

AMI Project	Start-Up and Deployment Cost	Year 1 Capital	Year 2 Capital	Year 3 Capital	Year 4 Capital	Year 5 Capital	Year 6 Capital	Year 7 Capital	Year 8 Capital	Year 9 Capital	Year 10 Capital	Year 11 Capital	Year 12 Capital	Year 13 Capital	Year 14 Capital	Year 15 Capital	Year 16 Capital	Year 17 Capital	Year 18 Capital	Year 19 Capital	Year 20 Capital	Year 21 Capital	TOTAL CAP COST	Cash NPV
ITRON Smart Meters		47%	53%																					
Electric Meters	10,388,567	4,882,626	5,505,940	-	-	-	103,886	105,963	108,083	110,244	112,449	114,698	116,992	119,332	121,719	124,153	126,636	129,169	131,752	134,387	137,075	139,816	12,324,921	
Water Meters / Modules inc freight	12,302,102	5,781,988	6,520,114	-	-	-	-	-	-	-	123,021	125,481	127,991	130,551	133,162	135,825	138,542	141,312	144,139	147,022	149,962	152,951	13,799,109	
Gas Meters / Modules inc freight	3,157,043	1,483,810	1,673,233	26,400	26,928	27,467	28,016	28,576	29,148	29,731	30,325	30,932	31,550	32,181	32,825	33,482	34,151	34,834	35,531	36,242	36,966	37,706	3,760,034	
Meter Cost	\$ 25,847,712	\$ 12,148,425	\$ 13,699,287	\$ 26,400	\$ 26,928	\$ 27,467	\$ 131,902	\$ 134,540	\$ 137,230	\$ 139,975	\$ 142,774	\$ 268,651	\$ 274,024	\$ 279,504	\$ 285,095	\$ 290,796	\$ 296,612	\$ 302,545	\$ 308,596	\$ 314,767	\$ 321,063	\$ 327,484	\$ 29,884,065	\$ 27,355,161
Smart Meter Installation Process		47%	53%																					
Electric Meters	1,551,480	729,195.60	822,284.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,551,480	
Field Repairs	233,509	109,749.23	123,759.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233,509	
Water Meters / Modules	3,258,970	1,531,716	1,727,254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,258,970	
Field Repairs	262,262	123,263	138,999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	262,262	
Gas Meters / Modules	2,165,587	1,017,826	1,147,761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,165,587	
Field Repairs	40,115	18,854	21,261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40,115	
Pit Cleaning																								
GRU Internal Labor and Equipment	250,000	125,000	125,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250,000	
Installation Cost	\$ 7,761,923	\$ 3,655,604	\$ 4,106,319	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,761,923	\$ 7,419,730
Network		100%																						
Field Area Network (inc GRU labor for CGR Install)	1,302,947	1,302,947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,302,947	
HES - Head End System	1,616,947	1,162,427	454,521	468,156	482,201	496,667	511,567	526,914	542,721	559,003	575,773	593,046	610,838	629,163	648,038	667,479	687,503	708,128	729,372	751,253	773,791	797,005	13,375,565	
Professional Services/Travel	560,430	560,430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	560,430	
MDM - Meter Data Management	330,516	-	330,516	62,245	64,112	66,036	68,017	70,057	72,159	74,324	76,553	78,850	81,216	83,652	86,162	88,746	91,409	94,151	96,976	99,885	102,881	105,968	1,893,914	
Professional Services/Travel	785,740	-	785,740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	785,740	
ISIAM	64,422	64,422	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64,422	
Network Cost	\$ 4,661,002	\$ 3,090,226	\$ 1,570,777	\$ 530,401	\$ 546,313	\$ 562,703	\$ 579,584	\$ 596,971	\$ 614,880	\$ 633,327	\$ 652,327	\$ 671,896	\$ 692,053	\$ 712,815	\$ 734,199	\$ 756,225	\$ 778,912	\$ 802,279	\$ 826,348	\$ 851,138	\$ 876,672	\$ 902,972	\$ 17,983,019	\$ 13,703,279
System Integration (Util-Assist)		80%	20%																					
PM/BPS/DEV/Testing	1,527,011	1,221,609	305,402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,527,011	
GRU Project Team	1,098,240	780,000	318,240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,098,240	
Integration Cost	\$ 2,625,251	\$ 2,001,609	\$ 623,642	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,625,251	\$ 2,531,152
Other Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Cost	\$ 40,895,888	\$ 20,895,863	\$ 20,000,025	\$ 556,801	\$ 573,241	\$ 590,169	\$ 711,486	\$ 731,511	\$ 752,111	\$ 773,302	\$ 795,101	\$ 940,547	\$ 966,077	\$ 992,319	\$ 1,019,294	\$ 1,047,022	\$ 1,075,524	\$ 1,104,824	\$ 1,134,943	\$ 1,165,906	\$ 1,197,735	\$ 1,230,457	\$ 58,254,258	\$ 51,009,321

AMI Project	Start-Up and Deployment Cost	Year 1 O&M	Year 2 O&M	Year 3 O&M	Year 4 O&M	Year 5 O&M	Year 6 O&M	Year 7 O&M	Year 8 O&M	Year 9 O&M	Year 10 O&M	Year 11 O&M	Year 12 O&M	Year 13 O&M	Year 14 O&M	Year 15 O&M	Year 16 O&M	Year 17 O&M	Year 18 O&M	Year 19 O&M	Year 20 O&M	Year 21 O&M	TOTAL O&M COST	
ITRON Smart Meters		47%	53%	0%	0%																			
Electric Meters (3 year Warranty)	154,675	72,697	81,978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154,675	
Water Meters / Modules (10 yr Warranty + 10 prorated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gas Meters / Modules (1 year Warranty)	783,805	368,388	415,417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	783,805	
Meter Cost	\$ 938,480	\$ 441,086	\$ 497,395	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 938,480	\$ 897,081
Smart Meter Installation Process		47%	53%	0%	0%																			
Electric Meters	1,957,051	919,814	1,037,237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,957,051	
Warehouse, customer call center, bonding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Meters / Modules	125,780	59,117	66,664	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125,780	
Customer call center, One time setup chg, integration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gas Meters / Modules	326,770	153,582	173,188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	326,770	
Customer call center, One time setup chg, integration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Installation Cost Spread over 2 years	\$ 2,409,602	\$ 1,132,513	\$ 1,277,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,409,602	\$ 2,303,306
Network																								
Field Area Network (CGR)	5,359	2,640	2,719	2,801	2,885	2,971	3,060	3,152	3,247	3,344	3,445	3,548	3,654	3,764	3,877	3,993	4,113	4,236	4,364	4,494	4,629	4,768	75,706	
HES - Head End System	117,125	57,697	59,428	61,211	63,047	64,939	66,887	68,893	70,960	73,089	75,282	77,540	79,866	82,262	84,730	87,272	89,890	92,587	95,365	98,226	101,172	104,207	1,654,552	
MDM - Meter Data Management	58,455	-	58,455	59,624	60,816	62,033	63,273	64,539	65,830	67,146	68,489	69,859	71,256	72,681	74,135	75,618	77,130	78,673	80,246	81,851	83,488	85,158	1,420,299	
ISIAM	26,155	12,884	13,271	13,669	14,079	14,501	14,936	15,385	15,846	16,321	16,811	17,315	17,835	18,370	18,921	19,489	20,073	20,676	21,296	21,935	22,593	23,271	369,477	
Other Network Cost (56 CGRs)																								
WAN VPN Link/Private IP Pool/Cellular Backhaul	64,963	32,160	32,803	33,459	34,128	34,811	35,507	36,217	36,942	37,681	38,434	39,203	39,987	40,787	41,602	42,434	43,283	44,149	45,032	45,932	46,851	47,788	829,191	
Network Cost	\$ 272,058	\$ 105,381	\$ 166,676	\$ 170,764	\$ 174,956	\$ 179,255	\$ 183,664	\$ 188,187	\$ 192,825	\$ 197,582	\$ 202,461	\$ 207,465	\$ 212,599	\$ 217,864	\$ 223,265</									

Gas O&M Benefits	\$ 230,478	\$ -	\$ 108,325	\$ 216,854	\$ 221,191	\$ 225,615	\$ 230,127	\$ 234,730	\$ 239,424	\$ 244,213	\$ 249,097	\$ 254,079	\$ 259,160	\$ 264,344	\$ 269,631	\$ 275,023	\$ 280,524	\$ 286,134	\$ 291,857	\$ 297,694	\$ 303,648	\$ 309,721	\$ 5,061,388	\$3,560,667.93
Water AMI Deployment Benefits		0%	47%	53%																				
Water Meter Reading	234,452	0	110,193	239,141	243,924	248,803	253,779	258,854	264,032	269,312	274,698	280,192	285,796	291,512	297,342	303,289	309,355	315,542	321,853	328,290	334,856	341,553		5,572,318
***Re-Reads, Move In/Out Reads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Move In/Out Reads Reduction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Service Engagement Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Theft	6,216	-	2,922	6,340	6,467	6,596	6,728	6,863	7,000	7,140	7,283	7,429	7,577	7,729	7,883	8,041	8,202	8,366	8,533	8,704	8,878	9,056		147,738
Water Meter Accuracy	194,899	-	91,603	198,797	202,773	206,829	210,965	215,184	219,488	223,878	228,355	232,923	237,581	242,333	247,179	252,123	257,165	262,309	267,555	272,906	278,364	283,931		4,632,241
Main Breaks Prevention/Reduction	170,625	-	80,194	174,038	177,518	181,069	184,690	188,384	192,151	195,994	199,914	203,913	207,991	212,151	216,394	220,722	225,136	229,639	234,232	238,916	243,695	248,568		4,055,307
Pumping Schedule	105,757	-	49,706	107,872	110,030	112,230	114,475	116,764	119,100	121,482	123,911	126,389	128,917	131,496	134,125	136,800	139,544	142,335	145,182	148,085	151,047	154,068		2,513,566
Fleet reduction	14,221	-	6,684	14,505	14,795	15,091	15,393	15,701	16,015	16,335	16,662	16,995	17,335	17,682	18,035	18,396	18,764	19,139	19,522	19,912	20,311	20,717		337,988
Water O&M Benefits	\$ 726,170	\$ -	\$ 341,301	\$ 740,694	\$ 755,508	\$ 770,618	\$ 786,030	\$ 801,751	\$ 817,786	\$ 834,141	\$ 850,824	\$ 867,841	\$ 885,198	\$ 902,901	\$ 920,960	\$ 939,379	\$ 958,166	\$ 977,330	\$ 996,876	\$ 1,016,814	\$ 1,037,150	\$ 1,057,893	\$ 17,259,159	\$12,134,893.35
WasteWater AMI Deployment Benefits		0%	47%	53%																				
WasteWater Meter Reading	249,404	0	117,220	254,393	259,480	264,670	269,963	275,363	280,870	286,487	292,217	298,061	304,023	310,103	316,305	322,631	329,084	335,666	342,379	349,226	356,211	363,335		5,927,688
***Re-Reads, Move In/Out Reads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Move In/Out Reads Reduction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Service Engagement Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Theft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Meter Accuracy	292,349	-	137,404	298,196	304,160	310,243	316,448	322,777	329,232	335,817	342,533	349,384	356,372	363,499	370,769	378,184	385,748	393,463	401,332	409,359	417,546	425,897		6,948,362
Main Breaks Prevention/Reduction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumping Schedule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fleet reduction	15,472	-	7,272	15,782	16,097	16,419	16,748	17,083	17,424	17,773	18,128	18,491	18,861	19,238	19,623	20,015	20,415	20,824	21,240	21,665	22,098	22,540		367,735
Water O&M Benefits	\$ 557,226	\$ -	\$ 261,896	\$ 568,370	\$ 579,737	\$ 591,332	\$ 603,159	\$ 615,222	\$ 627,526	\$ 640,077	\$ 652,879	\$ 665,936	\$ 679,255	\$ 692,840	\$ 706,697	\$ 720,831	\$ 735,247	\$ 749,952	\$ 764,951	\$ 780,250	\$ 795,855	\$ 811,772	\$ 13,243,785	\$9,311,688.92
GRUCom (1932)	25,023	-	11,761	25,523	26,034	26,554	27,086	27,627	28,180	28,743	29,318	29,905	30,503	31,113	31,735	32,370	33,017	33,677	34,351	35,038	35,739	36,454		594,727
Fleet reduction	2,095	-	984	2,137	2,179	2,223	2,267	2,313	2,359	2,406	2,454	2,503	2,553	2,604	2,656	2,710	2,764	2,819	2,875	2,933	2,992	3,051		49,783
GRUCom O&M Benefits	\$ 27,117	\$ -	\$ 12,745	\$ 27,660	\$ 28,213	\$ 28,777	\$ 29,353	\$ 29,940	\$ 30,539	\$ 31,149	\$ 31,772	\$ 32,408	\$ 33,056	\$ 33,717	\$ 34,391	\$ 35,079	\$ 35,781	\$ 36,497	\$ 37,226	\$ 37,971	\$ 38,730	\$ 39,505	\$ 644,510	\$453,154.30
Total Capital Benefits	\$ 22,154,978	\$ 1,068,614	\$ 1,108,486	\$ 933,009	\$ 951,669	\$ 970,702	\$ 990,116	\$ 1,009,919	\$ 1,030,117	\$ 1,050,720	\$ 1,071,734	\$ 1,093,169	\$ 1,115,032	\$ 1,137,333	\$ 1,160,079	\$ 1,183,281	\$ 1,206,946	\$ 1,231,085	\$ 1,255,707	\$ 1,280,821	\$ 1,306,438	\$ -	\$ 22,154,978	\$16,246,407.05
Total O&M Benefits	\$ 2,505,361	\$ -	\$ 1,177,520	\$ 2,537,235	\$ 2,587,979	\$ 2,639,738	\$ 2,692,533	\$ 2,746,384	\$ 2,801,311	\$ 2,857,338	\$ 2,914,484	\$ 2,972,774	\$ 3,032,230	\$ 3,092,874	\$ 3,154,732	\$ 3,217,826	\$ 3,282,183	\$ 3,347,826	\$ 3,414,783	\$ 3,483,079	\$ 3,552,740	\$ 3,623,795	\$ 59,129,363	\$41,575,793.77
																							\$ 81,284,341	\$57,822,200.82

Summary	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Cash	
Net Capital per year	\$ 19,827,248	\$ 18,891,539	\$ (376,208)	\$ (378,428)	\$ (380,533)	\$ (278,631)	\$ (278,408)	\$ (278,006)	\$ (277,418)	\$ (276,633)	\$ (152,621)	\$ (148,955)	\$ (145,013)	\$ (140,785)	\$ (136,259)	\$ (131,422)	\$ (126,261)	\$ (120,764)	\$ (114,916)	\$ (108,703)	\$ 1,230,457	\$ (36,099,279)	(\$34,762,913.29)
Net O&M per year	\$ 3,351,371	\$ 1,641,598	\$ (1,879,563)	\$ (1,916,377)	\$ (1,953,905)	\$ (1,992,159)	\$ (2,031,153)	\$ (2,070,902)	\$ (2,111,419)	\$ (2,152,720)	\$ (2,194,819)	\$ (2,237,732)	\$ (2,281,473)	\$ (2,326,058)	\$ (2,371,504)	\$ (2,417,827)	\$ (2,465,042)	\$ (2,513,168)	\$ (2,562,221)	\$ (2,612,219)	\$ (2,663,180)	\$ 37,760,474	\$25,063,901.03
Net	\$ 23,178,620	\$ 20,533,136	\$ (2,255,771)	\$ (2,294,805)	\$ (2,334,438)	\$ (2,270,790)	\$ (2,309,561)	\$ (2,348,908)	\$ (2,388,837)	\$ (2,429,353)	\$ (2,347,441)	\$ (2,386,686)	\$ (2,426,486)	\$ (2,466,844)	\$ (2,507,763)	\$ (2,549,249)	\$ (2,591,304)	\$ (2,633,932)	\$ (2,677,137)	\$ (2,720,922)	\$ (1,432,723)	\$ 1,661,194	(\$9,699,012.26)

Cash Basis	NPV Valuation
Implementation Cost	\$47,066,376.60
21 Year Cost of AMI Project	(\$79,623,146.30)
21 Yr Cost Avoidance / Benefits	\$81,284,340.68
Net 21 Year Cost of AMI Project	\$1,661,194.38

AMI Project Optional Items	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	
	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital
GRUCom Fiber Build	\$ 2,044,460		34%	33%	33%																	
			695,116	674,672	674,672																	
GRUCom Annual Cost (20Mb)	9,240	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M
			9,240	9,517	9,803	10,097	10,400	10,712	11,033	11,364	11,705	12,056	12,418	12,790	13,174	13,569	13,976	14,396	14,827	15,272	15,730	
Total Option Cost	\$ 2,053,700	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
		\$ -	\$ -	\$ 704,356	\$ 684,189	\$ 684,475	\$ 10,097	\$ 10,400	\$ 10,712	\$ 11,033	\$ 11,364	\$ 11,705	\$ 12,056	\$ 12,418	\$ 12,790	\$ 13,174	\$ 13,569	\$ 13,976	\$ 14,396	\$ 14,827	\$ 15,272	\$ 15,730

AMI Project	Start-Up and Deployment Cost	Year 1 Capital	Year 2 Capital	Year 3 Capital	Year 4 Capital	Year 5 Capital	Year 6 Capital	Year 7 Capital	Year 8 Capital	Year 9 Capital	Year 10 Capital	Year 11 Capital	Year 12 Capital	Year 13 Capital	Year 14 Capital	Year 15 Capital	Year 16 Capital	Year 17 Capital	Year 18 Capital	Year 19 Capital	Year 20 Capital	Year 21 Capital
ITRON Smart Meters		47%	53%																			
Electric Meters	10,388,567	4,882,626	5,505,940	-	-	-	103,886	105,963	108,083	110,244	112,449	114,698	116,992	119,332	121,719	124,153	126,636	129,169	131,752	134,387	137,075	139,816
GRU Materials	18,211	8,559	9,652																			
Lids, seals, boxes, locking rings, keys, etc...																						
Meter Cost	\$ 10,406,777	\$ 4,891,185.36	\$ 5,515,592	\$ -	\$ -	\$ -	\$ 103,886	\$ 105,963	\$ 108,083	\$ 110,244	\$ 112,449	\$ 114,698	\$ 116,992	\$ 119,332	\$ 121,719	\$ 124,153	\$ 126,636	\$ 129,169	\$ 131,752	\$ 134,387	\$ 137,075	\$ 139,816
Smart Meter Installation Process		47%	53%																			
Electric Meters	\$ 1,575,578	740,522	835,057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Installation Cost	\$ 1,575,578	\$ 740,522	\$ 835,057	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network		46%																				
Field Area Network (inc GRU labor for CGR)	605,427	605,427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HES - Head End System	751,491	540,133	211,197	217,533	224,059	230,781	237,705	244,836	252,181	259,746	267,539	275,565	283,832	292,347	301,117	310,151	319,455	329,039	338,910	349,077	359,550	370,336
Professional Services/Travel	260,409	260,409																				
MDM - Meter Data Management	153,578		153,578	28,923	29,790	30,684	31,605	32,553	33,529	34,535	35,571	36,638	37,738	38,870	40,036	41,237	42,474	43,748	45,061	46,413	47,805	49,239
Professional Services/Travel	365,102		365,102																			
ISIAM	29,934	29,934																				
Network Cost	\$ 2,165,781	\$ 1,435,904	\$ 729,877	\$ 246,456	\$ 253,850	\$ 261,465	\$ 269,309	\$ 277,389	\$ 285,710	\$ 294,282	\$ 303,110	\$ 312,203	\$ 321,569	\$ 331,216	\$ 341,153	\$ 351,388	\$ 361,929	\$ 372,787	\$ 383,971	\$ 395,490	\$ 407,354	\$ 419,575
System Integration (LNU-Assist)		80%	20%																			
PM/BPS/DEV/Testing	709,541	567,633	141,908																			
GRU Project Team	510,308	362,435	147,873																			
Integration Cost	\$ 1,219,849	\$ 930,067	\$ 289,781.51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Cost	\$ 15,367,985	\$ 7,997,679	\$ 7,370,307	\$ 246,456	\$ 253,850	\$ 261,465	\$ 273,195	\$ 283,352	\$ 293,793	\$ 304,526	\$ 315,559	\$ 326,901	\$ 338,562	\$ 350,548	\$ 362,872	\$ 375,541	\$ 388,565	\$ 401,956	\$ 415,723	\$ 429,877	\$ 444,429	\$ 459,320

\$20,292,391.85 NPV capital cost

AMI Project	Start-Up and Deployment Cost	Year 1 O&M	Year 2 O&M	Year 3 O&M	Year 4 O&M	Year 5 O&M	Year 6 O&M	Year 7 O&M	Year 8 O&M	Year 9 O&M	Year 10 O&M	Year 11 O&M	Year 12 O&M	Year 13 O&M	Year 14 O&M	Year 15 O&M	Year 16 O&M	Year 17 O&M	Year 18 O&M	Year 19 O&M	Year 20 O&M	Year 21 O&M
ITRON Smart Meters		47%	53%	0%	0%																	
Electric Meters Warranty	154,675	72,697	81,978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meter Cost	\$ 154,675	\$ 72,697	\$ 81,978	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Smart Meter Installation Process		47%	53%	0%	0%																	
Electric Meters	1,957,051	919,814	1,037,237																			
Waarehouse, customer call center, bonding																						
Installation Cost Spread over 2 years	\$ 1,957,051	\$ 919,814	\$ 1,037,237	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network		46%																				
Field Area Network	2,490	1,227	1,264	1,301	1,340	1,381	1,422	1,465	1,509	1,554	1,601	1,649	1,698	1,749	1,801	1,855	1,911	1,968	2,028	2,088	2,151	2,216
HES - Head End System	54,423	26,810	27,614	28,442	29,296	30,174	31,080	32,012	32,972	33,962	34,980	36,030	37,111	38,224	39,371	40,552	41,768	43,021	44,312	45,642	47,011	48,421
MDM - Meter Data Management	27,162		27,162	27,705	28,259	28,824	29,401	29,989	30,588	31,200	31,824	32,461	33,110	33,772	34,447	35,136	35,839	36,556	37,287	38,033	38,793	39,569
ISIAM	12,153	5,987	6,166	6,351	6,542	6,738	6,940	7,149	7,363	7,584	7,811	8,046	8,287	8,536	8,792	9,056	9,327	9,607	9,895	10,192	10,498	10,813
Other Network Cost (56 CGR)																						
WAN VPN Link/Private IP Pool/Cellular Backhaul	30,186	14,943	15,242	15,547	15,858	16,175	16,499	16,829	17,165	17,509	17,859	18,216	18,580	18,952	19,331	19,718	20,112	20,514	20,924	21,343	21,770	22,205
Network Cost	\$ 126,414	\$ 68,967	\$ 77,448	\$ 79,347	\$ 81,295	\$ 83,293	\$ 85,342	\$ 87,443	\$ 89,598	\$ 91,808	\$ 94,075	\$ 96,401	\$ 98,786	\$ 101,233	\$ 103,743	\$ 106,317	\$ 108,958	\$ 111,667	\$ 114,447	\$ 117,298	\$ 120,223	\$ 123,224
System Integration		80%	20%																			
PM/BPS/DEV/Testing	684,439	547,551	136,888																			
GRU Team																						
GRU Operations Team	221,810		221,810	226,246	230,771	235,387	240,094	244,896	249,794	254,790	259,886	265,084	270,385	275,793	281,309	286,935	292,674	298,527	304,498	310,588	316,799	323,135
Customer Education		47%	53%																			
Flyers/Advertising	92,932	43,678	49,254																			
Deployment Integration Cost	\$ 999,181	\$ 591,230	\$ 407,952	\$ 226,246	\$ 230,771	\$ 235,387	\$ 240,094	\$ 244,896	\$ 249,794	\$ 254,790	\$ 259,886	\$ 265,084	\$ 270,385	\$ 275,793	\$ 281,309	\$ 286,935	\$ 292,674	\$ 298,527	\$ 304,498	\$ 310,588	\$ 316,799	\$ 323,135
Meter Farm																						
Other Cost	185,864	185,864																				
Other Cost	\$ 185,864	\$ 185,864	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
O&M Cost	\$ 3,423,186	\$ 1,818,572	\$ 1,604,615	\$ 305,593	\$ 312,066	\$ 318,679	\$ 325,436	\$ 332,339	\$ 339,392	\$ 346,598	\$ 353,961	\$ 361,484	\$ 369,171	\$ 377,026	\$ 385,051	\$ 393,252	\$ 401,632	\$ 410,194	\$ 418,944	\$ 427,885	\$ 437,022	\$ 446,359

\$8,201,895.38 NPV O&M cost

Total Cost	Start-Up and Deployment Cost	Year 1 Total Cost	Year 2 Total Cost	Year 3 Total Cost	Year 4 Total Cost	Year 5 Total Cost	Year 6 Total Cost	Year 7 Total Cost	Year 8 Total Cost	Year 9 Total Cost	Year 10 Total Cost	Year 11 Total Cost	Year 12 Total Cost	Year 13 Total Cost	Year 14 Total Cost	Year 15 Total Cost	Year 16 Total Cost	Year 17 Total Cost	Year 18 Total Cost	Year 19 Total Cost	Year 20 Total Cost	Year 21 Total Cost
ITRON Smart Meters																						
Electric Meters	\$ 10,543,242	\$ 4,953,324	\$ 5,587,918	\$ -	\$ -	\$ -	\$ 103,886	\$ 105,963	\$ 108,083	\$ 110,244	\$ 112,449	\$ 114,698	\$ 116,992	\$ 119,332	\$ 121,719	\$ 124,153	\$ 126,636	\$ 129,169	\$ 131,752	\$ 134,387	\$ 137,075	\$ 139,816
GRU Materials	\$ 18,211	\$ 8,559	\$ 9,652	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Smart Meter Installation Process																						
Electric Meters	\$ 3,532,630	\$ 1,660,336	\$ 1,872,294	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network																						
Field Area Network	\$ 607,917	\$ 606,654	\$ 1,264	\$ 1,301	\$ 1,340	\$																

MDM - Meter Data Management	\$ 180,739	\$ -	\$ 180,739	\$ 56,628	\$ 58,049	\$ 59,508	\$ 61,005	\$ 62,541	\$ 64,118	\$ 65,735	\$ 67,395	\$ 69,099	\$ 70,847	\$ 72,642	\$ 74,483	\$ 76,373	\$ 78,313	\$ 80,304	\$ 82,348	\$ 84,445	\$ 86,598	\$ 88,808
Professional Services/Travel	\$ 365,102	\$ -	\$ 365,102	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ISAM	\$ 42,008	\$ 35,921	\$ 6,166	\$ 6,351	\$ 6,542	\$ 6,738	\$ 6,940	\$ 7,149	\$ 7,363	\$ 7,584	\$ 7,811	\$ 8,046	\$ 8,287	\$ 8,536	\$ 8,792	\$ 9,056	\$ 9,327	\$ 9,607	\$ 9,895	\$ 10,192	\$ 10,498	\$ 10,813
Professional Services/Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Network Cost (56 CGR)																						
WAN VPN Link/Private IP Pool/Cellular Backhaul	\$ 30,186	\$ 14,943	\$ 15,242	\$ 15,547	\$ 15,858	\$ 16,175	\$ 16,499	\$ 16,829	\$ 17,165	\$ 17,509	\$ 17,859	\$ 18,216	\$ 18,580	\$ 18,952	\$ 19,331	\$ 19,718	\$ 20,112	\$ 20,514	\$ 20,924	\$ 21,343	\$ 21,770	\$ 22,205
System Integration (UHI-Assist)																						
PM/BPS/DEV/Testing	\$ 1,393,980	\$ 1,115,184	\$ 278,796	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Team																						
GRU Labor	\$ 732,118	\$ 362,434.71	\$ 369,683.41	\$ 226,246.24	\$ 230,771.17	\$ 235,386.59	\$ 240,094.32	\$ 244,896.21	\$ 249,794.14	\$ 254,790.02	\$ 259,885.82	\$ 265,083.53	\$ 270,385.21	\$ 275,792.91	\$ 281,308.77	\$ 286,934.94	\$ 292,673.64	\$ 298,527.12	\$ 304,497.66	\$ 310,587.61	\$ 316,799.36	\$ 323,135.35
Customer Education																						
Flyers/Advertising	\$ 92,932	\$ 43,678	\$ 49,254	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meter Farm																						
Meter Farm	\$ 185,864	\$ 185,864	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 18,791,171	\$ 9,816,251	\$ 8,974,922	\$ 552,050	\$ 565,916	\$ 580,145	\$ 598,631	\$ 618,691	\$ 639,318	\$ 660,520	\$ 682,306	\$ 704,685	\$ 727,668	\$ 751,257	\$ 775,464	\$ 799,299	\$ 823,774	\$ 848,900	\$ 874,688	\$ 901,149	\$ 927,294	\$ 954,136

\$28,496,287.23 Capital and O&M cost

AMI Project	Total Annual Capital Benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
Electric AMI Deployment Benefits		47%	53%	0%	0%																	
Electric Meter Scrap Value	\$ 90,346	\$ 47,463	\$ 47,883	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Avoided Meter Replacement Costs	2,957,354	121,715	124,149	126,632	129,165	131,748	134,383	137,071	139,812	142,609	145,461	148,370	151,337	154,364	157,451	160,600	163,812	167,089	170,430	173,839	177,316	
Reduce based on FY20 NL budget for meter																						
Extended warranty for 5 years																						
Electric Capital Benefits	\$ 90,346	\$ 164,178	\$ 172,033	\$ 126,632	\$ 129,165	\$ 131,748	\$ 134,383	\$ 137,071	\$ 139,812	\$ 142,609	\$ 145,461	\$ 148,370	\$ 151,337	\$ 154,364	\$ 157,451	\$ 160,600	\$ 163,812	\$ 167,089	\$ 170,430	\$ 173,839	\$ 177,316	\$ -

AMI Project	Total Annual O&M Benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
Electric AMI Deployment Benefits		0%	47%	53%	0%	0%																
Electric Meter Reading (1930, 1932)	710,103	-	333,749	724,306	738,792	753,568	768,639	784,012	799,692	815,686	831,999	848,639	865,612	882,924	900,583	918,595	936,966	955,706	974,820	994,316	1,014,203	1,034,487
**Hs Reads: Move In/Out Reads																						
Fleet reduction (1930, 1932)	44,925	-	21,115	45,824	46,740	47,675	48,629	49,601	50,593	51,605	52,637	53,690	54,764	55,859	56,976	58,116	59,278	60,464	61,673	62,906	64,164	65,448
Customer Service Engagement Expense																						
Electric Non-pay Disconnect Non-Payment Labor																						
Conductor Repair	60,900	-	28,623	63,118	63,360	64,626	65,920	67,239	68,583	69,955	71,354	72,781	74,237	75,721	77,236	78,781	80,356	81,963	83,603	85,275	86,980	88,720
Outage Management	20,746	-	9,751	21,161	21,584	22,016	22,456	22,905	23,363	23,831	24,307	24,793	25,289	25,795	26,311	26,837	27,374	27,921	28,480	29,049	29,629	30,221
Outage Labor Reduction	11,167	-	5,248	11,390	11,618	11,851	12,088	12,329	12,576	12,827	13,084	13,346	13,613	13,885	14,162	14,446	14,735	15,029	15,330	15,636	15,949	16,268
Electric Theft Identification	10,795	-	5,074	11,011	11,231	11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,422	13,691	13,964	14,244	14,529	14,819	15,116	15,418	15,726
Improved Meter Accuracy	105,732	-	49,694	107,847	110,004	112,204	114,448	116,737	119,072	121,453	123,882	126,360	128,887	131,465	134,094	136,776	139,512	142,302	145,148	148,051	151,012	154,032
Electric O&M Benefits	\$ 964,369	\$ -	\$ 453,254	\$ 983,657	\$ 1,003,330	\$ 1,023,396	\$ 1,043,864	\$ 1,064,742	\$ 1,086,036	\$ 1,107,757	\$ 1,129,912	\$ 1,152,511	\$ 1,175,561	\$ 1,199,072	\$ 1,223,053	\$ 1,247,514	\$ 1,272,465	\$ 1,297,914	\$ 1,323,872	\$ 1,350,350	\$ 1,377,357	\$ 1,404,904

\$2,243,965.26 NPV Total Capital Project benefit

\$16,115,389.27 NPV O&M Project benefit

Total Capital Benefits	\$ 90,346	\$ 164,178	\$ 172,033	\$ 126,632	\$ 129,165	\$ 131,748	\$ 134,383	\$ 137,071	\$ 139,812	\$ 142,609	\$ 145,461	\$ 148,370	\$ 151,337	\$ 154,364	\$ 157,451	\$ 160,600	\$ 163,812	\$ 167,089	\$ 170,430	\$ 173,839	\$ 177,316	\$ -
Total O&M Benefits	\$ 964,369	\$ -	\$ 453,254	\$ 983,657	\$ 1,003,330	\$ 1,023,396	\$ 1,043,864	\$ 1,064,742	\$ 1,086,036	\$ 1,107,757	\$ 1,129,912	\$ 1,152,511	\$ 1,175,561	\$ 1,199,072	\$ 1,223,053	\$ 1,247,514	\$ 1,272,465	\$ 1,297,914	\$ 1,323,872	\$ 1,350,350	\$ 1,377,357	\$ 1,404,904

Summary	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	
Net Capital per year	\$ 7,833,501	\$ 7,198,274	\$ 119,824	\$ 124,685	\$ 129,717	\$ 238,812	\$ 246,281	\$ 253,981	\$ 261,917	\$ 270,098	\$ 278,532	\$ 287,224	\$ 296,184	\$ 305,420	\$ 314,940	\$ 324,753	\$ 334,867	\$ 345,292	\$ 356,038	\$ 367,114	\$ 378,532	\$ 391,292
Net O&M per year	\$ 1,818,572	\$ 1,151,862	\$ (678,063)	\$ (691,264)	\$ (704,717)	\$ (718,428)	\$ (732,403)	\$ (746,644)	\$ (761,159)	\$ (775,951)	\$ (791,026)	\$ (806,389)	\$ (822,046)	\$ (838,002)	\$ (854,262)	\$ (870,833)	\$ (887,720)	\$ (904,928)	\$ (922,464)	\$ (940,334)	\$ (958,544)	
Net	\$ 9,652,073	\$ 8,349,636	\$ (558,239)	\$ (566,579)	\$ (575,000)	\$ (479,617)	\$ (486,121)	\$ (492,664)	\$ (499,242)	\$ (505,853)	\$ (512,495)	\$ (519,165)	\$ (525,862)	\$ (532,582)	\$ (539,322)	\$ (546,080)	\$ (552,852)	\$ (559,636)	\$ (566,420)	\$ (573,211)	\$ (579,918)	\$ (586,641)

(\$18,048,426.59) NPV Capital (Net)

\$7,911,493.89 NPV O&M (Net)

(\$10,136,932.70) NPV Project - Capital and O&M

AMI Project Optional Items	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital
GRUCom Fiber Build	\$ 949,979	\$ -	\$ 322,993	\$ 313,493	\$ 313,493	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRUCom Annual Cost (20Mb)	\$ 4,293	\$ -	\$ 4,293	\$ 4,422	\$ 4,555	\$ 4,692	\$ 4,832	\$ 4,977	\$ 5,127	\$ 5,280	\$ 5,439	\$ 5,602	\$ 5,770	\$ 5,943	\$ 6,121	\$ 6,305	\$ 6,494	\$ 6,689	\$ 6,890	\$ 7,096	\$ 7,309
Total Option Cost	\$ 954,272	\$ -	\$ 327,286	\$ 317,915	\$ 318,048	\$ 4,692	\$ 4,832	\$ 4,977	\$ 5,127	\$ 5,280	\$ 5,439	\$ 5,602	\$ 5,770	\$ 5,943	\$ 6,121	\$ 6,305	\$ 6,494	\$ 6,689	\$ 6,890	\$ 7,096	\$ 7,309

AMI Project	Start-Up and Deployment Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	
	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	Capital	
ITRON Smart Meters		47%	53%	0%	0%																		
Water Meters / Modules	\$ 12,302,102	\$ 5,781,988	\$ 6,520,114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 123,021	\$ 125,481	\$ 127,991	\$ 130,551	\$ 133,162	\$ 135,825	\$ 138,542	\$ 141,312	\$ 144,139	\$ 147,022	\$ 149,962
GRU Materials	\$ 178,288	\$ 84,205	\$ 95,023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meter Cost	\$ 12,480,390	\$ 5,866,233	\$ 6,615,137	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 123,021	\$ 125,481	\$ 127,991	\$ 130,551	\$ 133,162	\$ 135,825	\$ 138,542	\$ 141,312	\$ 144,139	\$ 147,022	\$ 149,962
Smart Meter Installation Process		47%	53%																				
Water Meters / Modules	\$ 3,451,770	\$ 1,622,432	\$ 1,829,438	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Internal Labor and Equipment	\$ 250,000	\$ 125,000	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Installation Cost	\$ 3,701,770	\$ 1,747,432	\$ 1,954,438	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network		30%																					
Field Area Network (w/ GRU labor for GRU)	\$ 473,530	\$ 473,530	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
HES - Head End System	\$ 587,648	\$ 432,461	\$ 165,187	\$ 170,142	\$ 175,246	\$ 180,504	\$ 185,910	\$ 191,467	\$ 197,241	\$ 203,199	\$ 209,293	\$ 215,511	\$ 221,997	\$ 228,657	\$ 235,517	\$ 242,583	\$ 249,860	\$ 257,355	\$ 265,076	\$ 273,028	\$ 281,219	\$ 289,656	
Professional Services/Travel	\$ 203,677	\$ 203,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MEM - Meter Data Management	\$ 120,120	\$ -	\$ 120,120	\$ 22,622	\$ 23,300	\$ 23,999	\$ 24,719	\$ 25,461	\$ 26,225	\$ 27,012	\$ 27,822	\$ 28,657	\$ 29,516	\$ 30,402	\$ 31,314	\$ 32,253	\$ 33,219	\$ 34,211	\$ 35,224	\$ 36,251	\$ 37,290	\$ 38,342	
Professional Services/Travel	\$ 285,563	\$ -	\$ 285,563	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ISAM	\$ 23,413	\$ 23,413	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network Cost	\$ 1,693,956	\$ 1,323,082	\$ 179,868	\$ 192,764	\$ 196,547	\$ 200,501	\$ 210,638	\$ 216,957	\$ 223,466	\$ 230,170	\$ 237,075	\$ 244,188	\$ 251,513	\$ 259,059	\$ 266,830	\$ 274,835	\$ 283,080	\$ 291,573	\$ 300,320	\$ 309,329	\$ 318,605	\$ 328,148	
System Integration (with Assist)		80%	20%																				
PHSP/GRU/Testing	\$ 554,962	\$ 443,970	\$ 110,992	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU/Project Team	\$ 390,134	\$ 283,476	\$ 116,658	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Integration Cost	\$ 954,096	\$ 727,446	\$ 227,650	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Cost	\$ 18,831,205	\$ 9,464,113	\$ 9,367,091	\$ 192,764	\$ 198,547	\$ 204,501	\$ 210,638	\$ 216,957	\$ 223,466	\$ 230,170	\$ 237,075	\$ 244,188	\$ 251,513	\$ 259,059	\$ 266,830	\$ 274,835	\$ 283,080	\$ 291,573	\$ 300,320	\$ 309,329	\$ 318,605	\$ 328,148	

52.301.063.77 NPV capital cost

AMI Project	Start-Up and Deployment Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM	CAIM
ITRON Smart Meters		47%	53%	0%	0%																	
Water Meters / Modules	\$ -	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Materials	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meter Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Smart Meter Installation Process		47%	53%	0%	0%																	
Water Meters / Modules	\$ 125,780	\$ 59,117	\$ 66,664	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer call center, One time setup, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Installation Cost Spread over 2 years	\$ 125,780	\$ 59,117	\$ 66,664	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network		30%																				
Field Area Network	\$ 1,948	\$ 959	\$ 988	\$ 1,018	\$ 1,048	\$ 1,080	\$ 1,112	\$ 1,146	\$ 1,180	\$ 1,215	\$ 1,252	\$ 1,289	\$ 1,328	\$ 1,368	\$ 1,409	\$ 1,451	\$ 1,495	\$ 1,540	\$ 1,586	\$ 1,633	\$ 1,682	\$ 1,733
HES - Head End System	\$ 42,567	\$ 20,589	\$ 21,598	\$ 22,246	\$ 22,913	\$ 23,601	\$ 24,309	\$ 25,038	\$ 25,789	\$ 26,563	\$ 27,360	\$ 28,180	\$ 29,026	\$ 29,897	\$ 30,794	\$ 31,717	\$ 32,669	\$ 33,648	\$ 34,656	\$ 35,693	\$ 36,759	\$ 37,852
Professional Services/Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MEM - Meter Data Management	\$ 21,244	\$ -	\$ 21,244	\$ 21,669	\$ 22,105	\$ 22,543	\$ 22,995	\$ 23,453	\$ 23,924	\$ 24,405	\$ 24,891	\$ 25,389	\$ 25,897	\$ 26,415	\$ 26,943	\$ 27,482	\$ 28,031	\$ 28,592	\$ 29,164	\$ 29,747	\$ 30,342	\$ 30,949
Professional Services/Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ISAM	\$ 9,506	\$ 4,683	\$ 4,823	\$ 4,968	\$ 5,117	\$ 5,270	\$ 5,428	\$ 5,591	\$ 5,759	\$ 5,932	\$ 6,110	\$ 6,293	\$ 6,482	\$ 6,676	\$ 6,877	\$ 7,083	\$ 7,295	\$ 7,514	\$ 7,740	\$ 7,972	\$ 8,211	\$ 8,457
Other Network Cost (56 GRU)	\$ 23,610	\$ 11,688	\$ 11,922	\$ 12,160	\$ 12,403	\$ 12,651	\$ 12,904	\$ 13,162	\$ 13,426	\$ 13,694	\$ 13,968	\$ 14,248	\$ 14,532	\$ 14,823	\$ 15,120	\$ 15,422	\$ 15,730	\$ 16,045	\$ 16,366	\$ 16,693	\$ 17,027	\$ 17,368
WAN VPN Link/Private P/Proc/Cellular Backhaul	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network Cost	\$ 98,874	\$ 38,299	\$ 40,975	\$ 42,061	\$ 43,884	\$ 45,447	\$ 46,749	\$ 48,393	\$ 50,278	\$ 52,307	\$ 54,485	\$ 56,807	\$ 59,270	\$ 61,879	\$ 64,631	\$ 67,533	\$ 70,582	\$ 73,784	\$ 77,145	\$ 80,662	\$ 84,341	\$ 88,179
System Integration (with Assist)		80%	20%																			
PHSP/GRU/Testing	\$ 535,321	\$ 428,263	\$ 107,056	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Team	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRU Operations Team	\$ 173,487	\$ -	\$ 173,487	\$ 176,957	\$ 180,496	\$ 184,106	\$ 187,788	\$ 191,544	\$ 195,375	\$ 199,282	\$ 203,268	\$ 207,331	\$ 211,480	\$ 215,709	\$ 220,024	\$ 224,424	\$ 228,911	\$ 233,495	\$ 238,161	\$ 242,924	\$ 247,782	\$ 252,738
Customer Education	\$ 72,686	\$ -	\$ 72,686	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Flowers/Advertising	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deployment Integration Cost	\$ 781,502	\$ 462,426	\$ 319,077	\$ 176,957	\$ 180,496	\$ 184,106	\$ 187,788	\$ 191,544	\$ 195,375	\$ 199,282	\$ 203,268	\$ 207,331	\$ 211,480	\$ 215,709	\$ 220,024	\$ 224,424	\$ 228,911	\$ 233,495	\$ 238,161	\$ 242,924	\$ 247,782	\$ 252,738
Meter Farm	\$ 145,372</																					

AMI Project	Total Annual O&M Benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
		O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M
WasteWater AMI Deployment Benefits		0%	47%	53%																		
Water/WasteWater Meter Reading	249,404	-	117,220	254,393	259,480	264,670	269,963	275,363	280,870	286,487	292,217	298,061	304,023	310,103	316,305	322,631	329,084	335,666	342,379	349,226	356,211	363,335
***Re-Reads, Move In/Out Reads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Move In/Out Reads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer Service Engagement Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Theft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Meter Accuracy	292,349	-	137,404	298,196	304,160	310,243	316,448	322,777	329,232	335,817	342,533	349,384	356,372	363,499	370,769	378,184	385,748	393,463	401,332	409,359	417,546	425,897
Main Breaks Prevention/Reduction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumping Schedule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fleet reduction	15,472	-	7,272	15,782	16,097	16,419	16,748	17,083	17,424	17,773	18,128	18,491	18,861	19,238	19,623	20,015	20,415	20,824	21,240	21,665	22,098	22,540
WasteWater O&M Benefits	\$ 557,226	\$ -	\$ 261,896	\$ 568,370	\$ 579,737	\$ 591,332	\$ 603,159	\$ 615,222	\$ 627,526	\$ 640,077	\$ 652,879	\$ 665,936	\$ 679,255	\$ 692,840	\$ 706,697	\$ 720,831	\$ 735,247	\$ 749,952	\$ 764,951	\$ 780,250	\$ 795,855	\$ 811,772

\$9,591,039.58

***1930-1932 allocates to W/WW

AMI Project	Total Annual O&M Benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
		O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M
GRUCom AMI Deployment Benefit	0%	4%	5%	4%	5%																	
GRUCom (1935)	25,023	11,761	25,523	26,054	26,554	27,086	27,627	28,180	28,743	29,318	29,905	30,503	31,113	31,735	32,370	33,017	33,677	34,351	35,038	35,739	36,454	36,454
Fixed reduction	3,695	984	3,137	3,129	3,225	3,307	3,383	3,458	3,534	3,610	3,686	3,763	3,840	3,918	3,996	4,074	4,152	4,230	4,308	4,386	4,464	4,464
GRUCom O&M Benefits	\$ 27,117	\$ -	\$ 12,745	\$ 27,666	\$ 28,213	\$ 28,777	\$ 29,353	\$ 29,940	\$ 30,539	\$ 31,149	\$ 31,772	\$ 32,408	\$ 33,056	\$ 33,717	\$ 34,391	\$ 35,079	\$ 35,781	\$ 36,497	\$ 37,226	\$ 37,971	\$ 38,732	\$ 39,505

***1932 allocates to GRUCom