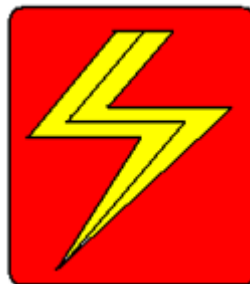


# **Power Supply Procurement Plan 2024 - 2033**



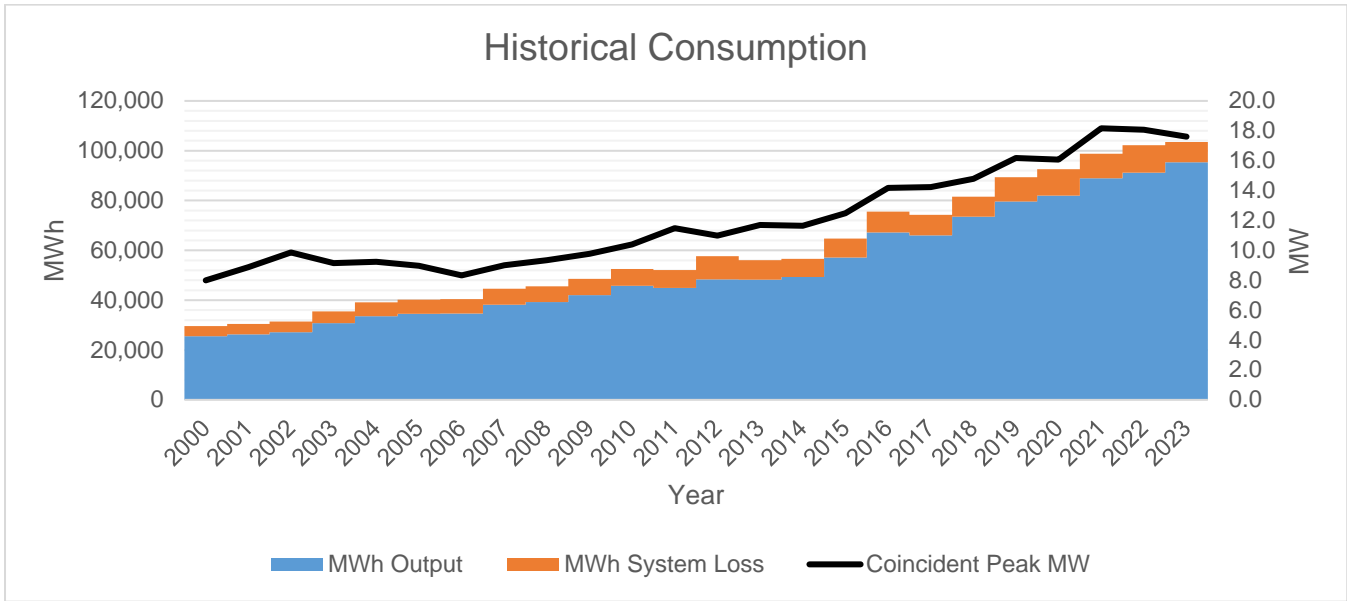
**SAMAR II ELECTRIC COOPERATIVE, INC.  
Paranas, Samar**

### Historical Consumption Data

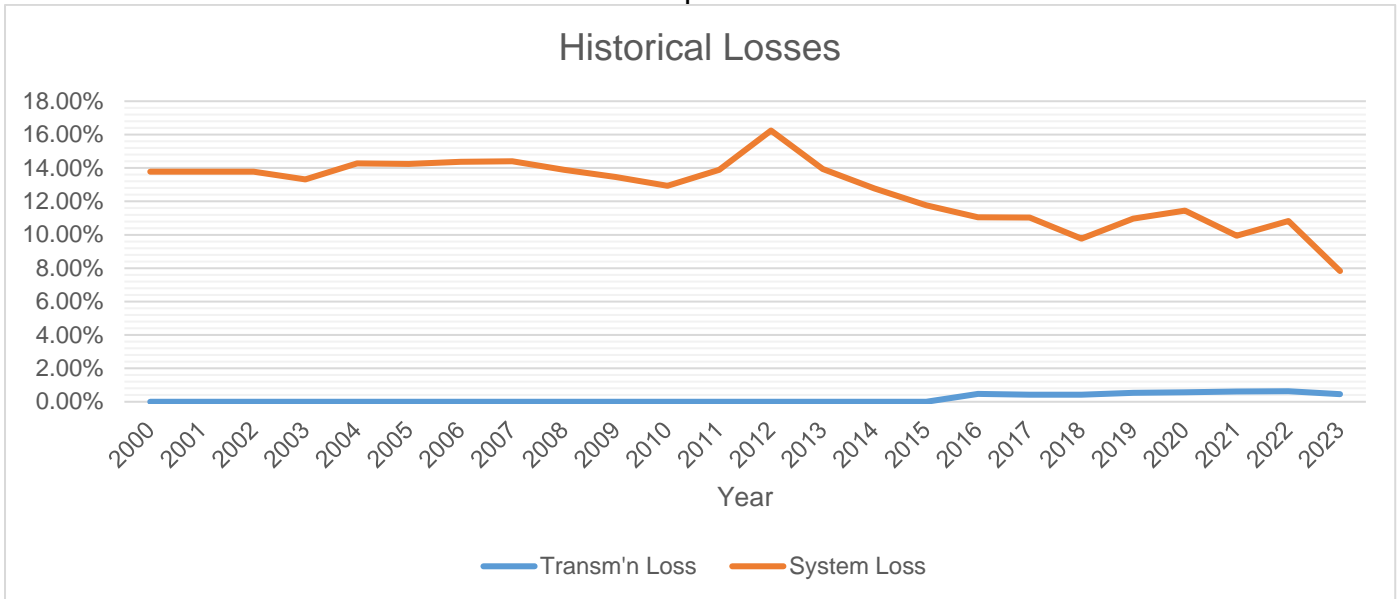
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	7.99	29,604	0	29,604	25,523	4,081	42%	0.00%	0.00%	13.79%
2001	8.88	30,520	0	30,520	26,312	4,208	39%	0.00%	0.00%	13.79%
2002	9.87	31,464	0	31,464	27,126	4,338	36%	0.00%	0.00%	13.79%
2003	9.16	35,550	0	35,550	30,814	4,736	44%	0.00%	0.00%	13.32%
2004	9.24	39,194	0	39,194	33,599	5,595	48%	0.00%	0.00%	14.28%
2005	8.97	40,229	0	40,229	34,497	5,732	51%	0.00%	0.00%	14.25%
2006	8.33	40,477	0	40,477	34,662	5,815	55%	0.00%	0.00%	14.37%
2007	9.00	44,610	0	44,610	38,183	6,427	57%	0.00%	0.00%	14.41%
2008	9.34	45,598	0	45,598	39,264	6,334	56%	0.00%	0.00%	13.89%
2009	9.78	48,623	0	48,623	42,081	6,542	57%	0.00%	0.00%	13.45%
2010	10.39	52,577	0	52,577	45,780	6,797	58%	0.00%	0.00%	12.93%
2011	11.49	52,119	0	52,119	44,877	7,242	52%	0.00%	0.00%	13.90%
2012	10.99	57,703	0	57,703	48,330	9,374	60%	0.00%	0.00%	16.24%
2013	11.69	56,051	0	56,051	48,233	7,818	55%	0.00%	0.00%	13.95%
2014	11.66	56,577	7,517	56,577	49,351	7,226	55%	0.00%	0.00%	12.77%
2015	12.49	64,708	2,082	64,708	57,093	7,615	59%	0.00%	0.00%	11.77%
2016	14.19	75,894	3,603	75,542	67,191	8,351	61%	0.00%	0.46%	11.05%
2017	14.24	74,538	13,170	74,226	66,042	8,184	60%	0.00%	0.42%	11.03%
2018	14.78	81,882	7,092	81,532	73,560	7,972	63%	0.00%	0.43%	9.78%
2019	16.19	89,885	13,985	89,400	79,592	9,808	63%	0.00%	0.54%	10.97%
2020	16.08	93,143	23,262	92,612	82,008	10,604	66%	0.00%	0.57%	11.45%
2021	18.17	99,440	-4,061	98,831	88,991	9,823	62%	-0.02%	0.61%	9.94%
2022	18.06	102,852	-10,624	102,203	91,137	11,066	65%	0.00%	0.63%	10.83%
2023	17.61	103,957	-15,040	103,490	95,387	8,103	67%	0.00%	0.45%	7.83%

Peak Demand decreased from 18.06 MW in 2022 to 17.61 MW in 2023 at a rate of -2.49 % due to Due to lower demand of residential during peak hours. MWh Offtake increased from 102,852 MWh in 2022 to 103,957 MWh in 2023 at a rate of 1.07% for the reason that the consumption during the last quarter of 2023 is higher compared to the energy consumption of 2022. Within the same period, Load Factor ranged from 65% to 67%. There was an abrupt change in consumption on 2022 due to full operations of commercial, industrial, and government offices.

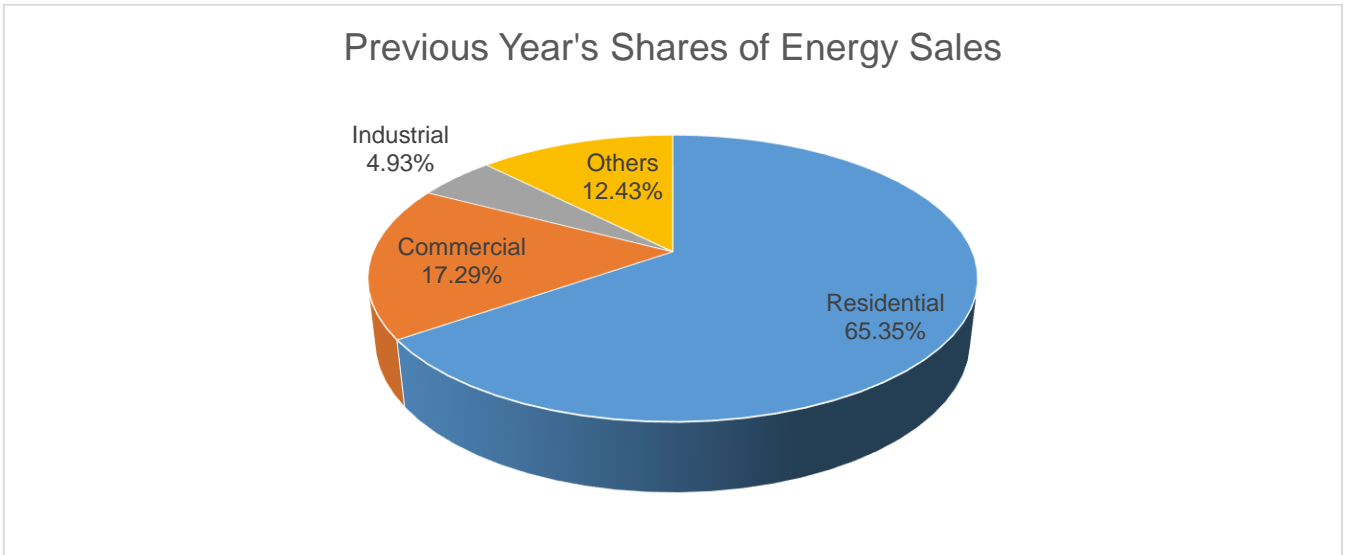
# SAMELCO II PSPP - GRID 2024-2033



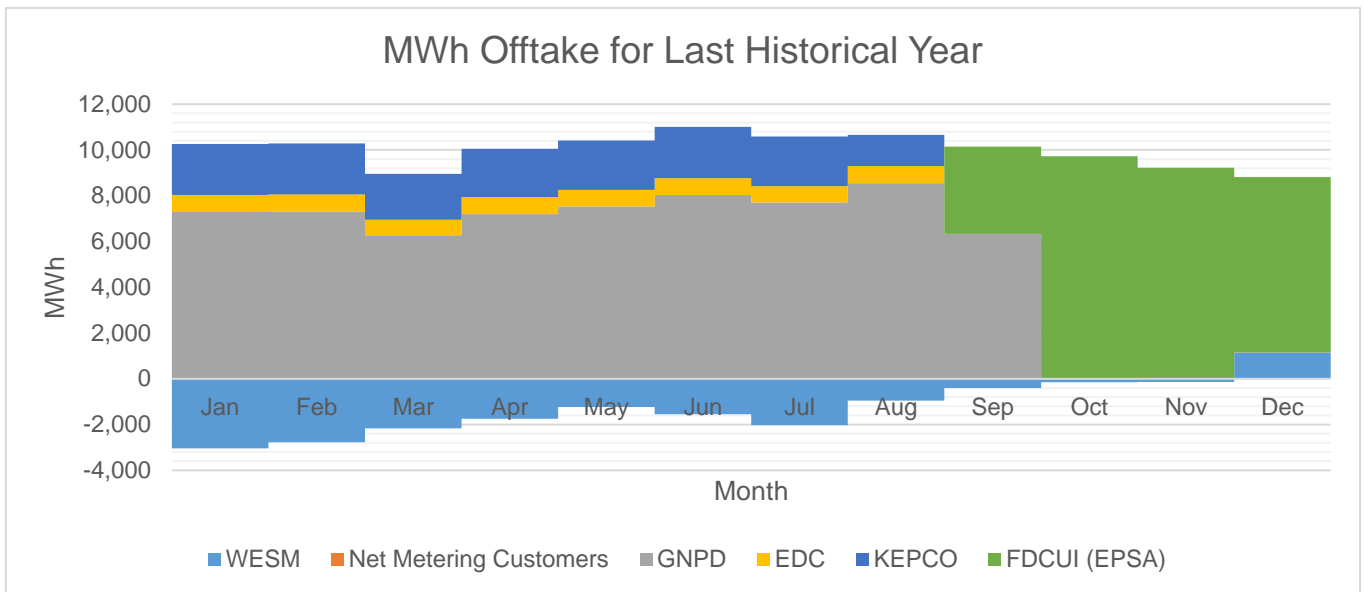
MWh Output increased from year 2022 to year 2023 at a rate of 4.66%, while MWh System Loss decreased at a rate of -27.70% within the same period.



Historically, Transmission Loss ranged from 0.42% to 0.63% while System Loss ranged from 7.83% to 16.24%. Transmission Loss peaked at 0.63% on year 2022 because of growing system demand. System Loss peaked at 16.24% on year 2012 because of the problems on the non-technical side that have encountered; most of the kWh meters installed were beyond 20 years, hence a low accuracy, widespread illegal connection, right-of-way problems, and loose connections at the primary and secondary side taps.

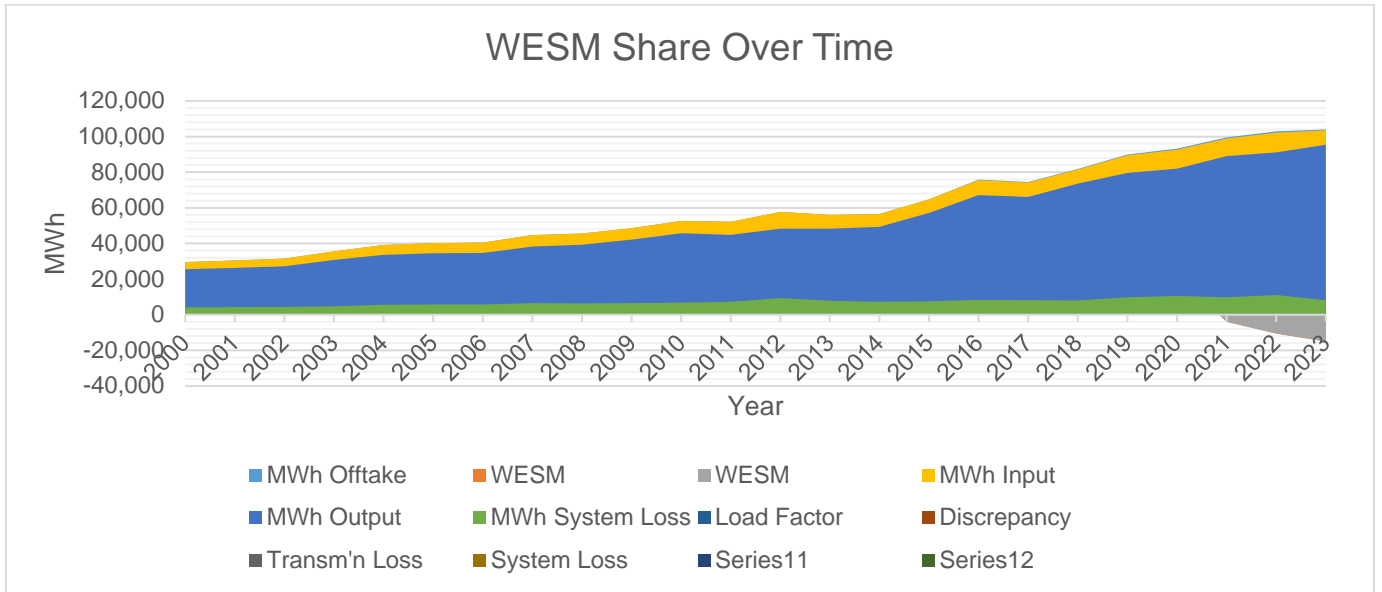


Residential customers account for the bulk of energy sales at 65.35% due to the high number of connections. In contrast, industrial customers accounted for only 4.93% of energy sales due to the low number of connections.



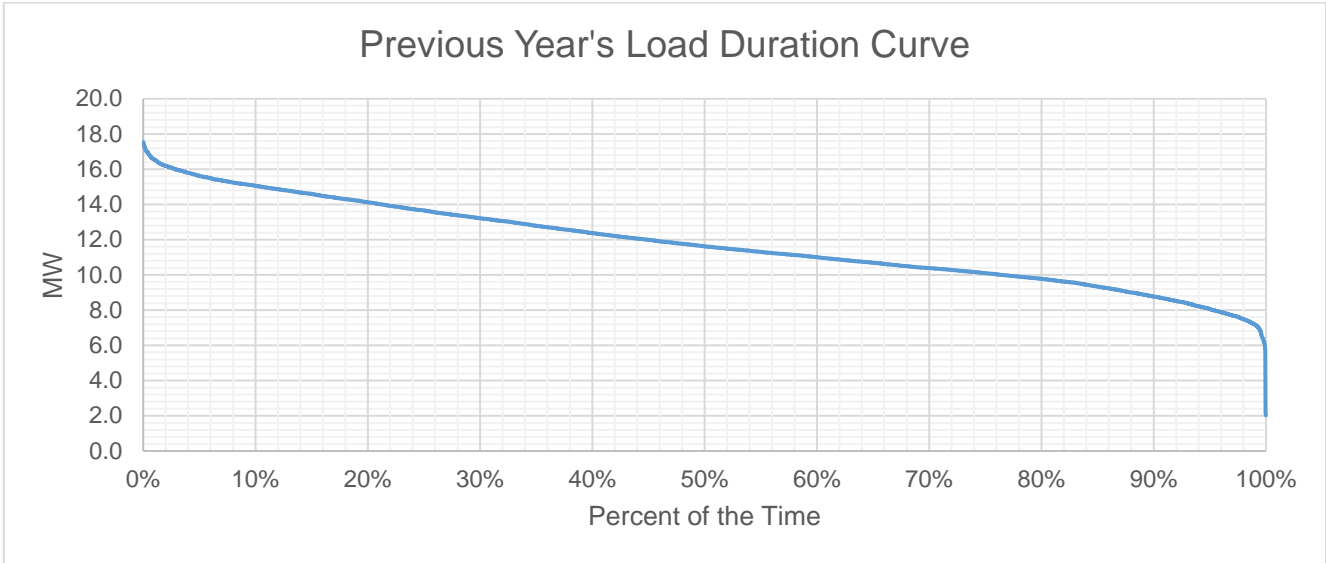
For 2023, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with GNPD and FDCUI accounts for the bulk of MWh Offtake.

## SAMELCO II PSPP - GRID 2024-2033

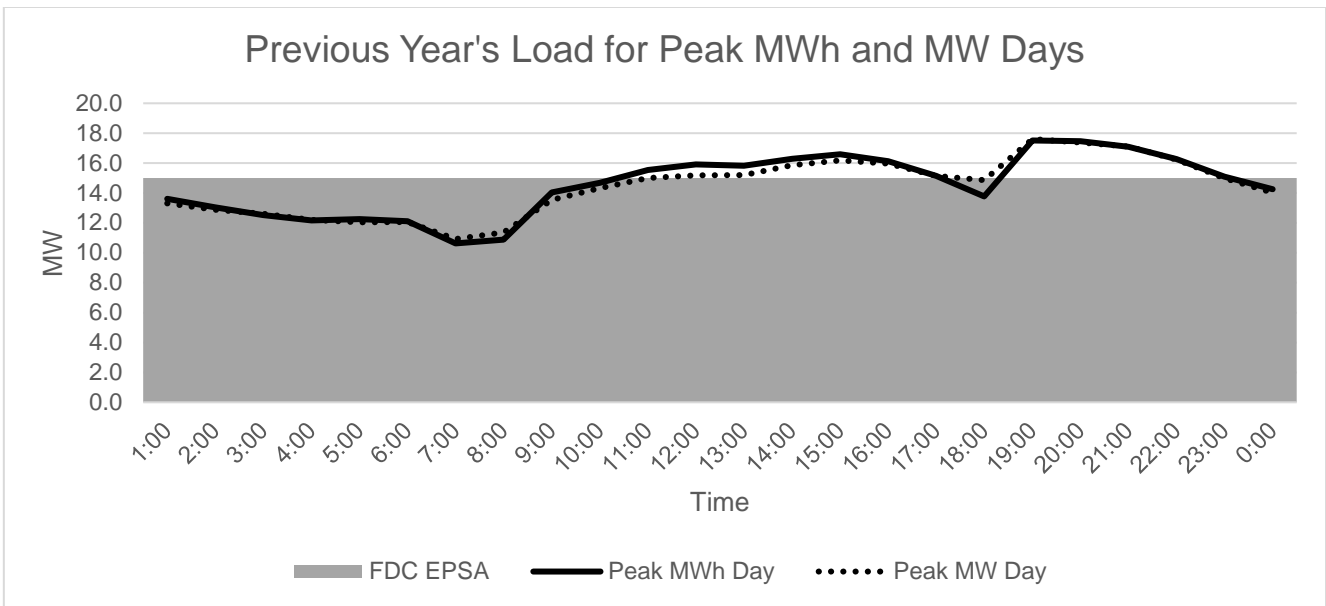


WESM Offtake decreased from -10,623.94 MWh in 2022 to -15,039.76 MWh in 2023 at a rate of -41.5% due to the contracted energy from EDC, KEPCO, and GNPD, however the WESM Offtake increases during the last quarter of 2023 due to the expiration of contract for EDC and KEPCO, and termination of contract for GNPD, respectively. The share of WESM in the total Offtake ranged from -42.14% to 13.00%. The net WESM transaction is negative from January to November, then from September to December was low to positive Offtake due to exposure to WESM.

Previous Year's Load Profile

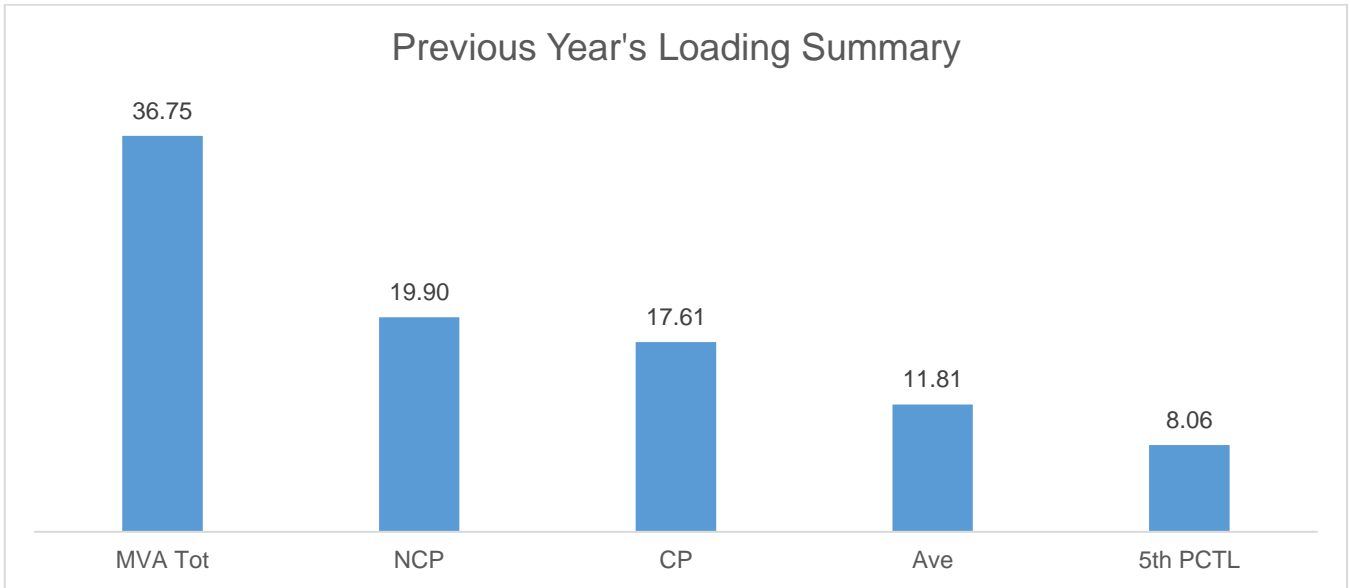


Based on the Load Duration Curve, the minimum load is 2.0217 MW and the maximum load is 17.607 MW for the last historical year.



Peak MW occurred on May due to the effect higher ambient temperature. Peak daily MWh occurred on September due to higher activity at the capital of Province. As shown in the Load Curves, the available supply is lower than the Peak Demand.

## SAMELCO II PSPP - GRID 2024-2033



The Non-coincident Peak Demand is 19.90 MW, which is around 54.16% of the total substation capacity of 36.75 MVA at a power factor of 99%. The load factor or the ratio between the Average Load of 11.81 MW and the Non-coincident Peak Demand is 59.5% of. A safe estimate of the true minimum load is the fifth percentile load of 8.06 MW which is 40.5% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Paranas	6.25	3.396
Catbalogan	18	9.127
Bagolibas	6.25	4.000
Villareal	6.25	3.380

Based on the table above, it shows that Bagolibas substations were loaded at 64% of power transformer capacity which is planned to uprate on the year 2025. Paranas Substation is 54.34%.

SAMELCO II is now planning to file the CAPEX application in ERC this year 2024 for the start construction for a new 6.25MVA substation in the Basey area to address the capacity issues and planned to complete the project in the year 2025 to 2026.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	17.10	0.00	15.00	0.000		0%	88%	-2.10
	Feb	15.71	0.00	15.00	0.000		0%	95%	-0.71
	Mar	16.52	0.00	15.00	0.000		0%	91%	-1.52
	Apr	18.19	0.00	15.00	0.000		0%	82%	-3.19
	May	19.08	0.00	15.00	0.000		0%	79%	-4.08
	Jun	19.35	0.00	15.00	0.000		0%	78%	-4.35
	Jul	18.49	0.00	15.00	0.000		0%	81%	-3.49
	Aug	21.14	0.00	0.00	22.000		0%	104%	0.86
	Sep	20.60	0.00	0.00	22.000		0%	107%	1.40
	Oct	19.96	0.00	0.00	22.000		0%	110%	2.04
	Nov	18.73	0.00	0.00	22.000		0%	117%	3.27
	Dec	18.91	0.00	0.00	22.000		0%	116%	3.09
2025	Jan	19.19	0.00	0.00	22.000		0%	115%	2.81
	Feb	18.93	0.00	0.00	22.000		0%	116%	3.07
	Mar	20.21	0.00	0.00	22.000		0%	109%	1.79
	Apr	19.86	0.00	0.00	22.000		0%	111%	2.14
	May	22.16	0.00	0.00	22.000		0%	99%	-0.16
	Jun	20.80	0.00	0.00	22.000		0%	106%	1.20
	Jul	20.81	0.00	0.00	22.000		0%	106%	1.19
	Aug	21.14	0.00	0.00	22.000		0%	104%	0.86
	Sep	21.60	0.00	0.00	22.000		0%	102%	0.40
	Oct	20.93	0.00	0.00	22.000		0%	105%	1.07
	Nov	19.63	0.00	0.00	22.000		0%	112%	2.37
	Dec	19.82	0.00	0.00	22.000		0%	111%	2.18



**SAMELCO II PSPP - GRID 2024-2033**

2026	Jan	20.07	0.00	0.00	22.000		0%	110%	1.93
	Feb	19.80	0.00	0.00	22.000		0%	111%	2.20
	Mar	21.14	0.00	0.00	22.000		0%	104%	0.86
	Apr	20.78	0.00	0.00	22.000		0%	106%	1.22
	May	23.19	0.00	0.00	22.000		0%	95%	-1.19
	Jun	21.76	0.00	0.00	22.000		0%	101%	0.24
	Jul	21.77	0.00	0.00	22.000		0%	101%	0.23
	Aug	22.12	0.00	0.00	22.000		0%	99%	-0.12
	Sep	22.59	0.00	0.00	22.000		0%	97%	-0.59
	Oct	21.89	0.00	0.00	22.000		0%	100%	0.11
	Nov	20.54	0.00	0.00	22.000		0%	107%	1.46
	Dec	20.74	0.00	0.00	22.000		0%	106%	1.26
2027	Jan	20.96	0.00	0.00	26.000		0%	124%	5.04
	Feb	20.68	0.00	0.00	26.000		0%	126%	5.32
	Mar	22.07	0.00	0.00	26.000		0%	118%	3.93
	Apr	21.69	0.00	0.00	26.000		0%	120%	4.31
	May	24.21	0.00	0.00	26.000		0%	107%	1.79
	Jun	22.72	0.00	0.00	26.000		0%	114%	3.28
	Jul	22.73	0.00	0.00	26.000		0%	114%	3.27
	Aug	23.09	0.00	0.00	26.000		0%	113%	2.91
	Sep	23.59	0.00	0.00	26.000		0%	110%	2.41
	Oct	22.86	0.00	0.00	26.000		0%	114%	3.14
	Nov	21.44	0.00	0.00	26.000		0%	121%	4.56
	Dec	21.66	0.00	0.00	26.000		0%	120%	4.34
2028	Jan	21.85	0.00	0.00	26.000		0%	119%	4.15
	Feb	21.55	0.00	0.00	26.000		0%	121%	4.45
	Mar	23.01	0.00	0.00	26.000		0%	113%	2.99
	Apr	22.61	0.00	0.00	26.000		0%	115%	3.39
	May	25.24	0.00	0.00	26.000		0%	103%	0.76
	Jun	23.68	0.00	0.00	26.000		0%	110%	2.32
	Jul	23.70	0.00	0.00	26.000		0%	110%	2.30

**SAMELCO II PSPP - GRID 2024-2033**

	Aug	24.07	0.00	0.00	26.000		0%	108%	1.93
	Sep	24.59	0.00	0.00	26.000		0%	106%	1.41
	Oct	23.83	0.00	0.00	26.000		0%	109%	2.17
	Nov	22.35	0.00	0.00	26.000		0%	116%	3.65
	Dec	22.57	0.00	0.00	26.000		0%	115%	3.43
2029	Jan	22.73	0.00	0.00	26.000		0%	114%	3.27
	Feb	22.43	0.00	0.00	26.000		0%	116%	3.57
	Mar	23.94	0.00	0.00	26.000		0%	109%	2.06
	Apr	23.53	0.00	0.00	26.000		0%	110%	2.47
	May	26.26	0.00	0.00	26.000		0%	99%	-0.26
	Jun	24.64	0.00	0.00	26.000		0%	106%	1.36
	Jul	24.66	0.00	0.00	26.000		0%	105%	1.34
	Aug	25.05	0.00	0.00	26.000		0%	104%	0.95
	Sep	25.59	0.00	0.00	26.000		0%	102%	0.41
	Oct	24.80	0.00	0.00	26.000		0%	105%	1.20
	Nov	23.26	0.00	0.00	26.000		0%	112%	2.74
	Dec	23.49	0.00	0.00	26.000		0%	111%	2.51
2030	Jan	23.62	0.00	0.00	26.000		0%	110%	2.38
	Feb	23.31	0.00	0.00	26.000		0%	112%	2.69
	Mar	24.88	0.00	0.00	26.000		0%	105%	1.12
	Apr	24.45	0.00	0.00	26.000		0%	106%	1.55
	May	27.29	0.00	0.00	26.000		0%	95%	-1.29
	Jun	25.61	0.00	0.00	26.000		0%	102%	0.39
	Jul	25.62	0.00	0.00	26.000		0%	101%	0.38
	Aug	26.03	0.00	0.00	26.000		0%	100%	-0.03
	Sep	26.59	0.00	0.00	26.000		0%	98%	-0.59
	Oct	25.77	0.00	0.00	26.000		0%	101%	0.23
	Nov	24.17	0.00	0.00	26.000		0%	108%	1.83
	Dec	24.41	0.00	0.00	26.000		0%	107%	1.59
2031	Jan	24.51	0.00	0.00	26.000		0%	106%	1.49
	Feb	24.18	0.00	0.00	26.000		0%	108%	1.82

**SAMELCO II PSPP - GRID 2024-2033**

	Mar	25.82	0.00	0.00	26.000		0%	101%	0.18
	Apr	25.37	0.00	0.00	26.000		0%	102%	0.63
	May	28.32	0.00	0.00	26.000		0%	92%	-2.32
	Jun	26.57	0.00	0.00	26.000		0%	98%	-0.57
	Jul	26.59	0.00	0.00	26.000		0%	98%	-0.59
	Aug	27.01	0.00	0.00	26.000		0%	96%	-1.01
	Sep	27.60	0.00	0.00	26.000		0%	94%	-1.60
	Oct	26.74	0.00	0.00	26.000		0%	97%	-0.74
	Nov	25.08	0.00	0.00	26.000		0%	104%	0.92
	Dec	25.33	0.00	0.00	26.000		0%	103%	0.67
2032	Jan	25.40	0.00	0.00	26.000		0%	102%	0.60
	Feb	25.06	0.00	0.00	26.000		0%	104%	0.94
	Mar	26.75	0.00	0.00	26.000		0%	97%	-0.75
	Apr	26.30	0.00	0.00	26.000		0%	99%	-0.30
	May	29.35	0.00	0.00	26.000		0%	89%	-3.35
	Jun	27.54	0.00	0.00	26.000		0%	94%	-1.54
	Jul	27.55	0.00	0.00	26.000		0%	94%	-1.55
	Aug	27.99	0.00	0.00	26.000		0%	93%	-1.99
	Sep	28.60	0.00	0.00	26.000		0%	91%	-2.60
	Oct	27.71	0.00	0.00	26.000		0%	94%	-1.71
	Nov	25.99	0.00	0.00	26.000		0%	100%	0.01
	Dec	26.25	0.00	0.00	26.000		0%	99%	-0.25
2033	Jan	26.47	0.00	0.00	28.000		0%	106%	1.53
	Feb	26.11	0.00	0.00	28.000		0%	107%	1.89
	Mar	27.87	0.00	0.00	28.000		0%	100%	0.13
	Apr	27.40	0.00	0.00	28.000		0%	102%	0.60
	May	30.57	0.00	0.00	28.000		0%	92%	-2.57
	Jun	28.69	0.00	0.00	28.000		0%	98%	-0.69
	Jul	28.71	0.00	0.00	28.000		0%	98%	-0.71
	Aug	29.16	0.00	0.00	28.000		0%	96%	-1.16
	Sep	29.80	0.00	0.00	28.000		0%	94%	-1.80

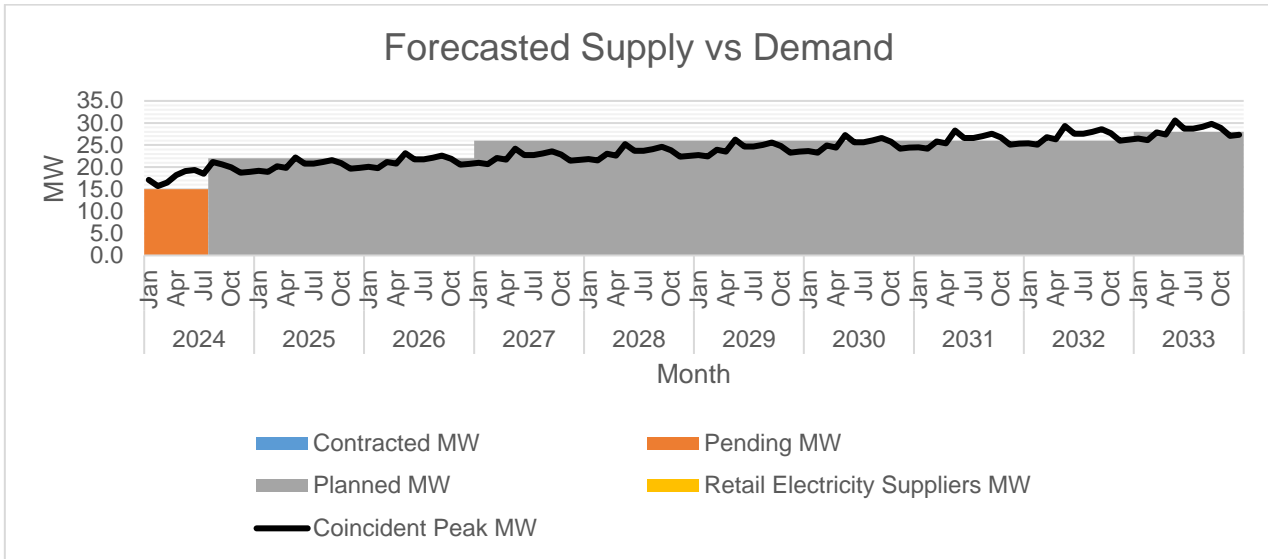
**SAMELCO II PSPP - GRID 2024-2033**

	Oct	28.87	0.00	0.00	28.000		0%	97%	-0.87
	Nov	27.08	0.00	0.00	28.000		0%	103%	0.92
	Dec	27.35	0.00	0.00	28.000		0%	102%	0.65

The Peak Demand was forecasted using trend analysis (regression model) and was assumed to occur on the month of May due to the expected higher consumption and due to the effect of summer season hence higher energy consumption. Monthly Peak Demand is at its lowest in the month of February due to cold weather at that time. In general, Peak Demand is expected to grow at a rate of 4 – 4.8% annually in the next three (3) years.

The significant increase in forecast for the peak demand of 2024 compared to 2023 was, first, the data used was based on 2022 load profile, second, there was a seen decrease of peak demand for 2023 probably due to low energy consumption of the MCO's because of higher electricity rate seen in 2022. However, due to lower electricity rate this 2024, there is a normalization of energy consumption.

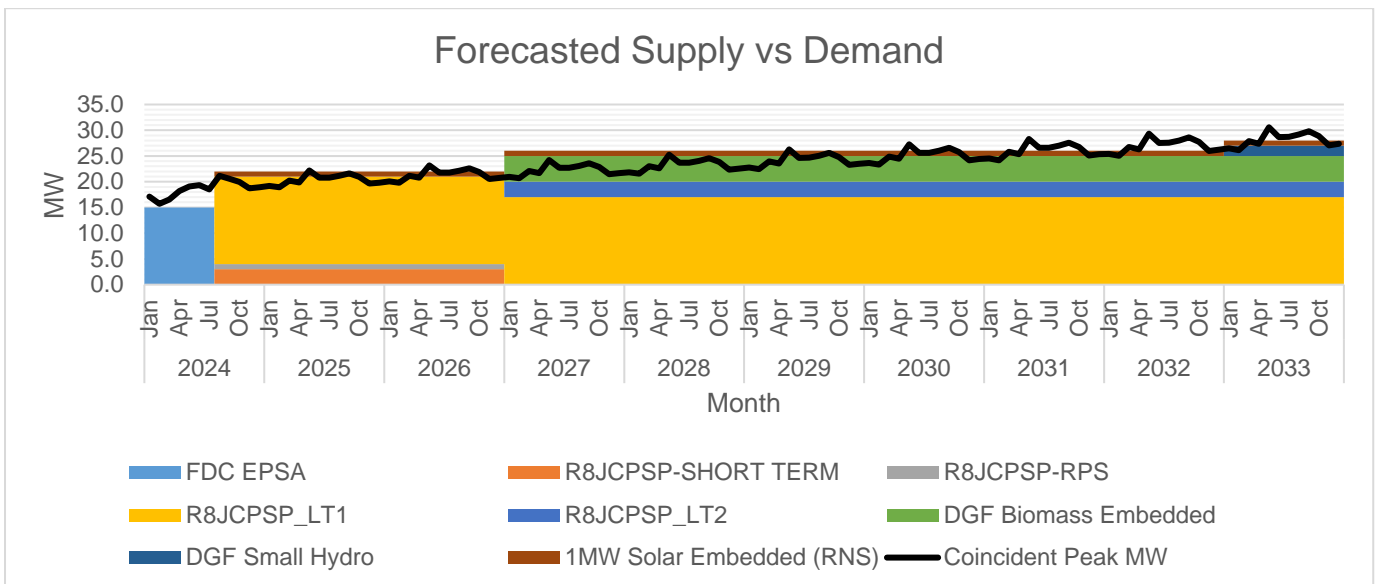
# SAMELCO II PSPP - GRID 2024-2033



For the year 2024 the available supply is sufficiently meet the demand due to the new conducted CSP for 2024 onwards. However, the EPSA with FDCUI with a capacity of 15MW will end this August 2024. In order to have a sufficient power supply SAMELCO II joined R8JCPSP the aggregation of demand in region 8 ECs for the short term (2024-2026), RPS (2024-2026) and long term (2024-2033) for the un-contracted baseload requirements.

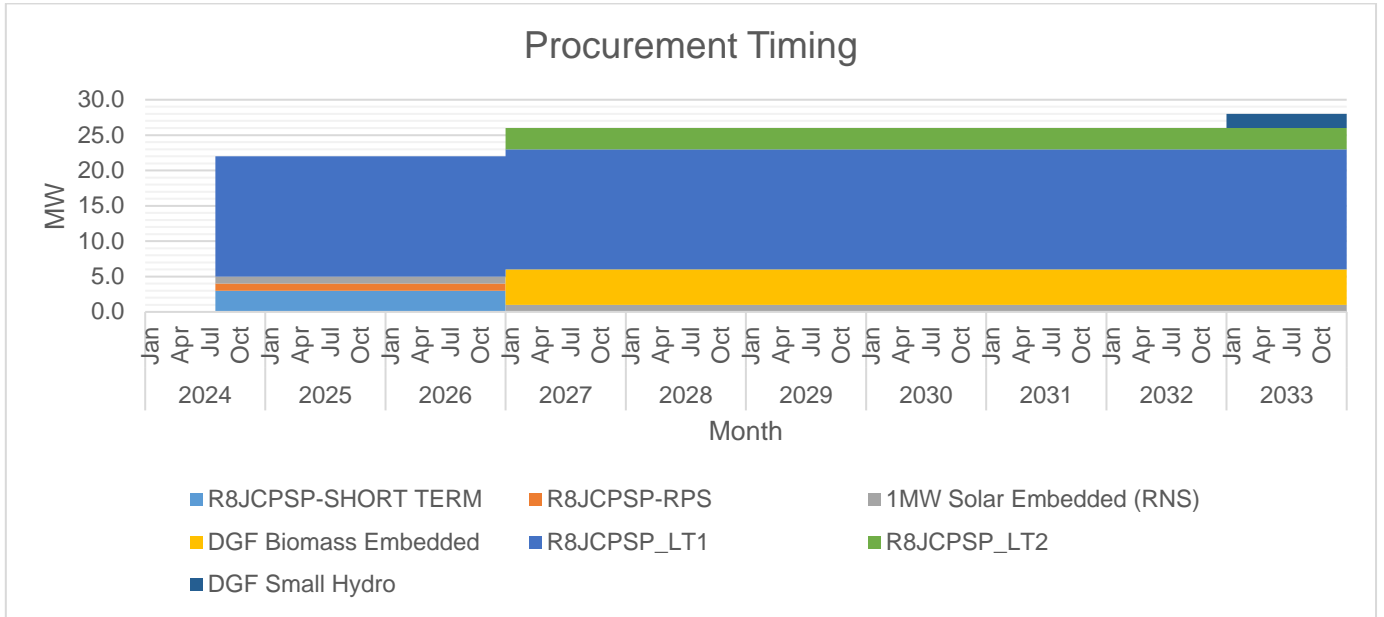
In addition, the solar power project grant by the World Bank is expected to commission this first quarter of 2024.

In preparation for the RPS requirements, SAMELCO II is planning to construct a Distributed Generation Facility for a five (5) MW Biomass Embedded Power Plant and 2MW DGF Small Hydro Embedded to be completed and commissioned in the year 2032.

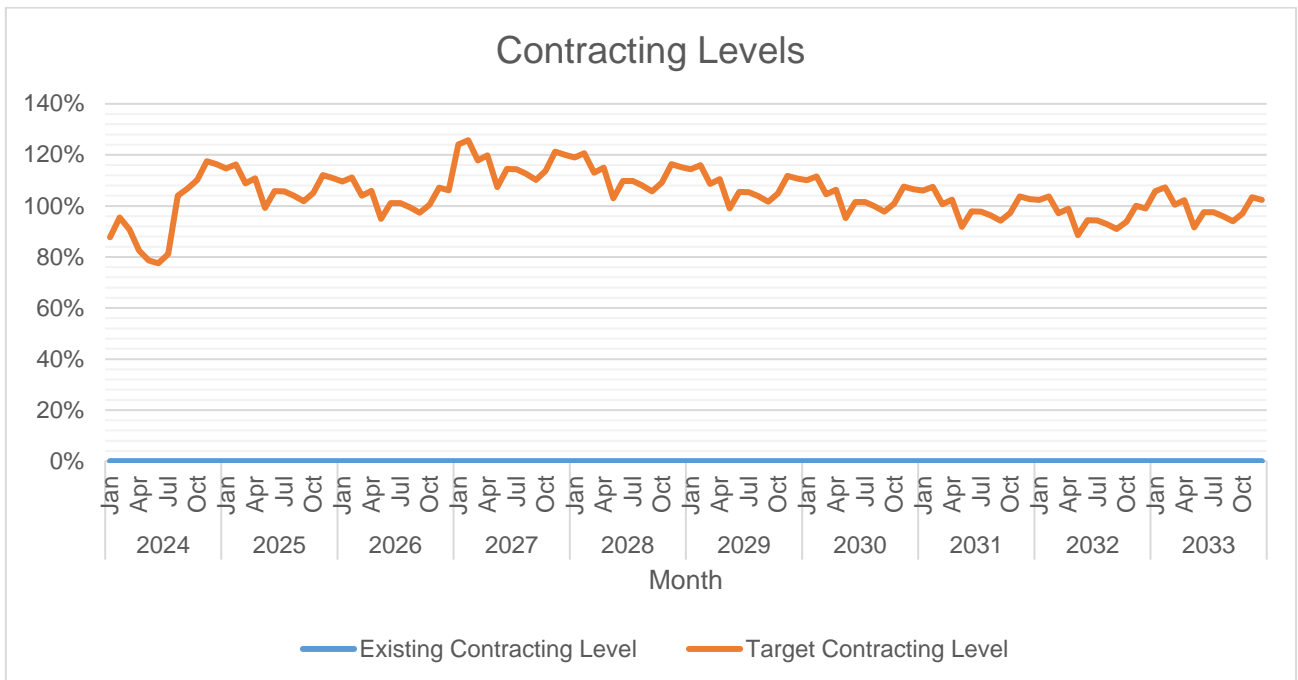


Of the available supply, the largest is 17MW from R8JCPSP\_LT followed 15MW from FDCUI EPESA will expire on August 25, 2024, 5MW from the planned to construct an embedded Distributed Generation Facility and 2MW DGF Small Hydro Power plant to be completed in before the end of 4<sup>th</sup> quarter of 2032. The other supply will come from the aggregation from region 8 ECs for the 3 MW baseload and 1MW RPS requirements, for short-term supply. Also, 1MW Solar embedded that will be commission this first quarter of 2024.

# SAMELCO II PSPP - GRID 2024-2033

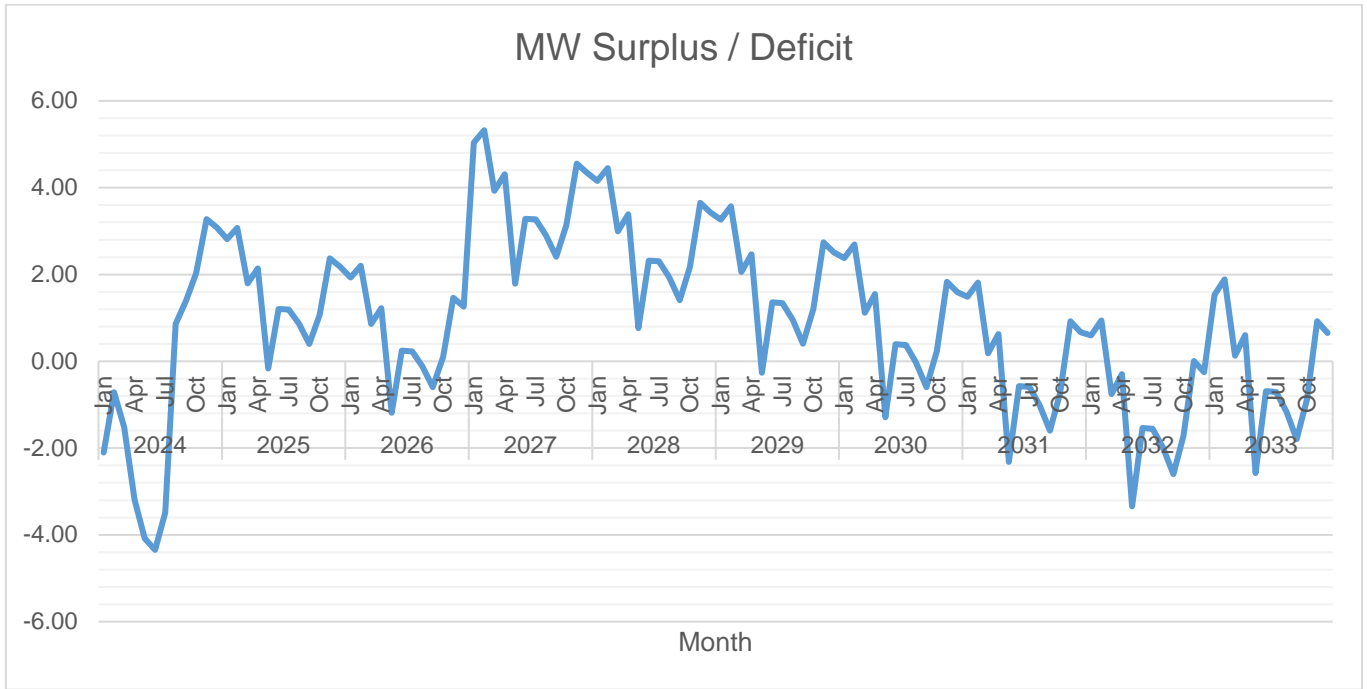


The first wave of supply procurement will be the aggregation from R8JCPSP for the baseload (short-term 2024-2026) and RPS (2024-2026), followed by R8JCPSP\_LT (long-term) from 2024-2033. Lastly, Embedded DGF 5MW Biomass and 2MW Small Hydro will start commercial operation on December 2026 and December 2032, respectively.



Graph above shows the percentage (%) Contracting Levels. The highest target contracting level is More than 100% which is expected to occur on 2027. The lowest target contracting level is 92% which is expected to occur on 2033.

## SAMELCO II PSCP - GRID 2024-2033



Currently, there is under-contracted up to 2.68 MW at the last quarter of 2023. The highest surplus is 5.32 MW which is expected to occur on the month of February 2027. There was a deficit of -4.35 MW on June 2024, due to the reason that the R8JCPSP-SHORT TERM is still pending at ERC. And the lowest forecasted deficit is -3.35 MW which is expected to occur on the month of May 2032.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	9,114	8,232	848	0.37%	9.34%
	Feb	8,484	7,746	718	0.24%	8.48%
	Mar	8,681	8,023	617	0.47%	7.15%
	Apr	10,099	9,352	698	0.49%	6.94%
	May	10,726	9,937	733	0.52%	6.87%
	Jun	10,911	9,669	1,182	0.55%	10.89%
	Jul	9,734	9,090	600	0.45%	6.19%
	Aug	11,422	10,392	939	0.80%	8.29%
	Sep	10,304	9,353	880	0.68%	8.60%
	Oct	10,307	9,276	957	0.72%	9.35%
	Nov	10,650	9,626	956	0.64%	9.03%
	Dec	9,714	8,830	821	0.64%	8.51%
2025	Jan	8,392	7,659	684	0.59%	8.20%
	Feb	8,530	7,788	680	0.74%	8.03%
	Mar	9,404	8,538	801	0.69%	8.57%
	Apr	10,781	9,799	909	0.67%	8.49%
	May	10,914	9,906	927	0.74%	8.56%
	Jun	11,044	10,001	957	0.78%	8.73%
	Jul	11,041	9,951	1,007	0.75%	9.19%
	Aug	11,423	10,392	939	0.80%	8.29%
	Sep	11,033	10,062	895	0.68%	8.17%

## SAMELCO II PSPP - GRID 2024-2033

	Oct	11,036	9,980	978	0.71%	8.93%
	Nov	11,404	10,355	976	0.64%	8.61%
	Dec	10,401	9,500	835	0.63%	8.08%
2026	Jan	8,974	8,226	695	0.58%	7.79%
	Feb	9,121	8,365	689	0.73%	7.61%
	Mar	10,055	9,171	815	0.68%	8.16%
	Apr	11,528	10,526	926	0.67%	8.08%
	May	11,671	10,640	944	0.74%	8.15%
	Jun	11,809	10,742	975	0.77%	8.32%
	Jul	11,806	10,688	1,029	0.75%	8.78%
	Aug	12,214	11,162	955	0.80%	7.88%
	Sep	11,797	10,808	909	0.68%	7.76%
	Oct	11,801	10,719	998	0.71%	8.52%
	Nov	12,195	11,123	994	0.64%	8.20%
	Dec	11,122	10,204	848	0.63%	7.67%
2027	Jan	9,582	8,822	705	0.58%	7.39%
	Feb	9,739	8,971	698	0.72%	7.22%
	Mar	10,737	9,836	829	0.68%	7.77%
	Apr	12,310	11,288	940	0.67%	7.69%
	May	12,462	11,411	960	0.74%	7.76%
	Jun	12,610	11,521	992	0.77%	7.93%
	Jul	12,607	11,463	1,050	0.74%	8.39%
	Aug	13,043	11,971	968	0.79%	7.48%
	Sep	12,598	11,591	922	0.67%	7.36%
	Oct	12,602	11,496	1,017	0.70%	8.13%
	Nov	13,022	11,929	1,010	0.64%	7.81%
	Dec	11,876	10,943	859	0.62%	7.28%
2028	Jan	10,218	9,447	713	0.58%	7.02%
	Feb	10,385	9,606	705	0.71%	6.84%
	Mar	11,450	10,532	841	0.67%	7.39%
	Apr	13,127	12,087	954	0.66%	7.31%
	May	13,289	12,218	974	0.73%	7.38%
	Jun	13,447	12,336	1,008	0.77%	7.55%
	Jul	13,443	12,274	1,070	0.74%	8.02%
	Aug	13,908	12,818	981	0.79%	7.11%
	Sep	13,434	12,411	932	0.67%	6.99%
	Oct	13,438	12,309	1,034	0.70%	7.75%
	Nov	13,887	12,773	1,025	0.63%	7.43%
	Dec	12,664	11,717	868	0.62%	6.90%
2029	Jan	10,882	10,099	720	0.58%	6.65%
	Feb	11,058	10,269	711	0.70%	6.48%
	Mar	12,192	11,259	852	0.67%	7.03%
	Apr	13,979	12,922	965	0.66%	6.95%
	May	14,152	13,062	986	0.73%	7.02%
	Jun	14,319	13,188	1,022	0.76%	7.19%
	Jul	14,315	13,122	1,088	0.74%	7.66%
	Aug	14,811	13,703	991	0.78%	6.74%



## SAMELCO II PSPP - GRID 2024-2033

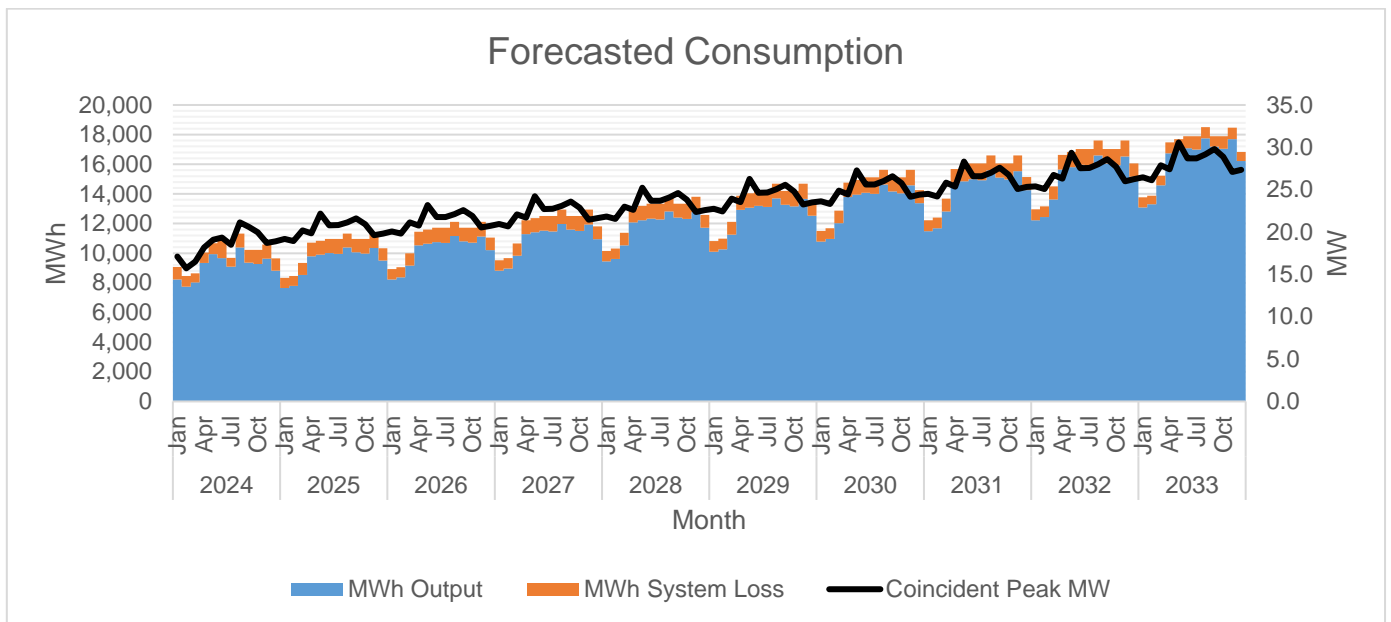
	Sep	14,305	13,269	941	0.67%	6.62%
	Oct	14,310	13,160	1,050	0.70%	7.39%
	Nov	14,788	13,655	1,039	0.63%	7.07%
	Dec	13,486	12,527	876	0.62%	6.54%
2030	Jan	11,572	10,780	726	0.57%	6.31%
	Feb	11,759	10,961	716	0.70%	6.13%
	Mar	12,966	12,018	861	0.67%	6.69%
	Apr	14,865	13,793	976	0.65%	6.61%
	May	15,049	13,942	997	0.73%	6.68%
	Jun	15,227	14,077	1,035	0.76%	6.85%
	Jul	15,223	14,006	1,106	0.73%	7.32%
	Aug	15,750	14,627	1,000	0.78%	6.40%
	Sep	15,213	14,163	949	0.66%	6.28%
	Oct	15,217	14,047	1,065	0.69%	7.05%
	Nov	15,726	14,576	1,051	0.63%	6.73%
	Dec	14,341	13,371	882	0.61%	6.19%
2031	Jan	12,289	11,489	730	0.57%	5.98%
	Feb	12,488	11,682	719	0.69%	5.80%
	Mar	13,769	12,808	870	0.66%	6.36%
	Apr	15,787	14,700	984	0.65%	6.28%
	May	15,982	14,859	1,007	0.72%	6.35%
	Jun	16,171	15,002	1,047	0.75%	6.52%
	Jul	16,167	14,927	1,122	0.73%	6.99%
	Aug	16,726	15,589	1,007	0.78%	6.07%
	Sep	16,155	15,094	954	0.66%	5.95%
	Oct	16,160	14,970	1,079	0.69%	6.72%
	Nov	16,701	15,534	1,062	0.63%	6.40%
	Dec	15,230	14,250	887	0.61%	5.86%
2032	Jan	13,034	12,226	734	0.57%	5.66%
	Feb	13,244	12,432	721	0.69%	5.48%
	Mar	14,603	13,630	877	0.66%	6.04%
	Apr	16,743	15,643	992	0.65%	5.96%
	May	16,950	15,813	1,015	0.72%	6.03%
	Jun	17,150	15,965	1,057	0.75%	6.21%
	Jul	17,146	15,885	1,137	0.73%	6.68%
	Aug	17,739	16,589	1,013	0.77%	5.75%
	Sep	17,134	16,063	959	0.66%	5.63%
	Oct	17,139	15,931	1,091	0.69%	6.41%
	Nov	17,713	16,531	1,071	0.63%	6.08%
	Dec	16,152	15,165	890	0.61%	5.54%
2033	Jan	13,805	13,081	691	0.24%	5.02%
	Feb	14,016	13,302	585	0.93%	4.21%
	Mar	15,310	14,584	638	0.57%	4.19%
	Apr	17,527	16,737	747	0.25%	4.27%
	May	17,712	16,919	771	0.13%	4.36%
	Jun	17,937	17,082	812	0.24%	4.54%
	Jul	17,909	16,996	891	0.12%	4.98%

## SAMELCO II PSPP - GRID 2024-2033

	Aug	18,528	17,750	759	0.10%	4.10%
	Sep	17,920	17,187	696	0.21%	3.89%
	Oct	17,902	17,045	846	0.06%	4.73%
	Nov	18,500	17,687	774	0.21%	4.19%
	Dec	16,911	16,226	610	0.44%	3.62%

MWh Offtake was forecasted using trend analysis (regression model). The average forecasted load factor is from 2024 to 2033 is 69.48%. While 64.59% is the lowest for the year 2025 and 76.16% is the highest from year 2033.

System Loss was calculated through a Load Flow Analysis Study conducted on every year by Corporate Planning Department using Distribution System Application Software (DSAS). Based on the same study, the Distribution System can adequately convey electricity to customers.



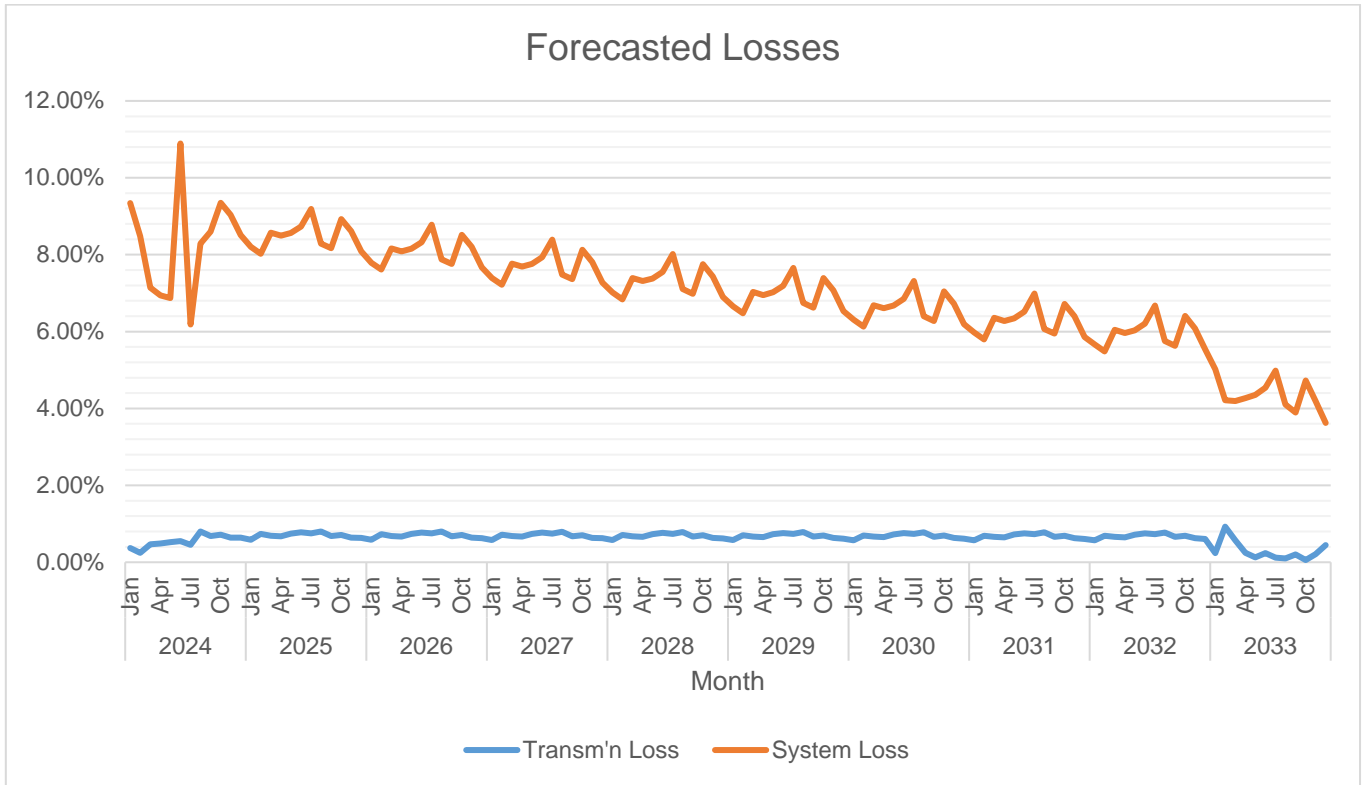
MWh Output was expected to grow at a rate of 6.42% to 7.58% annually. An average growth rate of 6.9%.

For the forecast highest sales output, expected highest loads of commercial and Industrial loads in the area of Catbalogan City, Sta. Rita and Basey which more incoming establishment the area.

In Others (Public & Street Lights) loads, highest forecast for Catbalogan City due to more incoming public offices of the government.

For the same reason of peak demand forecast. There was significant increase in energy forecast for 2024 compared to 2023 was, the data used was based on 2022 load profile and the low energy consumption for 2023 was probably due to low energy consumption of the MCO's because of higher electricity rate seen in 2022. However, due to lower electricity rate this 2024, there is a normalization of energy consumption.

# SAMELCO II PSPP - GRID 2024-2033



Transmission Loss is expected to range from 0.06% to 0.93% while System Loss is expected to range from 3.62% to 9.61%.

**Power Supply**

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
EDC EPSA	Base	Energy Development Corporation	1.00	8,670	12/26/2022	8/25/2023
KEPCO EPSA	Base	KEPCO SPC Power Corporation	3.00	15,606	8/26/2022	8/25/2023
2016-047 GNPD	Base	GN Power Dinginin	15.00	72,270	12/26/2020	9/13/2023
1MW Solar Embedded (RNS)	Base	DU-owned	1.00	1,752	12/26/2023	12/25/2040
FDCUI EPSA	Base	FDC Misamis Power Corporation	15.00	72,270	9/14/2023	8/25/2024

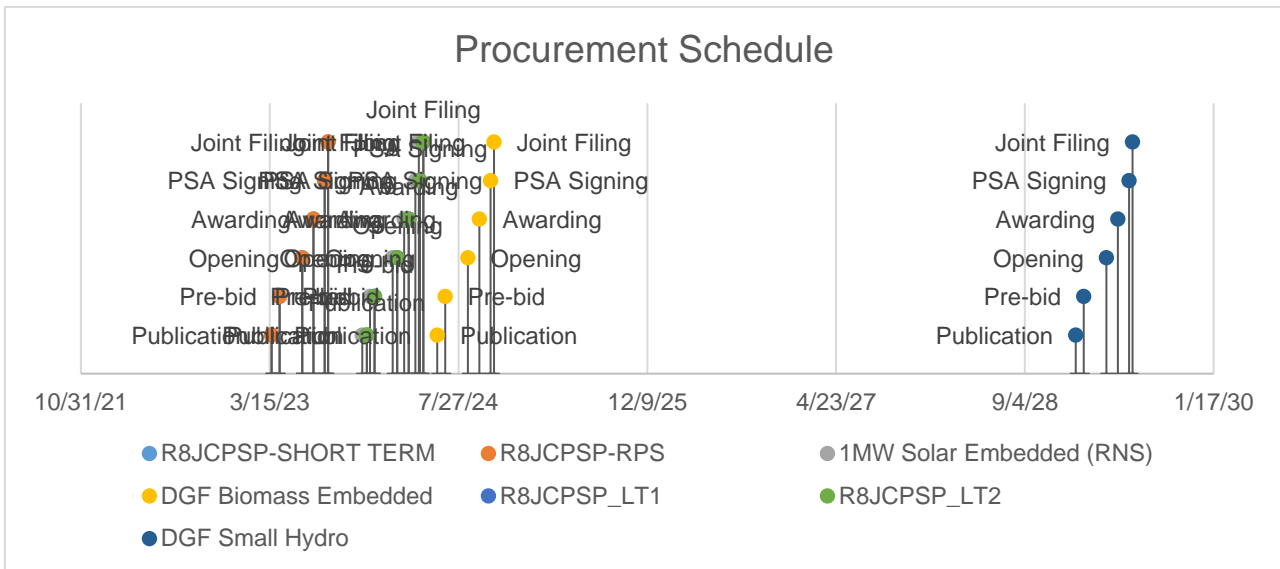
The PSA with EDC EPSA and KEPCO EPSA are already submitted to ERC for evaluation. It was selected as emergency power supply to provide for baseload requirements of SAMELCO II due to the expiration of PSALM contract last July 2022, however the said EPSA were expired on August 25, 2023

The PSA with GN Power Dinginin filed with ERC under Case No. 2016-047 was procured through Competitive Selection Process (CSP). It was selected to provide for base requirements due to expiration of SAMELCO II baseload contracted. The utilization of the PSA is 100-65% capacity utilization factor. Outages of the plant led to un-served energy of around 6570MWh per year. The generation rate under the PSA ranged from 3.30P/kWh to 4.50P/KWh in the entire duration. The Energy Regulatory Commission (ERC) approved the SAMELCO II and GNPD application only provisional authority. However, the said application was denied or terminated by ERC under the same case number. In order to mitigate the exposure to the spot market, the EC has entered into EPSA with FDCUI on September 14, 2023 to August 25, 2024.

For the 1MW Solar Embedded (RNS) it was conducted by the NPC-ASEP (Project Management) the procurement bidding last August 2022 for the supply and installation of solar farm in the premises of SAMELCO II compound. The project was funded by European Union (EU) with a 20% equity share of SAMELCO II and target to complete and commission this project in 4th quarter of 2023. SAMELCO II is now on the process of filing to ERC for the approval generation rates.

# SAMELCO II PSPP - GRID 2024-2033

	R8JCPSP-SHORT TERM	R8JCPSP-RPS	1MW Solar Embedded (RNS)	DGF Biomass Embedded	R8JCPSP_LT1	R8JCPSP_LT2	DGF Small Hydro
Type	Base	Base	Peaking	Intermediate	Base	Base	Intermediate
Minimum MW	3.00	1.00	1.00	5.00	17.00	3.00	2.00
Minimum MWh/yr	18,396	8,760	1,840	35,040	89,275	18,396	8,585
PSA Start	12/26/2023	12/26/2023	12/26/2023	12/26/2026	8/26/2024	12/26/2026	12/26/2032
PSA End	12/25/2026	12/25/2026	12/25/2036	12/26/2036	12/25/2033	12/25/2033	12/26/2042
Publication	3/20/2023	3/20/2023	11/15/2023	6/1/2024	11/27/2023	11/27/2023	1/17/2029
Pre-bid	4/10/2023	4/10/2023	12/6/2023	6/22/2024	12/18/2023	12/18/2023	2/7/2029
Opening	6/9/2023	6/9/2023	2/4/2024	8/21/2024	2/16/2024	2/16/2024	4/8/2029
Awarding	7/9/2023	7/9/2023	3/5/2024	9/20/2024	3/17/2024	3/17/2024	5/8/2029
PSA Signing	8/8/2023	8/8/2023	4/4/2024	10/20/2024	4/16/2024	4/16/2024	6/7/2029
Joint Filing	8/17/2023	8/17/2023	4/13/2024	10/29/2024	4/25/2024	4/25/2024	6/16/2029



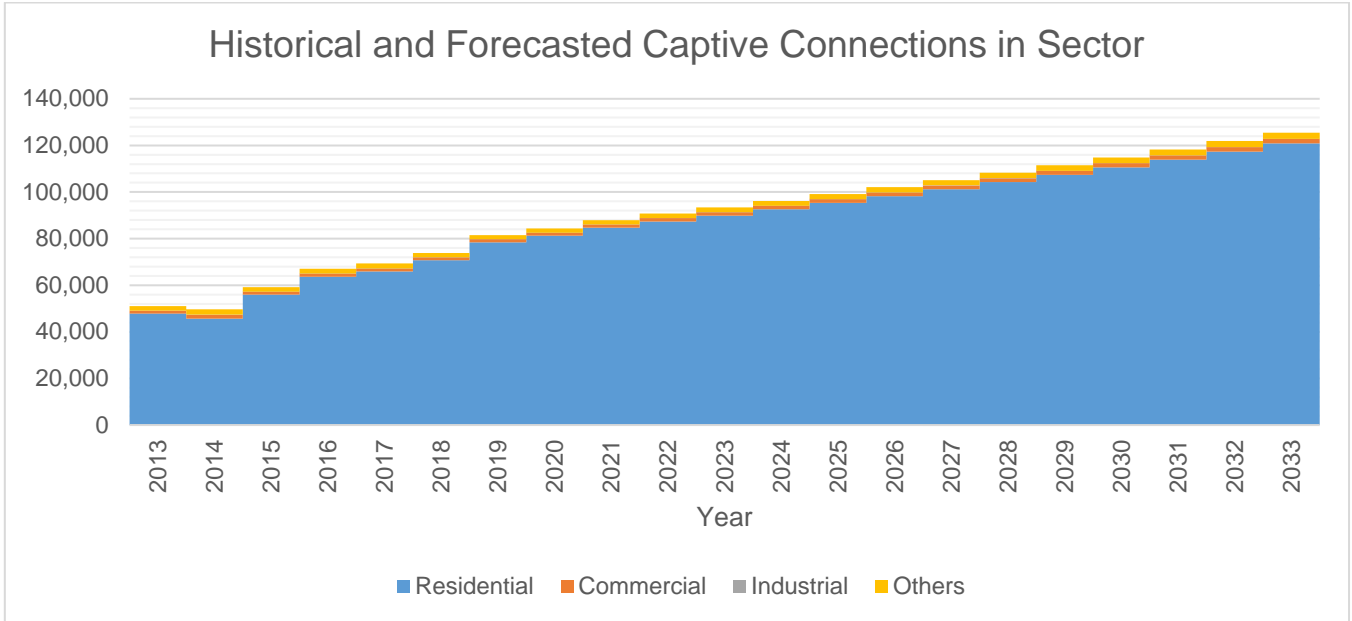
For the procurement of supply for aggregation of region 8 ECs for the 3MW R8JCPSP-Baseload-Short Term and minimum of 1MW for RPS requirements which is planned to be available on December 26, 2023. The first publication or launch of CSP will be on March 20, 2023. Joint filing is planned on October 17, 2023, or 150 days later, in accordance with DOE’s 2018 CSP Policy.

For the procurement of supply for aggregation of region 8 ECs for the 17MW R8JCPSP\_LT is planned to start on August 26, 2024 and will end on August 25, 2033. The first publication or launch of CSP will be on November 16, 2023. Joint filing is planned on April 14, 2024, or 150 days later, in accordance with DOE’s 2018 CSP Policy. The said R8JCPSP\_LT was due to the denied or terminated power supply agreement with GNPD by ERC. With an additional of 2MW capacity.

For the procurement of 5MW DGF Embedded of supply which is planned to be available on December 26, 2026, the first publication or launch of CSP will be on June 2024. Joint filing is planned on October 29, 2024, or 150 days later, in accordance with DOE’s 2018 CSP Policy.

For the procurement of 1MW Embedded Renewable Hydro power supply which is planned to be available on December 26, 2026, the first publication or launch of CSP will be on June 2024. Joint filing is planned on October 29, 2024, or 150 days later, in accordance with DOE’s 2018 CSP Policy. This project is a partnership with PNOC, NEA, DOE and SAMELCO II to align the National Government goal to achieve the renewable power supply in the country.

## Captive Customer Connections



The number of Residential connections is expected to grow at a rate of 6.8% annually. The said customer class is expected to account for 67% of the total consumption.