

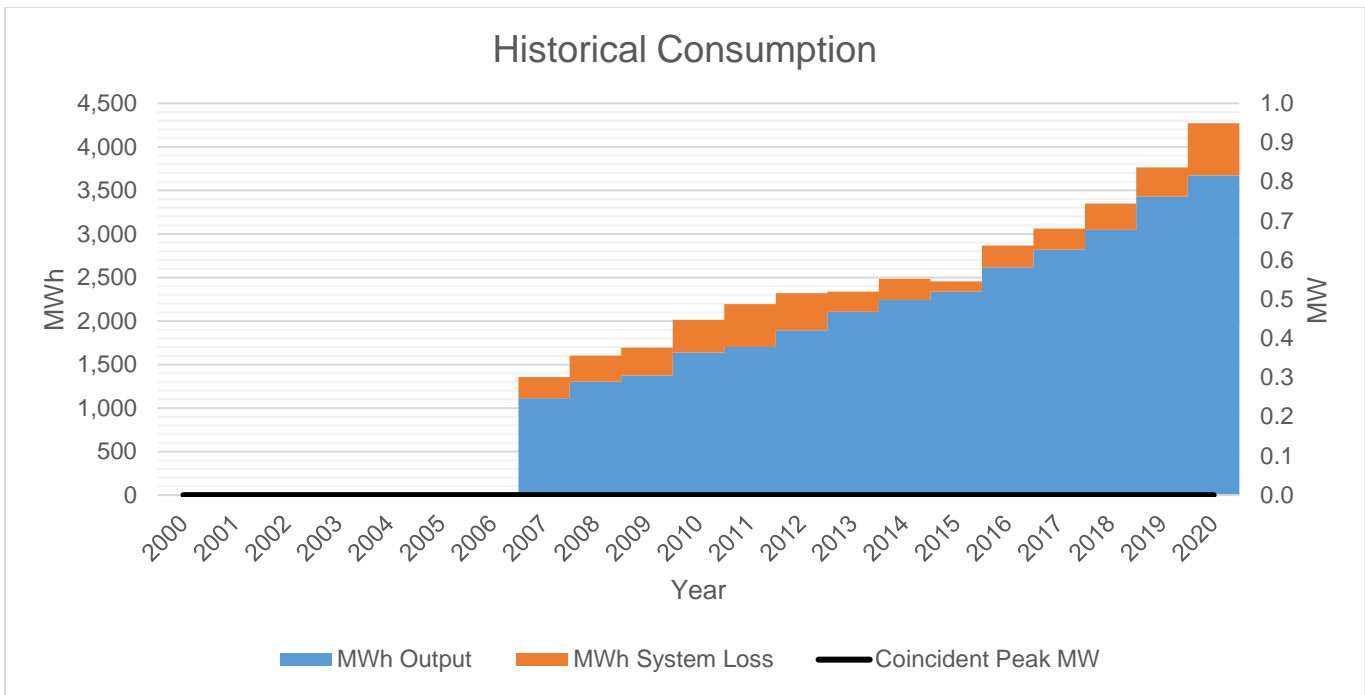
# **Power Supply Procurement Plan 2021**

**ILOCOS SUR ELECTRIC COOPERATIVE, INC**

## Historical Consumption Data

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2001	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2002	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2003	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2004	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2005	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2006	0.00	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2007	0.00	1,354	0	1,354	1,113	241	#DIV/0!	0.00%	0.00%	17.81%
2008	0.00	1,603	0	1,603	1,303	300	#DIV/0!	0.00%	0.00%	18.72%
2009	0.00	1,695	0	1,695	1,374	321	#DIV/0!	0.00%	0.00%	18.96%
2010	0.00	2,014	0	2,014	1,638	376	#DIV/0!	0.00%	0.00%	18.67%
2011	0.00	2,193	0	2,193	1,701	492	#DIV/0!	0.00%	0.00%	22.42%
2012	0.00	2,317	0	2,317	1,892	426	#DIV/0!	0.00%	0.00%	18.37%
2013	0.00	2,337	0	2,337	2,106	231	#DIV/0!	0.00%	0.00%	9.90%
2014	0.00	2,484	0	2,484	2,241	243	#DIV/0!	0.00%	0.00%	9.79%
2015	0.00	2,457	0	2,457	2,339	118	#DIV/0!	0.00%	0.00%	4.79%
2016	0.00	2,866	0	2,866	2,617	249	#DIV/0!	0.00%	0.00%	8.70%
2017	0.00	3,061	0	3,061	2,818	243	#DIV/0!	0.00%	0.00%	7.93%
2018	0.00	3,349	0	3,349	3,046	303	#DIV/0!	0.00%	0.00%	9.04%
2019	0.00	3,764	0	3,764	3,429	335	#DIV/0!	0.00%	0.00%	8.90%
2020	0.00	4,272	0	4,272	3,671	601	#DIV/0!	0.00%	0.00%	14.07%

MWh Offtake increased from 3,764 MWh in 2019 to 4,272 MWh in 2020 at a rate of 13.50% due to increase in consumption in residential customer. There was an abrupt change in consumption on residential due to imposition of lockdown in the province because of COVID 19.

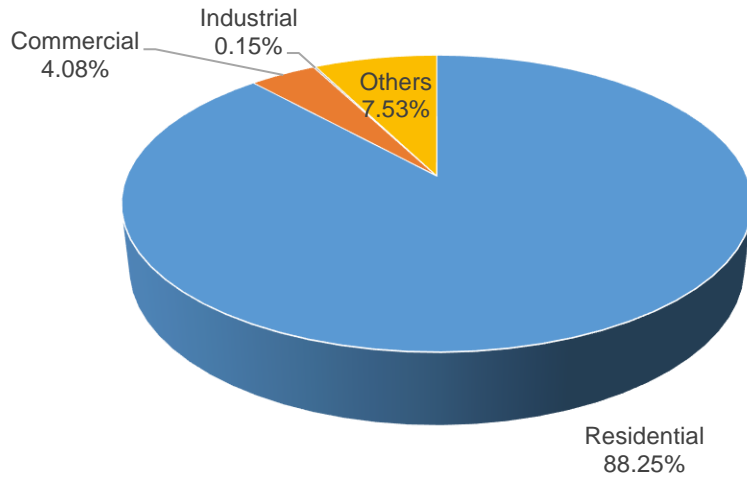


MWh Output increased from year 2019 to year 2020 at a rate of 7.06%, while MWh System Loss increased at a rate of 14.07% within the same period.



Historically, System Loss ranged from 22.42% to 4.79%. System Loss peaked at 22.42% on year 2011.

## Previous Year's Shares of Energy Sales



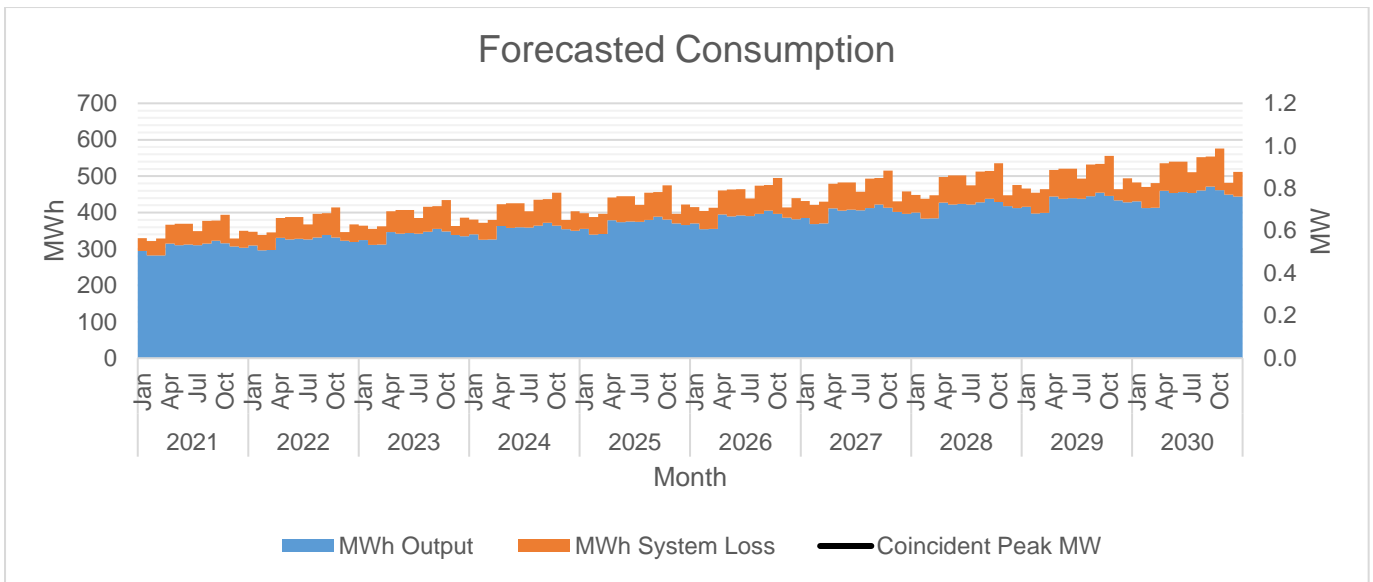
Residential customers account for the bulk of energy sales at 88.25% due to the high consumption during lockdown. In contrast, commercial customers accounted for only 0.15% of energy sales due imposition of lockdown.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	330	294	36	0.00%	10.76%
	Feb	322	282	40	0.00%	12.42%
	Mar	329	283	46	0.00%	14.04%
	Apr	366	314	52	0.00%	14.16%
	May	369	310	59	0.00%	15.94%
	Jun	369	312	57	0.00%	15.52%
	Jul	349	310	39	0.00%	11.14%
	Aug	377	315	62	0.00%	16.46%
	Sep	378	322	56	0.00%	14.85%
	Oct	394	316	78	0.00%	19.88%
	Nov	329	307	22	0.00%	6.73%
	Dec	350	303	46	0.00%	13.28%
2022	Jan	347	310	37	0.00%	10.76%
	Feb	338	296	42	0.00%	12.42%
	Mar	346	297	49	0.00%	14.04%
	Apr	385	330	55	0.00%	14.16%
	May	388	326	62	0.00%	15.94%
	Jun	388	328	60	0.00%	15.52%
	Jul	367	326	41	0.00%	11.14%
	Aug	397	331	65	0.00%	16.46%
	Sep	398	339	59	0.00%	14.85%
	Oct	414	332	82	0.00%	19.88%
	Nov	346	323	23	0.00%	6.73%
	Dec	368	319	49	0.00%	13.28%

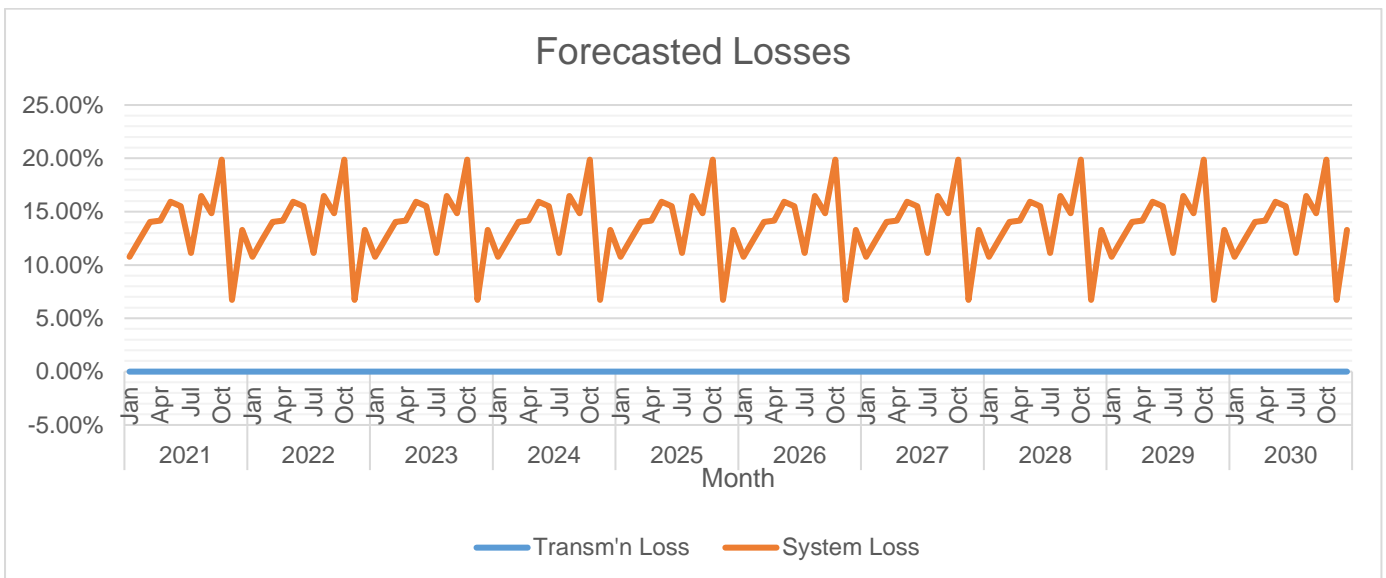
2023	Jan	364	325	39	0.00%	10.76%
	Feb	355	311	44	0.00%	12.42%
	Mar	363	312	51	0.00%	14.04%
	Apr	404	347	57	0.00%	14.16%
	May	407	342	65	0.00%	15.94%
	Jun	407	344	63	0.00%	15.52%
	Jul	385	342	43	0.00%	11.14%
	Aug	416	347	68	0.00%	16.46%
	Sep	417	355	62	0.00%	14.85%
	Oct	434	348	86	0.00%	19.88%
	Nov	363	339	24	0.00%	6.73%
	Dec	386	335	51	0.00%	13.28%
2024	Jan	381	340	41	0.00%	10.76%
	Feb	371	325	46	0.00%	12.42%
	Mar	380	326	53	0.00%	14.04%
	Apr	423	363	60	0.00%	14.16%
	May	426	358	68	0.00%	15.94%
	Jun	426	360	66	0.00%	15.52%
	Jul	403	358	45	0.00%	11.14%
	Aug	435	364	72	0.00%	16.46%
	Sep	437	372	65	0.00%	14.85%
	Oct	455	364	90	0.00%	19.88%
	Nov	380	354	26	0.00%	6.73%
	Dec	404	350	54	0.00%	13.28%
2025	Jan	398	355	43	0.00%	10.76%
	Feb	388	340	48	0.00%	12.42%
	Mar	396	341	56	0.00%	14.04%
	Apr	441	379	62	0.00%	14.16%
	May	445	374	71	0.00%	15.94%
	Jun	445	376	69	0.00%	15.52%
	Jul	421	374	47	0.00%	11.14%
	Aug	455	380	75	0.00%	16.46%
	Sep	456	388	68	0.00%	14.85%
	Oct	475	380	94	0.00%	19.88%
	Nov	397	370	27	0.00%	6.73%
	Dec	422	366	56	0.00%	13.28%
2026	Jan	415	370	45	0.00%	10.76%
	Feb	405	354	50	0.00%	12.42%
	Mar	413	355	58	0.00%	14.04%
	Apr	460	395	65	0.00%	14.16%
	May	464	390	74	0.00%	15.94%
	Jun	464	392	72	0.00%	15.52%
	Jul	439	390	49	0.00%	11.14%
	Aug	474	396	78	0.00%	16.46%
	Sep	476	405	71	0.00%	14.85%
	Oct	495	397	98	0.00%	19.88%
	Nov	414	386	28	0.00%	6.73%
	Dec	440	381	58	0.00%	13.28%
2027	Jan	432	385	46	0.00%	10.76%
	Feb	421	369	52	0.00%	12.42%
	Mar	430	370	60	0.00%	14.04%

	Apr	479	411	68	0.00%	14.16%
	May	483	406	77	0.00%	15.94%
	Jun	483	408	75	0.00%	15.52%
	Jul	457	406	51	0.00%	11.14%
	Aug	494	412	81	0.00%	16.46%
	Sep	495	422	74	0.00%	14.85%
	Oct	515	413	102	0.00%	19.88%
	Nov	431	402	29	0.00%	6.73%
	Dec	458	397	61	0.00%	13.28%
2028	Jan	449	400	48	0.00%	10.76%
	Feb	438	383	54	0.00%	12.42%
	Mar	447	384	63	0.00%	14.04%
	Apr	498	427	70	0.00%	14.16%
	May	502	422	80	0.00%	15.94%
	Jun	502	424	78	0.00%	15.52%
	Jul	475	422	53	0.00%	11.14%
	Aug	513	428	84	0.00%	16.46%
	Sep	515	438	76	0.00%	14.85%
	Oct	536	429	106	0.00%	19.88%
	Nov	448	417	30	0.00%	6.73%
	Dec	476	413	63	0.00%	13.28%
2029	Jan	466	416	50	0.00%	10.76%
	Feb	454	398	56	0.00%	12.42%
	Mar	464	399	65	0.00%	14.04%
	Apr	517	444	73	0.00%	14.16%
	May	521	438	83	0.00%	15.94%
	Jun	521	440	81	0.00%	15.52%
	Jul	493	438	55	0.00%	11.14%
	Aug	532	445	88	0.00%	16.46%
	Sep	534	455	79	0.00%	14.85%
	Oct	556	445	110	0.00%	19.88%
	Nov	464	433	31	0.00%	6.73%
	Dec	494	428	66	0.00%	13.28%
2030	Jan	483	431	52	0.00%	10.76%
	Feb	471	412	58	0.00%	12.42%
	Mar	481	413	68	0.00%	14.04%
	Apr	536	460	76	0.00%	14.16%
	May	539	453	86	0.00%	15.94%
	Jun	540	456	84	0.00%	15.52%
	Jul	511	454	57	0.00%	11.14%
	Aug	552	461	91	0.00%	16.46%
	Sep	554	471	82	0.00%	14.85%
	Oct	576	462	115	0.00%	19.88%
	Nov	481	449	32	0.00%	6.73%
	Dec	512	444	68	0.00%	13.28%

MWh Offtake was forecasted using Quadratic Logarithmic w/o t ( $Y = a + b(\log t)^2$ ).

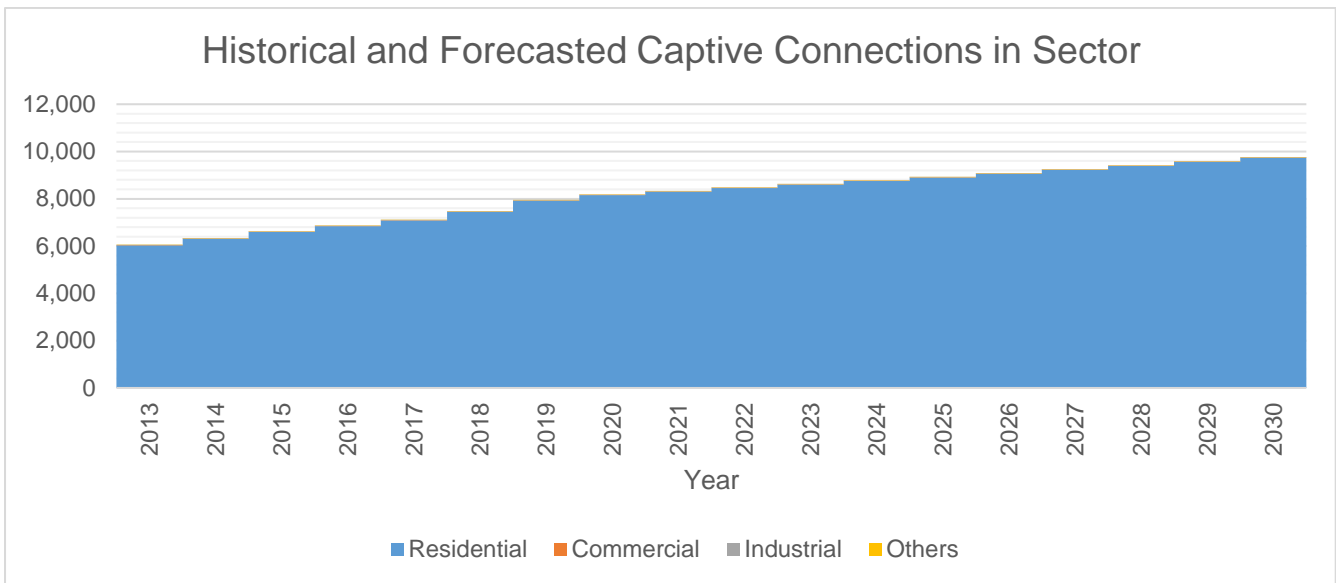


MWh Output was expected to grow at a rate of 4.32% annually.



System Loss is expected to range from 19.88% to 6.73%.

# Captive Customer Connections



The number of Residential connections is expected to grow at a rate of 1.79% annually. Said customer class is expected to account for 88.25% of the total consumption.