		
Net Amount: \$	6,000.00	\$6,000.00	\$3,000.00	\$ -	\$ -	\$	\$ 15,000.00

### Project Analysis Form

Project Name:	Cloyes LTC Rebuild
Project Driver:	Reliability
Priority Level:	Low

### Purpose & Necessity:

The Load Tap Changer (LTC) in a transformer allows automatic adjustment of voltage regulation. The Cloyes LTC needs to be rebuilt due to age and wear.

### Risk Assessment:

Automatic voltage regulation of the transformer will fail during different loading scenarios. This will ultimately result in an outage so as to protect the assets.

	<u>2019</u>	<u> 2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Overall</u>
Internal Labor	-	-	8,000.00	-	-	-	8,000.00
Materials	-	-	32,000.00	-	-	-	32,000.00
Subcontractor	-	-	-	-/	-	-	-
Miscellaneous	-	-	-	<b>/</b> -<	-	-	-
(CIAC) Reim		 -			-		
Subtotal:	\$ -	\$ -	\$ 40,000.00	\$ -	\$ -	\$ -	\$ 40,000.00
Impact Fee %							0%
Net Amount:	\$ -	\$ -	\$ 40,000.00	\$ -	\$ -	\$ -	\$ 40,000.00

### Project Analysis Form

Project Name:	Provo River Substation Rebuild
Project Driver:	Reliability
Priority Level:	Medium

#### Purpose & Necessity:

Provo River Substation currently serves limited load due to the age and reliability of the equipment. This project will rebuild the substation increasing its reliability.

### **Risk Assessment:**

Outages in excess of necessity will result by keeping system control limited to current assets.

	<u>2019</u>	2	<u>020</u>	2	021		<u>2022</u>		<u>2023</u>	20	024	<u>C</u>	<u>verall</u>
Internal Labor	-		-		-		250,000.00		250,000.00		-	5	00,000,000
Materials	-		-		-		750,000.00	2,	000,000.00		-	2,7	750,000.00
Subcontractor	-		-		-		-	1,	750,000.00		-	1,7	750,000.00
Miscellaneous	-		-		-				-		-		-
(CIAC) Reim	-		-		-		-		-		-		-
Subtotal: \$	-	\$	-	\$	-	\$ 1.	,000,000.00	\$ 4,	000,000.00	\$	-	\$ 5,0	00.000,000
Impact Fee %							100%		100%				100%
Net Amount: \$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

### Project Analysis Form

Project Name:	East Substation
Project Driver:	Growth
Priority Level:	Medium
Dumaga & Nac	accepture.

#### Purpose & Necessity:

Due to the regular growth and the planned development on the East side of the valley, additional capacity will be required by 2024. This project will include the siting, permitting, design, and construction of a new system load substation.

#### **Risk Assessment:**

Lack of substation capacity in the Lake Creek area will put the system at risk of overloaded circuits and existing equipment ultimately leading to rolling brown outs across the valley.

	2010	202	20	2021	202	2	2022	20	124	0	o m o 11
	<u>2019</u>	<u>202</u>	<u>20</u>	<u>2021</u>	<u>202</u>	<u> </u>	<u>2023</u>	<u> 20</u>	<u>)24</u>	<u>Ov</u>	<u>erall</u>
Internal Labor	-		-	-		-	250,000.00		-	25	0,000.00
Materials	-		-			-	2,000,000.00		-	2,00	0,000.00
Subcontractor	-		-	-		-	1,750,000.00		-	1,75	0,000.00
Miscellaneous	-		-	-		-	-		-		-
(CIAC) Reim	-			-		<u>-                                    </u>	-		-		-
Subtotal: \$	-	\$	- \$	-	\$	-	\$ 4,000,000.00	\$	-	\$ 4,00	0,000.00
Impact Fee %							100%				100%
Net Amount: \$	-	\$	- \$	-	\$		\$ -	\$	-	\$	

### Project Analysis Form

Project Name:	Battery Replacement Program
Project Driver:	Replacement
Priority Level:	Low

### Purpose & Necessity:

The batteries in Plant 2 will have reached their cycle life in 2022. The batteries at College Substation and the Lower Snake Creek Plant will reach their life cycle end in 2024. This project will see that they are replaced.

### Risk Assessment:

Battery systems provide back-up energy for black start in the event of a system transmission failure. Without them, the generator will not have energy sufficient to come online. These batteries also serve as a back-up to the switchgear equipment for similar purposes.

	<u>20</u>	<u> 20</u>	<u> 2021</u>	<u>2022</u>	<u>2023</u>	<u>202</u>	<u> 4</u>	202	<u> 25</u>	<u>Overall</u>
Internal Labor		-	-	1,500.00	-	3,00	00.00		-	4,500.00
Materials		-	-	8,000.00	-	16,00	00.00		-	24,000.00
Subcontractor		-	-	-	-		-		-	-
Miscellaneous		-	-	-	-		-		-	-
(CIAC) Reim		-	 -		<u></u>		-		-	-
Subtotal:	\$	-	\$ -	\$ 9,500.00	\$ -	\$ 19,00	00.00	\$	-	\$ 28,500.00
Impact Fee %										0%
Net Amount:	\$	-	\$ -	\$ 9,500.00	\$ -	\$ 19,00	00.00	\$		\$ 28,500.00

### Project Analysis Form

Project Name:	Midway Substation - High Side Rebuild
Project Driver:	Growth
Priority Level:	Low

### Purpose & Necessity:

The Midway Substation has slowly taken on more load until it has reached its capacity on the high-side of the transformer. It is estimated that by 2022 the high-side will need to be rebuilt to serve the loads being placed on the transformer.

### Risk Assessment:

The high side of the transformer is the side receiving energy from the grid. If the feed to the transformer is compromised, a prolonged outage will be experienced on the substation thus affecting all of the circuits.

	202	<u>21</u>	4	<u> 2022</u>	<u>2</u>	<u>023</u>	<u>2024</u>		<u>2025</u>	<u>20</u>	<u> 26</u>	<u>Overall</u>
Internal Labor		-		-			100,000	0.00	-		-	100,000.00
Materials		-		-		-	400,000	0.00	-		-	400,000.00
Subcontractor		-		-		-		-	-		-	-
Miscellaneous		-		-		-		-	-		-	-
(CIAC) Reim		-	_	-		-		-	_		-	
Subtotal:	\$	-	\$	-	\$	-	\$ 500,000	0.00 \$	-	\$	-	\$ 500,000.00
Impact Fee %								0%				0%
Net Amount:	\$	-	\$	-	\$	-	\$ 500,000	0.00 \$	-	\$	-	\$ 500,000.00

### Project Analysis Form

Project Name:	Heber Relay Upgrade
Project Driver:	Replacement
Priority Level:	Medium

### Purpose & Necessity:

The equipment in the substations and generation plants are controlled by a computer like device called a relay. These relays have a potential to fail without notice and have no real preventative maintenance options. The relays in the Heber Substation are an older version no longer supported after 2024.

### Risk Assessment:

Without the upgrade of these relays, the Heber Substation will not be properly monitored and controlled by the Dispatch department. Lack of proper monitoring and supervisory control creates serious risk to life and equipment.

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Overall</u>
Internal Labor	-	-		-	-	-	-
Materials	-	-	-	-	-	25,000.00	25,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-		-	-	-
(CIAC) Reim	-			-	-		
Subtotal: \$	_	\$ -	\$ -	\$ -	\$ -	\$ 25,000.00	\$ 25,000.00
Impact Fee %							0%
Net Amount: \$	-	\$ -	\$ -	\$ -	\$ -	\$ 25,000.00	\$ 25,000.00



# **Information Technology**

- IT Upgrades 1)
- OT Upgrades
- 2) 3) Smart Grid Investment

### Project Analysis Form

Proj	ect N	Vame:	2020	Capital	Im	provements	- ]	$\Gamma$	ľ
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Project Driver: Reliability

Priority Level: Medium

#### Purpose & Necessity:

The following collective list of minor capital assets are various technology components that will be purchased over 2020 for installation:

- Computer Replacement Program...\$22,000 (2020, 2021, 2023, 2025)

#### 2022

- Server replacements ...\$63,000
- Computer Replacement Program...\$22,000

#### 2024

- Camera Server replacement ...\$22,000
- Computer Replacement Program...\$22,000

### Risk Assessment:

These assets help HL&P to safely manage and maintain the system and each component carries its own risk if failure to secure said item happens.

	<u>2020</u>	<u>2021</u>	2022	2023	<u>2024</u>	<u>2025</u>	<b>Overall</b>
Internal Labor	2,000.00	2,000.00	10,000.00	2,000.00	5,000.00	2,000.00	23,000.00
Materials	20,000.00	20,000.00	75,000.00	20,000.00	39,000.00	20,000.00	194,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-		-	-	-
(CIAC) Reim	-					-	
Subtotal: \$	22,000.00	\$ 22,000.00	\$ 85,000.00	\$ 22,000.00	\$ 44,000.00	\$ 22,000.00	\$ 217,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	22,000.00	\$ 22,000.00	\$ 85,000.00	\$ 22,000.00	\$44,000.00	\$22,000.00	\$ 217,000.00

### Project Analysis Form

Project Name: 2020 Capital Improvements - OT

Project Driver: Reliability

Priority Level: Medium

### Purpose & Necessity:

The following collective list of minor capital assets are various technology components that will be purchased over 2020 for installation:

- Virtualize SCADA Terminals...\$6,000

- Dispatch Screen Upgrade ...\$2,000

### Risk Assessment:

These assets help HL&P to safely manage and maintain the system and each component carries its own risk if failure to secure said item happens.

Net Amount: \$	8,000.00	\$30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 250,000.00	<b>\$</b> -	\$ 348,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Subtotal: \$	8,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 250,000.00	\$ -	\$ 348,000.00
(CIAC) Reim	-			<u></u>	-		
Miscellaneous	-	-		-	-	-	-
Subcontractor	-	-		-	-	-	-
Materials	7,000.00	24,000.00	24,000.00	24,000.00	244,000.00	-	323,000.00
Internal Labor	1,000.00	6,000.00	6,000.00	6,000.00	6,000.00	-	25,000.00
	<u>2020</u>	<u>2021</u>	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>

### Project Analysis Form

Project Name:	2020 Smart Grid Investment
Project Driver:	Growth
Priority Level:	Medium

#### Purpose & Necessity:

Electrical utilities are connected to a grid of assets established to transfer and supply energy where needed. Technological advances continue to make additional control features available in an automated format. These automated features are otherwise known as Smart Grid. For the foreseeable future, HLP anticipates needing funds to implement these annual Smart Grid adjustments in order to appropriately serve our customers' needs.

### **Risk Assessment:**

The grid technology is advancing so quickly that without concentrated effort on the incorporation of these changes, HLP will be operating in a risk scenario or will ultimately require a significant grid upgrade investment later.

	<u>2020</u>	<u>2021</u>	2022	<u>2023</u>	<u>2024</u>	<u>2025</u>	<b>Overall</b>
Internal Labor	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	-	10,000.00
Materials	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	-	40,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-		_		-	_	
Subtotal: \$	10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ -	\$ 50,000.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount: \$	10,000.00	\$10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ -	\$ 50,000.00



# Tools / Equipment

1) 2020 Annual Program

### Project Analysis Form

Project Name: 2020 Capital Improvements - Tools

Project Driver: Replacement

Priority Level: Medium

### Purpose & Necessity:

The following collective list of tools are planned to be purchased over 2020:

- Generation
  - No large tool purchases
- Meter
  - No large tool purchases
- -Substation
  - Power Factor Tester...\$70,000
- Distribution
  - Line Locater...\$10,000

#### Risk Assessment:

These tools are required in order to keep the various crews working efficiently and safely.

Cook Elon Schodular										
Cash Flow Schedul	<u>e:</u>									
	<u>2019</u>		<u>2020</u>		<u>2021</u>	<u>2022</u>	<u>2023</u>	2	<u> 2024</u>	<u>Overall</u>
Internal Labor	-				-	-	-		-	-
Materials	80,000	00	45,000.00		45,000.00	45,000.00	45,000.00		-	260,000.00
Subcontractor	-		-		-	-	-		-	-
Miscellaneous	-		-		-	-	-		-	-
(CIAC) Reim			-		-				-	
Subtotal:	\$ 80,000	00	\$ 45,000.00	\$	45,000.00	\$ 45,000.00	\$ 45,000.00	\$	-	\$ 260,000.00
Impact Fee %		0%	0%		0%	0%	0%			0%
Net Amount:	\$ 80,000.	00	\$ 45,000.00	\$	45,000.00	\$45,000.00	\$ 45,000.00	\$	-	\$ 260,000.00



# Vehicles

1) 2020 Annual Program

### Project Analysis Form

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Project Driver: Replacement

Priority Level: Medium

### Purpose & Necessity:

The following vehicles are planned to be purchased in 2020:

- One(1) Digger Derrick Line Truck (\$300,000) Replaces the Ford
- Two (2) 1500 Series Light-Duty Truck (\$70,000) Replace the 2006 Ranger and the 2013 Explorer
- One (1) 3500 Series Heavy Duty Truck (\$50,000) Replace the 2013 F-350 Hydro Truck
- One (1) 5500 Series Heavy Duty Truck (\$120,000) Replace the 2013 F-550 Substation Truck

#### Risk Assessment:

These vehicles are deemed necessary to adequately service the territory. These vehicle purchases are meant to replace existing vehicles that have reached their useful life based upon company policy.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Overall</u>
Internal Labor	=		-	=	=	=	=
Materials	=	-	-	-	-	-	=
Subcontractor	=	=	-	-	=	=	=
Miscellaneous	540,000.00	360,000.00	400,000.00	300,000.00	420,000.00	-	2,020,000.00
(CIAC) Reim	-		-				<u> </u>
Subtotal: \$	540,000.00	\$ 360,000.00	\$ 400,000.00	\$ 300,000.00	\$ 420,000.00	\$ -	\$ 2,020,000.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount: \$	540,000.00	\$ 360,000.00	\$ 400,000.00	\$ 300,000.00	\$ 420,000.00	\$ -	\$ 2,020,000.00



# Metering

1) 2020 Metering Installs

### Project Analysis Form

Project Name:	2020 Capital Improvements - Metering
Project Driver:	Growth

Priority Level: Medium

#### Purpose & Necessity:

The following collective list of minor capital assets are various metering components that will be purchased over 2020 for installation:

- (800)-Generation 4 CL 200 Meters...\$120,800
- (6) CL320 Meters...\$1,260
- (4) 3S Meters...\$800
- (8) 16S Meters...\$3,312
- (6) 9S Meters...\$2,640
- Test Switches...\$1,130
- (19) Current Transformers...\$3,000
- Meter Wire...\$240

### Risk Assessment:

New meters are typically required to meet the new connections demand. The only risk that is involved in the purchase of these metering components is the cash flow risk as these items are purchased and stored in advance of the collection of the impact fee from the customer.

	2020	2	021	20	022	<u>2</u>	023	<u>20</u>	<u>24</u>	<u>20</u>	<u> 25</u>		<u>Overall</u>
Internal Labor	-				-		-		-		-		-
Materials	133,200.00		-		-		-		-		-		133,200.00
Subcontractor	-		-		-		-		-		-		-
Miscellaneous	-		-		-		-		-		-		-
(CIAC) Reim	(111,888.00)		-		-		-				-	(	(111,888.00)
Subtotal:	\$ 21,312.00	\$	-	\$	-	\$	-	\$	-	\$	-	\$	21,312.00
Impact Fee %	0%												
Net Amount:	\$ 21,312.00	\$	-	\$	-	\$	-	\$		\$	-	\$	21,312.00