Heber Light & Power

Fiscal Year 2021
Fees/Rates, Operating and Capital Budgets

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2021 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 include replacement meters.
Meter Installation Fee – 3-Phase	470.00	
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	14.70
1st 1,000 kWh	0.0868/kWh
All Additional	0.1072/kWh
Residential/Small Commercial - Pumping	
Base/Customer Charge	14.00
Demand Rate	9.60/kW
All kWh	0.063/kWh
General Service - Small (1kW <X<= 30kW) (Single Phase)	
Base/Customer Charge	13.00
Demand Rate	9.80/kW
1st 500 kWh	0.083/kWh
All Additional	0.050/kWh
General Service - Small (1kW <X<= 30kW) (3-Phase)	
Base/Customer Charge	17.00
Demand Rate	9.80/kW
1st 500 kWh	0.083/kWh
All Additional	0.050/kWh
General Service - Medium (>30kW & <= 250kW)	
Base/Customer Charge	66.00
Demand Rate	11.70/kW
1st 500 kWh	0.0544/kWh
All Additional	0.0457/kWh
General Service - Medium (>30kW) - Pumping	
Base/Customer Charge	66.00
Demand Rate	9.60/kW
All kWh	0.063/kWh
General Service - Large (> 250kW)	
Base/Customer Charge	127.00
Demand Rate	14.10/kW
All kWh	0.046/kWh

Heber Light & Power Company

2021 Budget – Executive Summary (State Format)

	2019 Actual	2020 Budget	2020 Projected	2021 Budget
REVENUES				
Electricity Sales	$19,046,457	$19,735,227	$19,693,219	$20,955,112
Connect Fees	38,740	41,000	38,140	35,000
Receivables Penalty Income	47,010	50,000	36,239	40,000
Other / Miscellaneous Income	316,448	233,390	190,290	203,069
Total Revenues	*$19,448,655*	*$20,059,617*	*$19,957,888*	*$21,233,181*
COST OF ELECTRIC SERVICE				
Power Production Expense	(1,052,107)	(895,774)	(879,246)	(1,071,176)
Cost of Purchased Power	(9,338,094)	(10,416,844)	(10,626,222)	(10,810,464)
Dist Expense – Operations	(428,850)	(446,760)	(474,396)	(474,718)
Dist Expense – Maintenance	(2,167,861)	(1,698,447)	(2,255,228)	(2,246,715)
Customer Account Expense	(405,546)	(342,825)	(482,157)	(751,942)
Admin & General Expense	(2,665,848)	(2,440,120)	(2,439,860)	(2,422,851)
Total Operating & Maint. Expense	(16,058,306)	(16,240,771)	(17,157,109)	(17,777,866)
Depreciation	(2,325,393)	(2,530,355)	(2,496,439)	(2,625,000)
Interest on Long-Term Debt	(612,779)	(967,813)	(1,001,975)	(901,004)
Total Cost of Electric Service	(18,996,478)	(19,738,939)	(20,655,523)	(21,303,870)
OPERATION MARGIN	*452,178*	*320,678*	*(697,635)*	*(70,689)*
Interest Income	124,000	240,000	253,753	165,000
Non-Operating Margins-Other	3,290,421	2,800,000	4,334,785	3,000,000
Dividends	(300,000)	(300,000)	(300,000)	(300,000)
OPERATING MARGIN	*3,566,599*	*3,060,678*	*3,590,903*	*2,794,311*
CAPITAL EXPENDITURES				
Generation - Hydro	2,120	15,000	54,719	25,000
Generation – Gas Plant	5,481	1,398,000	320,117	1,250,000
Distribution	2,445,072	4,375,000	3,301,090	5,810,000
Substation	2,253,005	1,231,000	6,000	11,181,000
Metering	30,824	25,000	95,291	114,400
Buildings	82,423	835,000	766,074	1,737,085
Vehicles	24,543	540,000	597,601	435,000
Tools	97,875	240,000	21,696	54,700
Technology – IT	196,363	69,000	39,439	522,000
Total Capital	*5,137,705*	*8,728,000*	*5,202,028*	*21,129,185*

Heber Light & Power Company

2021 Budget – Executive Summary (Actuals Format)

	2018 Actual	2019 Actual	2020 Projected	2021 Budget
REVENUES				
Electricity Sales	$18,476,656	$19,046,457	$19,693,219	$20,955,112
Connect Fees	35,195	38,740	38,140	35,000
Receivables Penalty Income	46,700	47,010	36,239	40,000
Other / Miscellaneous Income	304,423	316,448	190,290	203,069
Total Revenues	*$18,862,784*	*$19,448,655*	*$19,957,888*	*$21,233,181*
COST OF ELECTRIC SERVICE				
Power Production Expense	(962,771)	(1,052,107)	(879,246)	(1,071,176)
Cost of Purchased Power	(9,509,831)	(9,338,094)	(10,626,222)	(10,810,464)
Dist Expense – Operations	(425,273)	(428,850)	(474,396)	(474,718)
Dist Expense – Maintenance	(1,916,352)	(2,167,861)	(2,255,228)	(2,246,715)
Customer Account Expense	(312,102)	(405,546)	(482,157)	(751,942)
Admin & General Expense	(3,056,529)	(2,665,848)	(2,439,860)	(2,422,851)
Total Operating & Maint. Expense	(16,182,857)	(16,058,306)	(17,157,109)	(17,777,866)
Depreciation	(2,082,223)	(2,325,393)	(2,496,439)	(2,625,000)
Interest on Long-Term Debt	(498,354)	(612,779)	(1,001,975)	(901,004)
Total Cost of Electric Service	(18,763,434)	(18,996,478)	20,655,523)	(21,303,870)
OPERATION MARGIN	*99,875*	*452,178*	*(697,635)*	*(70,689)*
Interest Income	82,000	124,000	253,753	165,000
Non-Operating Margins-Other	2,913,563	3,290,421	4,334,785	3,000,000
Dividends	(300,000)	(300,000)	(300,000)	(300,000)
OPERATING MARGIN	*2,795,438*	*3,566,599*	*3,590,903*	*2,794,311*
CAPITAL EXPENDITURES				
Generation - Hydro	6,249	2,120	54,719	25,000
Generation – Gas Plant	(157,197)	5,481	320,117	1,250,000
Distribution	2,181,702	2,445,072	3,301,090	5,810,000
Substation	708,804	2,253,005	6,000	11,181,000
Metering	102,208	30,824	95,291	114,400
Buildings	16,446	82,423	766,074	1,737,085
Vehicles	495,649	24,543	597,601	435,000
Tools	(166,108)	97,875	21,696	54,700
Technology – IT	-	196,363	39,439	522,000
Total Capital	*3,187,754*	*5,137,705*	*5,202,028*	*21,129,185*

Operating Expenditures Budget

Revenues

The 2021 electricity revenues are budgeted to increase 5.9% over the projected 2020 revenues for residential and 8.4% 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.

	2019 Actual	2020 Budget	2020 Projected	2021 Budget
REVENUES				
Electricity Sales	$19,046,457	$19,735,227	$19,693,219	$20,955,112
Connect Fees	38,740	41,000	38,140	35,000
Receivables Penalty Income	47,010	50,000	36,239	40,000
Other / Miscellaneous Income	316,448	233,390	190,290	203,069
Total Revenues	*$19,448,655*	*$20,059,617*	*$19,957,888*	*$21,233,181*

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 Position	Stipend Amount
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	5,703.84
	$35,814.24

Repairs & Maintenance

Repairs and maintenance are anticipated to continue in 2021.

Travel & Training

To maintain the advanced technical knowledge required in the industry, various training initiatives for staff are included in the 2021 Budget.

Capital Expenditures Budget

The Capital Budget for 2021 totals $21,129,185. Heber Light & Power anticipates utilizing revenue from energy sales, debt financing, capital in aid of construction and through impact fees to complete the 2021 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	Impact	CIAC	Net Amount
Generation - Hydro	25,000	-	-	25,000
Generation – Gas Plant	1,250,000	-	-	1,250,000
Distribution	5,810,000	-	(2,000,000)	3,810,000
Substation	11,181,000	(3,000,000)	-	8,181,000
Metering	114,400	-	(96,000)	18,400
Buildings	1,737,085	-	-	1,737,085
Vehicles	435,000	-	-	435,000
Tools	54,700	-	-	54,700
Technology – IT	522,000	-	-	522,000
			Total Capital Expenditures:	$16,033,185
			Principal Payments on Long-Term Debt:	729,079
			Total Cash Requirements:	$16,762,264

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

Heber Light & Power - Five Year Forecast and Capital Improvement Plan

Upcoming Projects	Impact Fee Related %	Project Duration Start	Finish	Projected Cost ($1,000) Total	Impact Fee	Prior	2021	2022	2023	2024	2025	Priority
Buildings												
Generator Fire Suppression System	0%	2020	2023	$ 2,515	$ -	376	291	498	684	666	-	M
New Office Building	0%	2020	2021	$ 9,133	$ -	113	1,010	8,010	-	-	-	M
EV Charging Systems	0%	2021	2021	$ 130	$ -	-	130	-	-	-	-	M
Millflat Water Line Replacement	0%	2021	2021	$ 50	$ -	-	50	-	-	-	-	H
Plant 2 Switchgear Room AC Unit	0%	2021	2021	$ 18	$ -	-	18	-	-	-	-	M
Gas Plant Security Measures	0%	2021	2021	$ 55	$ -	-	55	-	-	-	-	M
Plant HVAC Upgrades	0%	2019	2020	$ 441	$ -	-	199	74	84	84	-	H
Plant 1 Electrical Upgrades	0%	2020	2020	$ 50	$ -	-	-	-	-	50	-	M
			Building Totals:	*$ 12,392*	*$ -*	*489*	*1,753*	*8,582*	*768*	*800*	-	
Generation												
Annual Generation Capital Improvements	0%	2019	2023	$ 350	$ -	-	50	50	50	200	0	H
Lower Snake Creek Plant Upgrade	0%	2019	2023	$ 35	$ -	-	15	5	5	5	5	M
Upper Snake Creek Capital Improvements	0%	2019	2023	$ 25	$ -	-	5	5	5	5	5	M
Lake Creek Capital Improvements	0%	2019	2023	$ 30	$ -	-	5	5	5	15	5	M
New Generation (Battery, Engine)	0%	2020	2022	$ 2,530	$ -	-	-	1,315	1,215	-	-	M
Unit Overhauls	0%	2022	2024	$ 459	$ -	-	-	188	83	188	-	M
Gas Plant 1 XFMR Upgrade	0%	2024	2024	$ 500	$ -	-	-	-	-	500	-	L
Gas Plant 3 Switchgear Upgrade	0%	2024	2024	$ 180	$ -	100	-	-	-	80	-	L
Lake Creek Bearing Replacement	0%	2025	2025	$ 10	$ -	-	-	-	-	-	10	L
Mobile Standby Generator	0%	2021	2021	$ 66	$ -	-	66	-	-	-	-	H
			Generation Totals:	*$ 4,185*	*$ -*	*100*	*141*	*1,568*	*1,363*	*993*	*25*	
Lines												
Cross Valley Transmission Line (2nd POI)	100%	2018	2020	$ 6,164	$ 6,164	2,864	3,300	-	-	-	-	H
Underground System Improvements	0%	2019	2023	$ 456	$ -	6	150	75	75	75	75	L
Aged & Environmental Distribution Replacement/Upgrade	0%	2019	2023	$ 900	$ -	150	150	150	150	150	150	L
Fault Indicator - Underground System	0%	2019	2023	$ 50	$ -	-	10	10	10	10	10	L
Rebuild PR201_Main Street to Burgi Lane	100%	2021	2021	$ 400	$ 400	-	200	200	-	-	-	H
Additional Circuits out of Jailhouse to the East	100%	2019	2021	$ 560	$ 560	280	-	140	140	-	-	H
Additional Circuits out of College to South and East	100%	2020	2022	$ 280	$ 280	-	-	140	140	-	-	H
Install Voltage Regulators at Timber Lakes Gate	100%	2022	2022	$ 100	$ 100	-	-	100	-	-	-	M
Heber Substation Additional Circuits (South & West)	100%	2022	2022	$ 280	$ 280	-	-	280	-	-	-	M
Reconductor HB305_600 West - Substation to 300 South	100%	2021	2021	$ 50	$ 50	-	-	-	25	25	-	H
Midway Substation - Get Aways	50%	2020	2020	$ 160	$ 80	-	-	-	160	-	-	H
Load to Parsons (Reconductor)	0%	2023	2023	$ 100	$ -	-	-	-	100	-	-	L
Reconductor Heber City Main 600 S to 1000 S	100%	2023	2023	$ 100	$ 100	-	-	-	100	-	-	L
1200 S Transmission Line	100%	2023	2023	$ 3,900	$ 3,900	-	-	-	3,900	-	-	L
Reconductor Pine Canyon Road - Midway	60%	2024	2024	$ 180	$ 108	-	-	-	-	180	-	H
Reconductor JH502/503_Old Mill Drive - 800 South to 1200 South	100%	2024	2024	$ 300	$ 300	-	-	-	-	300	-	L
Reconductor MW101/102 from 4/0 to 477	100%	2024	2024	$ 350	$ 350	-	-	-	-	350	-	L
Rebuild CL402_600 West to Tate Lane	100%	2024	2024	$ 550	$ 550	-	-	-	-	550	-	L
Tie line from 305 to 402 to 303	100%	2021	2025	$ -	$ -	-	-	-	-	-	-	M
Tie from 702 up to 500 East in Heber (HB304)	100%	2020	2020	$ -	$ -	-	-	-	-	-	-	H
			Distribution Lines Totals:	*$ 14,880*	*$ 13,222*	*3,300*	*3,810*	*1,095*	*4,800*	*1,640*	*235*	
Substation												
2nd Point of Interconnect Substation	70%	2017	2021	$ 13,132	$ 3,000	2,432	10,400	300	-	-	-	H
Replacement Recloser for Joslyn Reclosers	0%	2017	2020	$ 100	$ -	75	25	-	-	-	-	L
Substation Bird Guard	0%	2019	2022	$ 15	$ -	6	6	3	-	-	-	H
East Substation	100%	2023	2023	$ 4,750	$ 4,750	-	750	-	4,000	-	-	M
Cloyes LTC Rebuild	0%	2021	2021	$ 40	$ -	-	-	40	-	-	-	M
Provo River Substation Rebuild	100%	2022	2023	$ 5,000	$ 5,000	-	-	1,000	4,000	-	-	M
Battery Replacement Program	0%	2020	2024	$ 29	$ -		-	10	-	19	8	L
Midway Substation - High Side Rebuild	90%	2024	2024	$ 500	$ 450	-	-	-	-	500	-	L
Heber Relay Upgrade	0%	2024	2024	$ 25	$ -	-	-	-	-	25	-	L
Jailhouse Fence Replacement	0%	2021	2025	$ 129	$ -	-	-	-	-	-	129	M
			Substation Totals:	*$ 23,720*	*$ 13,200*	*2,513*	*11,181*	*1,353*	*8,000*	*544*	*137*	
Systems & Technology												
Annual IT Upgrades	0%	2020	2024	$ 253	$ -	-	124	22	85	22	44	M
Annual OT Upgrades	0%	2020	2024	$ 446	$ -	-	318	68	30	30	30	M
Smart Grid Investment	0%	2020	2024	$ 50	$ -	-	10	10	10	10	10	M
AMI Tower - North Village	0%	2021	2021	$ 70	$ -	-	70	-	-	-	-	M
			Systems & Technology Totals:	*$ 819*	*$ -*	-	*522*	*100*	*125*	*62*	*84*	
Tools & Equipment												
Annual Tool & Equipment Purchases	0%	2020	2024	$ 235	$ -	-	*55*	45	45	45	45	M
Vehicle												
Annual Vehicle Program	0%	2020	2024	$ 2,360	$ -	-	435	300	170	635	820	M
			2020-2025 Capital Plan Totals:	**$ 58,591**	**$ 26,422**	6,402	**17,897**	**13,043**	**15,271**	**4,719**	**1,346**	

2025 - 2029 Forecasted Projects	
Buildings	
Generator Plant 4	
Generation	
Unit Overhauls (Multiple Years)	280
Lines	
Lake Creek to Timberlakes Rebuild/Reconductor	350
3-Phase Extension up Lake Creek Road from Timberlakes Gate	500
East Substation Circuit Extension	400-900
Cabin Developments Overhead to Underground Conversion	?
Substation	
Battery Replacement Program (Multiple Years)	$8/Year
Cloyes XFMR Upgrade (2028)	500
Sorenson Substation (2029)	6,000
Gas Plant 2 XFMR Upgrade (2028)	500
Systems & Technology	
Server Upgrade (2027)	63

Buildings

1) Generator Fire Suppression System
2) New Office Building
3) EV Charging Systems
4) Millflat Water Line Replacement
5) Plant 2 Switchgear AC Unit
5) Gas Plant Security Measures
6) Plant HVAC Upgrades

Heber Light & Power

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: $660,963
Plant 2: $679,000
Plant 3 phase 1: $600,355
Plant 3 phase 2: $497,539
Campus Wide Fire A&D System Communication Network: $40,978

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	8,000.00	10,000.00	-	3,000.00	3,000.00	-	24,000.00
Materials	1,500.00	5,500.00	-	1,500.00	1,500.00	-	10,000.00
Subcontractor	366,000.00	275,085.00	497,539.00	679,000.00	660,963.00	-	2,478,587.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 375,500.00	$ 290,585.00	$ 497,539.00	$ 683,500.00	$ 665,463.00	$ -	$ 2,512,587.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	**$375,500.00**	**$290,585.00**	**$ 497,539.00**	**$683,500.00**	**$665,463.00**	**$ -**	**$2,512,587.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	7,527.83	10,000.00	10,000.00	-	-	-	27,527.83
Materials	-	-	-	-	-	-	-
Subcontractor	70,020.45	1,000,000.00	8,000,000.00	-	-	-	9,070,020.45
Miscellaneous	35,000.00	-	-	-	-	-	35,000.00
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 112,548.28	$ 1,010,000.00	$ 8,010,000.00	$ -	$ -	$ -	$ 9,132,548.28
Impact Fee %	0%	0%	0%				
Net Amount:	**$ 112,548.28**	**$ 1,010,000.00**	**$ 8,010,000.00**	**$ -**	**$ -**	**$ -**	**$ 9,132,548.28**

Heber Light & Power

Project Analysis Form

Project Name: EV Charging Systems

Project Driver: Upgrade

Priority Level: Medium

Purpose & Necessity:

Electric vehicles are beginning to become more prevalent on our system. The installation of strategically placed charging stations throughout the territory will be a benefit to both citizens as well as the company. HLP has obtained an estimate from a station supplier for 6 charging stations. This project will allow HLP to capture most of the commercial revenue from the sale to these vehicle owners. In addition, HLP will be able to obtain solid data for load studies and future forecasting needs as EV continue to expand across the system.

Risk Assessment:

Without this project, HLP will continue to see vendors selling our product at a mark-up.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	5,000.00	-	-	-	-	-	5,000.00
Materials	-	-	-	-	-	-	-
Subcontractor	125,000.00	-	-	-	-	-	125,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 130,000.00	$ -	$ -	$ -	$ -	$ -	$ 130,000.00
Impact Fee %	0%						
Net Amount:	**$ 130,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 130,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Millflat Water Line Replacement

Project Driver: Replacement

Priority Level: High

Purpose & Necessity:

The main water line that feeds the Upper Snake Creek and ultimately the Lower Snake Creek Hydro plants is in serious need of replacement. As it currently stands, the line is old and exposed to damage by vehicles and the Forest Service as they access the upper reaches of Snake Creek Canyon.

Risk Assessment:

Risk exists that given the right damage instance, loss of the use of both hydro plants will occur. This loss will lead to the curtailment of production which would then result in replacement energy being purchased on the spot market.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	-	-	-
Subcontractor	50,000.00	-	-	-	-	-	50,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 50,000.00	$ -	$ -	$ -	$ -	$ -	$ 50,000.00
Impact Fee %	0%						0%
Net Amount:	**$ 50,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 50,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Plant 2 Switchgear Room AC Unit

Project Driver: Upgrade

Priority Level: High

Purpose & Necessity:

Electrical equipment in the switchgear generate heat as a byproduct of normal operations. As such, air conditioning is installed to reduce the risk of damage to the structure and the equipment. The current AC system has reached it's useful life and needs to be replaced. The cost of a new unit would be roughly 6,000 while the cost of running a new electrical connection to the system would add another 7,000.

Risk Assessment:

Risk exists for premature failure of the equipment. In addition, if equipment becomes excessively warm, risk of fire increases thus putting the plant at risk of a fire situation.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	6,000.00	-	-	-	-	-	6,000.00
Materials	6,000.00	-	-	-	-	-	6,000.00
Subcontractor	6,000.00	-	-	-	-	-	6,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 18,000.00	$ -	$ -	$ -	$ -	$ -	$ 18,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	**$ 18,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 18,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Gas Plant Security

Project Driver: Upgrade

Priority Level: Medium

Purpose & Necessity:

HLP has been in the process of installing security access controls on all HLP facilities. The generation plants are the next in line to receive such security upgrades.

Risk Assessment:

Uncontrolled access is currently available to anyone that is able to penetrate the exterior fence of the campus. Such access could place the generation fleet at an unacceptable level of risk of tampering and potential destruction.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	5,000.00	-	5,000.00
Materials	-	-	-	-	40,000.00	-	40,000.00
Subcontractor	-	-	-	-	10,000.00	-	10,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 55,000.00	$ -	$ 55,000.00
Impact Fee %	0%						0%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ 55,000.00**	**$ -**	**$ 55,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	7,500.00	2,000.00	2,000.00	2,000.00	-	-	13,500.00
Materials	6,000.00	1,500.00	1,500.00	1,500.00	-	-	10,500.00
Subcontractor	185,000.00	70,000.00	80,000.00	80,000.00	-	-	415,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 198,500.00	$ 73,500.00	$ 83,500.00	$ 83,500.00	$ -	$ -	$ 439,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	**$ 198,500.00**	**$ 73,500.00**	**$ 83,500.00**	**$ 83,500.00**	**$ -**	**$ -**	**$ 439,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Plant 1 Electrical Upgrade

Project Driver: Upgrade

Priority Level: Medium

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	40,000.00	-	40,000.00
Subcontractor	-	-	-	-	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**

Generation

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

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
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**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	-	5,000.00
Materials	14,000.00	4,000.00	4,000.00	4,000.00	4,000.00	-	30,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 15,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ -	$ 35,000.00
Impact Fee %	0%	0%	0%	0%	0%		
Net Amount:	**$ 15,000.00**	**$ 5,000.00**	**$ 5,000.00**	**$ 5,000.00**	**$ 5,000.00**	**$ -**	**$ 35,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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	14,000.00	4,000.00	-	30,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 15,000.00	$ 5,000.00	$ -	$ 35,000.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount:	**$ 5,000.00**	**$ 5,000.00**	**$ 5,000.00**	**$ 15,000.00**	**$ 5,000.00**	**$ -**	**$ 35,000.00**

Heber Light & Power

Project Analysis Form

Project Name: New Generation

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. The company is working with the Caterpillar and Wheeler organizations to install a battery bank in 2022, as well as looking at a new engine in 2023.

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	15,000.00	15,000.00	-	-	-	30,000.00
Materials	-	1,250,000.00	-	-	-	-	1,250,000.00
Subcontractor	-	50,000.00	1,200,000.00	-	-	-	1,250,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ 1,315,000.00	$ 1,215,000.00	$ -	$ -	$ -	$ 2,530,000.00
Impact Fee %							
Net Amount:	**$ -**	**$ 1,315,000.00**	**$ 1,215,000.00**	**$ -**	**$ -**	**$ -**	**$ 2,530,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Unit Overhauls

Project Driver: Reliability

Priority Level: Medium

Purpose & Necessity:

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 4 - 2022
Unit 11 - 2023
Unit 1&2 - 2024

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	8,000.00	8,000.00	8,000.00	-	-	24,000.00
Materials	-	-	-	-	-	-	-
Subcontractor	-	180,000.00	75,000.00	180,000.00	-	-	435,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ 188,000.00	$ 83,000.00	$ 188,000.00	$ -	$ -	$ 459,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	**$ -**	**$ 188,000.00**	**$ 83,000.00**	**$ 188,000.00**	**$ -**	**$ -**	**$ 459,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
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**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	6,000.00	-	6,000.00
Materials	-	-	-	-	74,000.00	-	74,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(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**

Heber Light & Power

Project Analysis Form

Project Name: Lake Creek Bearing Replacement

Project Driver: Upgrade

Priority Level: High

Purpose & Necessity:

The bearing on the Lake Creek plant is showing signs of aging and normal wear. In order to extend the life of this plant, the bearing will need to be replaced.

Risk Assessment:

In the event a system failure occurs, the generator at the Lake Creek Hydro Plant will be offline. Thus the low-cost generator would not be supplying its regular energy at its reduced rate. Higher cost unplanned market energy would need to be secured to fill the hole in supply.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	-	-	2,000.00	-	2,000.00
Materials	-	-	-	-	8,000.00	-	8,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 10,000.00	$ -	$ 10,000.00
Impact Fee %	0%						
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ 10,000.00**	**$ -**	**$ 10,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Mobile Standby Generator Purchase

Project Driver: Reliability

Priority Level: High

Purpose & Necessity:

In coordination with the Heber City Corporation, HLP will be purchasing a mobile 1MW standby generator. This generator would be dispatched by either the Heber City Corporation or HLP to needed locations during periods of upheaval on the system.

Risk Assessment:

Critical infratructure such as water pumps or critical faciltiies such as rest homes or emergency back-up locations would need energy in critical outages due to multiple scenarios. This unit would be used to secure the energy for these critical locations until energy can be restored.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	1,000.00	-	-	-	-	-	1,000.00
Materials	130,000.00	-	-	-	-	-	130,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	(65,000.00)	-	-	-	-	-	(65,000.00)
Subtotal:	$ 66,000.00	$ -	$ -	$ -	$ -	$ -	$ 66,000.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount:	**$ 66,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 66,000.00**

Distribution

1) Cross-Valley Transmission Line (2nd POI)
2) Underground System Improvements
3) Aged & Environmental Distribution Replacement / Upgrade
4) Fault Indicator - Underground System
5) Rebuild PR 201: Main Street to Burgi Lane
6) Additional Circuits out of Jailhouse to the East
7) Additional Circuits out of College to South and East
8) Install Voltage Regulators at Timber Lakes Gate
9) Heber Substation Additional Circuits (South & West)
10) Reconductor HB305_600 West - Substation to 300 South
11) Midway Substation - Get Aways
12) Load to Parsons (Reconductor)
13) Reconductor Heber City Main Street: 600 South to 1000 South
14) 1200 South Transmission Line
15) Reconductor Pine Canyon Road - Midway
16) Reconductor JH 502/503: Old Mill Drive - 800 South to 1200 South
17) Reconductor MW 101/102: 4/0 to 477
18) Rebuild CL 402: 600 West to Tate Lane
19) Tie Line from 305 to 402 to 303
20) Tie from 702 up to 500 East in Heber (HB304)

Heber Light & Power

Project Analysis Form

Project Name: Cross-Valley Transmission Line (2nd POI)

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.

Cash Flow Schedule:

	2018	2019	2020	2021	2022	2023	Overall
Internal Labor	497.87	17,412.57	21,540.03	-	-	-	39,450.47
Materials	-	-	630,000.00	-	-	-	630,000.00
Subcontractor	3,830.05	47,974.90	43,397.00	3,300,000.00	-	-	3,395,201.95
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 4,327.92	$ 65,387.47	$ 694,937.03	$ 3,300,000.00	$ -	$ -	$ 4,064,652.42
Impact Fee %	0%	0%	0%	0%	0%	0%	100%
Net Amount:	**$ 4,327.92**	**$ 65,387.47**	**$ 694,937.03**	**$ 3,300,000.00**	**$ -**	**$ -**	**$ 4,064,652.42**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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**

Heber Light & Power

Project Analysis Form

Project Name: Aged & Environmental Distribution Replacement/Upgrade

Project Driver: Reliability

Priority Level: Medium

Purpose & Necessity:

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 Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	25,000.00	25,000.00	-	-	-	-	50,000.00
Materials	175,000.00	175,000.00	-	-	-	-	350,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 200,000.00	$ 200,000.00	$ -	$ -	$ -	$ -	$ 400,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

Project Analysis Form

Project Name: Additional Circuits out of Jailhouse to the East

Project Driver: Growth

Priority Level: Medium

Purpose & Necessity:

The development of the South end of Heber City, and the East side of Wasatch County have necessitated additional circuits out of the Jailhouse Substation.

Risk Assessment:

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.

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
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	-	-	-	-	-	-	-
(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:	**$ -**	**$ -**	**$ -**	**$ 140,000.00**	**$ 140,000.00**	**$ -**	**$ 280,000.00**

Heber Light & Power

Project Analysis Form

Project Name: Additional Circuits out of College to South and East

Project Driver: Growth

Priority Level: Medium

Purpose & Necessity:

The development 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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	28,000.00	28,000.00	-	-	-	56,000.00
Materials	-	112,000.00	112,000.00	-	-	-	224,000.00
Subcontractor	-	-	.	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ 140,000.00	$ 140,000.00	$ -	$ -	$ -	$ 280,000.00
Impact Fee %	100%	100%	100%	0%	0%	0%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	15,000.00	-	-	-	15,000.00
Materials	-	-	85,000.00	-	-	-	85,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ 100,000.00	$ -	$ -	$ -	$ 100,000.00
Impact Fee %	0%	0%	100%	0%	0%	0%	0%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

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.

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
Internal Labor	-	-	-	55,000.00	-	-	55,000.00
Materials	-	-	-	225,000.00	-	-	225,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ 280,000.00	$ -	$ -	$ 280,000.00
Impact Fee %				100%			100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	8,000.00	8,000.00	-	-	16,000.00
Materials	-	-	17,000.00	17,000.00	-	-	34,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ 25,000.00	$ 25,000.00	$ -	$ -	$ 50,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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**

Heber Light & Power

Project Analysis Form

Project Name: Load to Parsons (Reconductor)

Project Driver: Upgrade

Priority Level: High

Purpose & Necessity:

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.

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	100,000.00	-	100,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 100,000.00	$ -	$ 100,000.00
Impact Fee %	0%						0%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000.00**	**$ -**	**$ 100,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	100,000.00	-	100,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 100,000.00	$ -	$ 100,000.00
Impact Fee %							
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000.00**	**$ -**	**$ 100,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
Internal Labor	-	-	-	-	250,000.00	-	250,000.00
Materials	-	-	-	-	3,650,000.00	-	3,650,000.00
Subcontractor	-	-	-	-	-	-	-
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**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	36,000.00	-	36,000.00
Materials	-	-	-	-	144,000.00	-	144,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 180,000.00	$ -	$ 180,000.00
Impact Fee %		0%			60%		60%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ 72,000.00**	**$ -**	**$ 72,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	45,000.00	-	45,000.00
Materials	-	-	-	-	255,000.00	-	255,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 300,000.00	$ -	$ 300,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

Project Analysis Form

Project Name: Reconductor Midway 101/102 from 4/0 to 477

Project Driver: Reliability

Priority Level: Low

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	45,000.00	-	45,000.00
Materials	-	-	-	-	305,000.00	-	305,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 350,000.00	$ -	$ 350,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

Project Analysis Form

Project Name: Reconductor Cloyes 402 (600 West to Tate Lane)

Project Driver: Reliability

Priority Level: Low

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	65,000.00	-	65,000.00
Materials	-	-	-	-	485,000.00	-	485,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 550,000.00	$ -	$ 550,000.00
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

Project Analysis Form

Project Name: Tie From 305 to 402 to 303

Project Driver: Growth

Priority Level: High

Purpose & Necessity:

This tie will provide the company with additional looped feeders for future redundant system needs.

Risk Assessment:

Without completing this tie, an outage could drive an extended outage in particular sections of the system as redundant loops would not be in place to allow for switching efforts.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	-	-	-
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Impact Fee %	100%	100%	100%	100%	100%	100%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

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 , 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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	-	-	-	-	-
Materials	-	-	-	-	-	-	-
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Impact Fee %	100%	100%	100%	100%	100%	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
9) Heber Relay Upgrade
10) Jailhouse Fence Replacement

Heber Light & Power

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.

Cash Flow Schedule:

	2018	2019	2020	2021	2022	2023	Overall
Internal Labor	31,794.14	36,073.50	41,350.00	100,000.00	50,000.00	-	259,217.64
Materials	-	-	-	4,700,000.00	-	-	4,700,000.00
Subcontractor	81,708.85	61,826.73	79,631.50	5,550,000.00	250,000.00	-	6,023,167.08
Miscellaneous	-	2,100,000.00	-	50,000.00	-	-	2,150,000.00
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 113,502.99	$ 2,197,900.23	$ 120,981.50	$ 10,400,000.00	$ 300,000.00	$ -	$ 13,132,384.72
Impact Fee %							3,000,000
Net Amount:	**$ 113,502.99**	**$ 2,197,900.23**	**$ 120,981.50**	**$ 10,400,000.00**	**$ 300,000.00**	**$ -**	**$ 10,132,384.72**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
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**

Heber Light & Power

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:

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	1,200.00	600.00	-	-	-	-	1,800.00
Materials	4,800.00	2,400.00	-	-	-	-	7,200.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 6,000.00	$ 3,000.00	$ -	$ -	$ -	$ -	$ 9,000.00
Impact Fee %	0%	0%	0%	0%			
Net Amount:	**$ 6,000.00**	**$ 3,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 9,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	8,000.00	-	-	-	-	8,000.00
Materials	-	32,000.00	-	-	-	-	32,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ 40,000.00	$ -	$ -	$ -	$ -	$ 40,000.00
Impact Fee %							0%
Net Amount:	**$ -**	**$ 40,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 40,000.00**

Heber Light & Power

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.

Two options exist and being considered by HLP staff: 1) rebuild in current location; 2) include in the new 2nd POI site and then bring the feeders out and down the highway to the existing feeder connections at the current Provo River Substation.

Risk Assessment:

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

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	250,000.00	250,000.00	-	-	-	500,000.00
Materials	-	750,000.00	2,000,000.00	-	-	-	2,750,000.00
Subcontractor	-	-	1,750,000.00	-	-	-	1,750,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ 1,000,000.00	$ 4,000,000.00	$ -	$ -	$ -	$ 5,000,000.00
Impact Fee %	0%	100%	100%	0%	0%	0%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

Project Analysis Form

Project Name: East Substation

Project Driver: Growth

Priority Level: Medium

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.

2021: Land Purchase
2023: Substation Build

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	250,000.00	-	-	-	250,000.00
Materials	-	-	2,000,000.00	-	-	-	2,000,000.00
Subcontractor	-	-	1,750,000.00	-	-	-	1,750,000.00
Miscellaneous	750,000.00	-	-	-	-	-	750,000.00
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 750,000.00	$ -	$ 4,000,000.00	$ -	$ -	$ -	$ 4,750,000.00
Impact Fee %	100%	0%	100%	0%	0%	0%	100%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Heber Light & Power

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-	-	1,500.00	-	3,000.00	-	4,500.00
Materials	-	-	8,000.00	-	16,000.00	-	24,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ 9,500.00	$ -	$ 19,000.00	$ -	$ 28,500.00
Impact Fee %							0%
Net Amount:	**$ -**	**$ -**	**$ 9,500.00**	**$ -**	**$ 19,000.00**	**$ -**	**$ 28,500.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	-	100,000.00	-	-	100,000.00
Materials	-	-	-	400,000.00	-	-	400,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ 500,000.00	$ -	$ -	$ 500,000.00
Impact Fee %				0%			0%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ 500,000.00**	**$ -**	**$ -**	**$ 500,000.00**

Heber Light & Power

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.

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
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**

Heber Light & Power

Project Analysis Form

Project Name: Jailhouse Fence Replacement

Project Driver: Replacement

Priority Level: Low

Purpose & Necessity:

The jailhouse substation currently has a chain-link fence that prohibits unauthorized access. This fence is subject to high winds and regularly requires maintenance and occasional replacement of portions. A new fence more suited to handling the wind and other environmental factors while meeting the security and operational needs would be installed as part of this project. The current fence is 790 linear feet long.

Risk Assessment:

The company will continue to spend OMAG dollars on maintaining a fence that is truly not the correct type of fence for the designed purpose. With inadequate security as a result of this fence, the company has an increased risk of liability for injury or life lost. Furthermore risk exists that critical infrastructure might be damaged leading to extended outages affecting customers.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	-	-	-	10,000.00	-	10,000.00
Materials	-	-	-	-	-	-	-
Subcontractor	-	-	-	-	119,000.00	-	119,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ -	$ -	$ -	$ 129,000.00	$ -	$ 129,000.00
Impact Fee %							0%
Net Amount:	**$ -**	**$ -**	**$ -**	**$ -**	**$ 129,000.00**	**$ -**	**$ 129,000.00**

Information Technology

1) IT Upgrades
2) OT Upgrades
3) Smart Grid Investment
4) AMI North Tower

Heber Light & Power

Project Analysis Form

Project Name: 2021 Capital Improvements - IT

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 2021 for installation:

- Computer Replacement Program… $46,000
- Server Upgrades …..... $63,000

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	15,000.00	2,000.00	10,000.00	2,000.00	5,000.00	2,000.00	36,000.00
Materials	109,000.00	20,000.00	75,000.00	20,000.00	39,000.00	20,000.00	283,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-		-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 124,000.00	$ 22,000.00	$ 85,000.00	$ 22,000.00	$ 44,000.00	$ 22,000.00	$ 319,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	**$ 124,000.00**	**$ 22,000.00**	**$ 85,000.00**	**$ 22,000.00**	**$44,000.00**	**$ 22,000.00**	**$ 319,000.00**

Heber Light & Power

Project Analysis Form

Project Name: 2021 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 2021 for installation:

- New SCADA System… $250,000
- iVUE Mapwise ……..... $26,000

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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	30,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	60,000.00
Materials	12,000.00	12,000.00	24,000.00	24,000.00	24,000.00	24,000.00	120,000.00
Subcontractor	276,000.00	50,000.00	-	-	-	-	326,000.00
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 318,000.00	$ 68,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 506,000.00
Impact Fee %	0%	0%	0%	0%	0%	0%	0%
Net Amount:	**$ 318,000.00**	**$68,000.00**	**$ 30,000.00**	**$ 30,000.00**	**$ 30,000.00**	**$ 30,000.00**	**$ 506,000.00**

Heber Light & Power

Project Analysis Form

Project Name: 2021 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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
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**

Heber Light & Power

Project Analysis Form

Project Name: AMI North Tower

Project Driver: Growth

Priority Level: High

Purpose & Necessity:

The recent annexation plan approval by Heber City Corporation has also expanded the potential customer territory for Heber Light & Power. As developers begin to establish buildable lots within this annexed area, HLP will begin to deploy meters for the collection and relay of usage data. In order to have these meters communicate the data, a new AMI tower will need to be erected with the appropriate equipment.

Risk Assessment:

Without installing this critical antenna, HLP will not be able to read the meter data within the newly annexed service territory.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-	10,000.00	-	-	-	-	10,000.00
Materials	-	60,000.00	-	-	-	-	60,000.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ -	$ 70,000.00	$ -	$ -	$ -	$ -	$ 70,000.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount:	**$ -**	**$70,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 70,000.00**

Tools / Equipment

1) 2021 Annual Program

Heber Light & Power

Project Analysis Form

Project Name: 2021 Capital Improvements - Tools

Project Driver: Replacement

Priority Level: Medium

Purpose & Necessity:

The following collective list of tools are planned to be purchased over 2021:

-Metering
- Meter Programmer Tool $3,000

-Substation
- Potential Substation Monitor Tool ... $3,000

- Distribution
- Phasing Set..... $4,500
- Trimble GPS Unit (2) ..... $18,000 (9,000 each)
- 12-Ton Crimper $6,000
- 3" Wire Cutter $4,000
- 795 Hot Cutter $2,500
- Line Locator $6,500
- Ground Sets(3) ..... $3,600 (1,200 each)
- Underground Puller Attachment $3,600

Risk Assessment:

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

Cash Flow Schedule:

	2019	2020	2021	2022	2023	2024	Overall
Internal Labor	-		-	-	-	-	-
Materials	54,700.00	45,000.00	45,000.00	45,000.00	45,000.00	45,000.00	279,700.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 54,700.00	$ 45,000.00	$ 45,000.00	$ 45,000.00	$ 45,000.00	$ 45,000.00	$ 279,700.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount:	**$ 54,700.00**	**$ 45,000.00**	**$ 45,000.00**	**$ 45,000.00**	**$ 45,000.00**	**######**	**$ 279,700.00**

Vehicles

1) 2021 Annual Program

Heber Light & Power

Project Analysis Form

Project Name: 2021 Capital Improvements - Vehicles

Project Driver: Replacement

Priority Level: Medium

Purpose & Necessity:

The following vehicles are planned to be purchased in 2021:

- One(1) Digger Derrick Line Truck ($300,000) - Replaces truck 206 - International Bucket Truck
- One (1) 3500 Series Heavy Duty Truck ($50,000) - Replace the 2013 F-350 Hydro Truck
- One (1) 5500 Series Heavy Duty Truck ($85,000) - 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.

Cash Flow Schedule:

	2021	2022	2023	2024	2025	2026	Overall
Internal Labor	-		-	-	-	-	-
Materials	-	-	-	-	-	-	-
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	435,000.00	300,000.00	170,000.00	635,000.00	820,000.00	35,000.00	2,395,000.00
(CIAC) Reim	-	-	-	-	-	-	-
Subtotal:	$ 435,000.00	$ 300,000.00	$ 170,000.00	$ 635,000.00	$ 820,000.00	$ 35,000.00	$ 2,395,000.00
Impact Fee %	0%	0%	0%	0%	0%		0%
Net Amount:	**$ 435,000.00**	**$ 300,000.00**	**$ 170,000.00**	**$ 635,000.00**	**$ 820,000.00**	**$ 35,000.00**	**$ 2,395,000.00**

Metering

1) 2021 Metering Installs

Heber Light & Power

Project Analysis Form

Project Name: 2021 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 2021 for installation:

Generation 4 CL 200 Meters ... $90,600
CL320 Meters $4,600
3S 120 Volt Meters $300
3S 240 Volt Meters $300
16S Meters $5,800
9S Meters $3,900
Test Switches Single Phase $200
Test Switches Three Phase $1,600
Current Transformers Bar Type 100:5..... $2,300
Current Transformers Bar Type 200:5..... $2,500
Current Transformers Bar Type 300:5 ..... $800
Current Transformers Window Type 200:5 ... $100
Current Transformers Window Type 300:5 ... $500
Current Transformers Window Type 400:5 ... $500
Current Transformers Window Type 600:5 ... $400

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.

Cash Flow Schedule:

	2020	2021	2022	2023	2024	2025	Overall
Internal Labor	-		-	-	-	-	-
Materials	114,400.00	-	-	-	-	-	114,400.00
Subcontractor	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
(CIAC) Reim	(96,096.00)	-	-	-	-	-	(96,096.00)
Subtotal:	$ 18,304.00	$ -	$ -	$ -	$ -	$ -	$ 18,304.00
Impact Fee %	0%						
Net Amount:	**$ 18,304.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 18,304.00**