

ZAMBOANGA DEL NORTE ELECTRIC COOPERATIVE, INC.

POWER SUPPLY PROCUREMENT PLAN

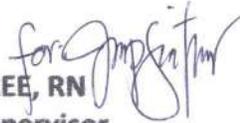
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POWER SUPPLY PROCUREMENT PLAN

ZAMBOANGA DEL NORTE ELECTRIC COOPERATIVE, INC. POWER SUPPLY PROCUREMENT PLAN

In compliance with the Department of Energy's (DOE) Department Circular No. DC 2018-02-0003, "Adopting and Prescribing the Policy for the Competitive Selection Process in the Procurement by the Distribution Utilities of Power Supply Agreement for the Captive Market" or the Competitive Selection process (CSP) Policy, the Power Supply Procurement Plan (PSPP) Report is hereby created, pursuant to the Section 4 of the said Circular.

The PSPP refers to the DUs' plan for the acquisition of a variety of demand-side and supply-side resources to cost-effectively meet the electricity needs of its customers. The PSPP is an integral part of the Distribution Utilities' Distribution Development Plan (DDP) and must be submitted to the Department of Energy with supported Board Resolution and/or notarized Secretary's Certificate.

The Third-Party Bids and Awards Committee (TPBAC), Joint TPBAC or Third Party Auctioneer (TPA) shall submit to the DOE and in the case of Electric Cooperatives (ECs), through the National Electrification Administration (NEA) the following:

- a. Power Supply Procurement Plan;
- b. Distribution Impact Study/ Load Flow Analysis conducted that served as the basis of the Terms of Reference; and
- c. Due diligence report of the existing generation plant

All Distribution Utilities' shall follow and submit the attached report to the Department of Energy for posting on the DOE CSP Portal. For ECs such reports shall be submitted to DOE and NEA. The NEA shall review the submitted report within ten (10) working days upon receipt prior to its submission to DOE for posting at the DOE CSP Portal.

The content of the PSPP shall be consistent with the DDP. The tables and graph format to be use on the PSPP report is provided on the following sheets. Further, the PSPP shall contain the following sections:

- I. Table of Contents
- II. Introduction
- III. Energy and Demand Forecast (10 year historical and forecast)
- IV. Energy Sales and Purchase
- V. Daily Load Profile and Load Duration Curve
- VI. Existing Contracts & Existing GenCos due diligence report
- VII. Currently approved SAGR for Off-Grid ECs to be passed-on to consumers;
- VIII. DU's Current Supply and Demand
- IX. Distribution Impact Study
- X. Schedule of Power Supply Procurement
- XI. Timeline of the CSP

For inquiries, you may send it at doe.csp@gmail.com or you may contact us through telephone numbers (02) 840-2173 and (02) 479-2900 local 202.

TABLE OF CONTENTS

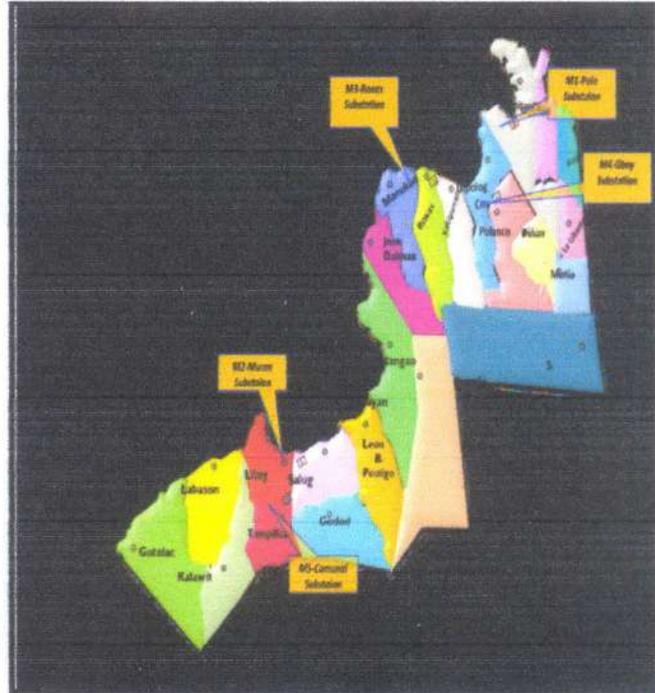
I.	Introduction	1
II.	Energy and Demand Forecast (10 year historical and forecast)	9-14
III.	Energy Sales and Purchase	2
IV.	Daily Load Profile and Load Duration Curve	4
V.	Existing Contracts & Existing GenCos due diligence report	6
VI.	Currently approved SAGR for Off-Grid ECs to be passed-on to consumers;	N/A
VII.	DU's Current Supply and Demand	5
VIII.	Distribution Impact Study	7
IX.	Schedule of Power Supply Procurement	8
X.	Timeline of the CSP	8

INTRODUCTION

DISTRIBUTION UTILITIES PROFILE

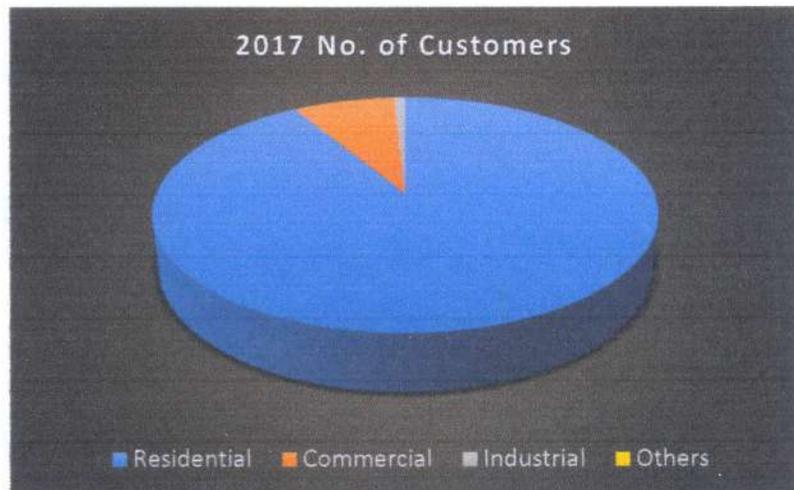
ZANECO was organized and registered with NEA on August 23, 1972 by virtue of P.D. 269. The franchise of ZANECO covers 2 cities and 21 municipalities, namely - Dapitan City, Dipolog City, Rizal, Sibutad, La Libertad, Polanco, Mutia, Pifian, Sergio Osmeña Sr., Katipunan, Roxas, Manukan, Jose Dalman, Sindangan, Siayan, Leon B. Postigo, Salug, Godod, Liloy, Labason, Gutalac, Tampilisan and Kalawit. Under NEA categorization for year 2016, ZANECO is categorized as an AA electric cooperative. As of December 2017, it has a collection efficiency of 90%, a system loss of 9.23% and has a positive margin.

ZANECO's Franchise MAP



Number of Customer Connections in Franchise	ACTUAL	FORECAST									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	106,939	113,152	118,506	123,742	128,847	133,820	138,661	143,373	147,961	152,428	156,782
Commercial	9,021	9,340	9,618	9,893	10,164	10,430	10,691	10,948	11,200	11,448	11,691
Industrial	941	1,012	1,072	1,132	1,192	1,252	1,313	1,373	1,434	1,495	1,555
Others											
Contestable Customers served by RES											
Total (Captive Customers)		123,504	129,196	134,766	140,203	145,503	150,665	155,695	160,595	165,371	170,028

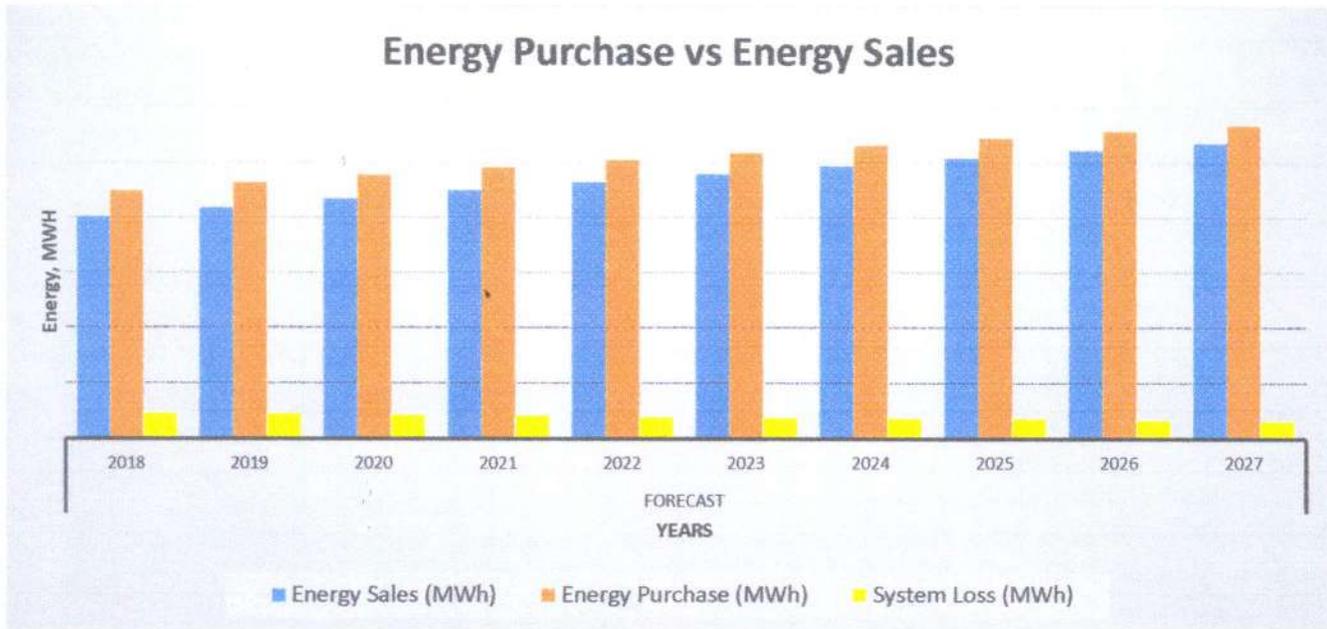
ZANECO has expected to increase its demand due to the commercialization of incoming big loads such as City Mall which has an estimated demand of 2MW, Sea Oil Depot and Petra Cement Plant which are both located in the Agro-Industrial Economic Zone of the Municipality of Roxas, Zamboanga del Norte. Since it is an economic zone, more big loads are expected to operate.



ENERGY SALES AND PURCHASE

ENERGY SALES AND PURCHASE	HISTORICAL									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Energy Sales (MWh)	114,885	121,441	127,767	141,919	150,531	156,220	158,540	172,498	188,107	190,150
Energy Purchase (MWh)	134,709	142,739	149,257	162,615	168,947	177,718	186,110	197,116	206,197	209,458
System Loss (MWh)	19,824	21,297	21,490	20,696	18,417	21,506	22,012	24,648	21,547	19,339

ENERGY SALES AND PURCHASE	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Energy Sales (MWh)	200,996	209,200	217,208	225,021	232,646	240,087	247,354	254,453	261,393	268,182
Energy Purchase (MWh)	224,682	232,112	239,187	246,003	252,654	259,238	265,847	272,575	278,283	284,233
System Loss (MWh)	23,687	22,912	21,979	20,981	20,009	19,151	18,494	18,122	16,890	16,050



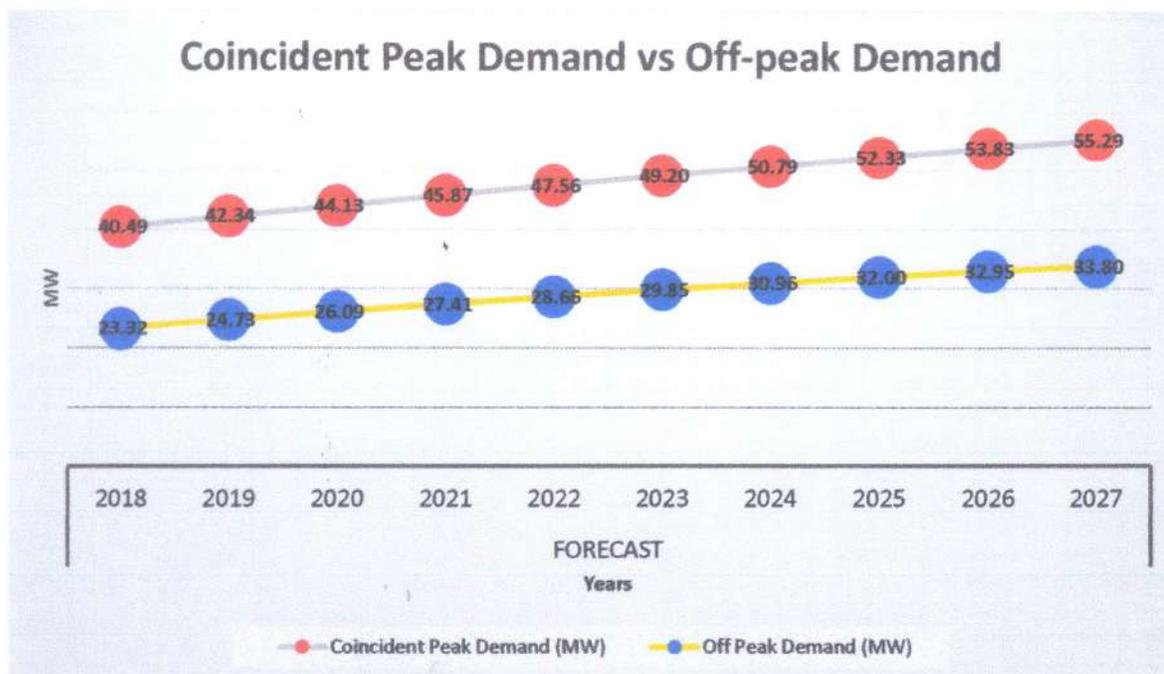
ZANECO has fully implemented the ERC's customer classification namely- Residential, Low Voltage and Higher Voltage Customers in year 2012. Based on the historical data, the annual average growth rate for years 2013-2017 is 5.1%. A lesser sales growth rate was recorded in years 2013 and 2014 due to the power crisis experienced in the Mindanao grid. The sales growth rate in 2017 is at 1.1% but no power curtailments were experienced by the member-consumers. This reduction in the kWh sales might due to the power interruptions scheduled for the construction of the 69kV Subtransmission line from Piao, Roxas Substation to Sindangan Substation. The forecasted energy sales of ZANECO has an annual average growth rate of 4.1% in years 2018-2022 and 2.9% in years 2023-2027. Based on the historical data, the energy purchased has an annual average growth rate of 4.2% and is forecasted with a growth rate of 3.8% and 2.4% in years 2018-2022 and 2023-2027 respectively. From these forecasted data, ZANECO will retain a single-digit system loss in these 10-year planning period.

Two peaking power suppliers of ZANECO are expiring; Mapalad Power Corporation will expire on August 1, 2018 while Therma Marine, Inc. will expire on January 2, 2019. ZANECO has not yet planned for the procurement of peaking supply cause GNPpower will be commencing soon and it will be able to dispatch supply to ZANECO which varies hourly. ZANECO is planning for the CSP of an embedded renewable power supply in compliance with the

DEMAND

Demand	HISTORICAL									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Coincident Peak Demand (MW)	25.37	25.32	26.95	29.48	29.82	31.42	32.72	34.35	36.53	39.08
Off Peak Demand (MW)	13.02	12.99	13.81	16.21	15.26	16.08	17.40	19.68	19.34	21.89

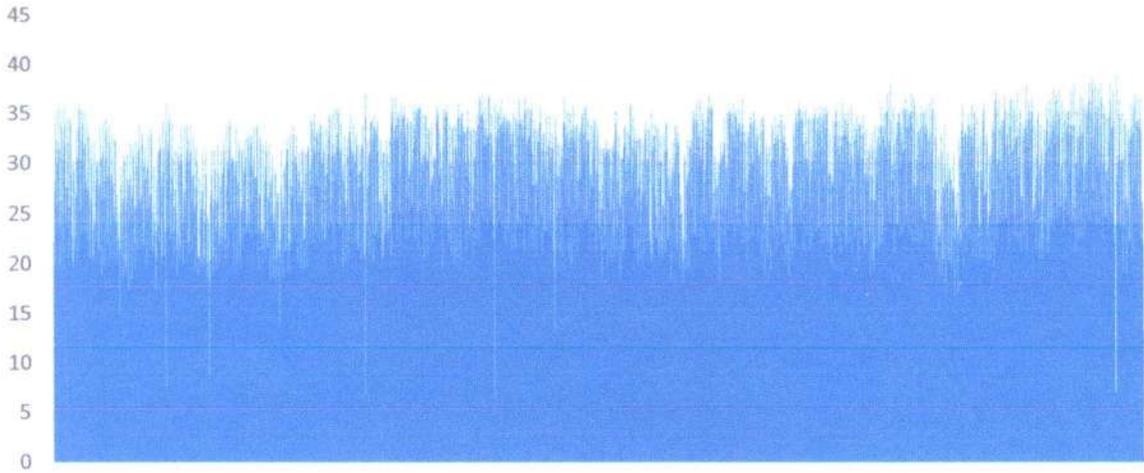
Demand	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Coincident Peak Demand (MW)	40.49	42.34	44.13	45.87	47.56	49.20	50.79	52.33	53.83	55.29
Off Peak Demand (MW)	23.32	24.73	26.09	27.41	28.66	29.85	30.96	32.00	32.95	33.80



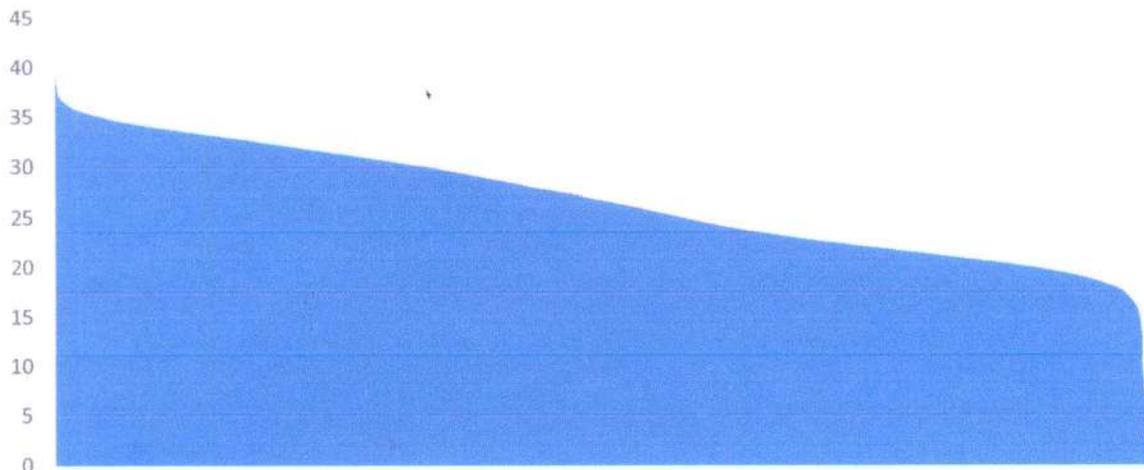
Based on historical data, the annual average growth rate of ZANECO's demand for years 2013-2017 is 5.6% with an actual demand of 39.08MW in 2017. For the determination of the forecasted values for the peak demand, the forecasting model used is the Quadratic & Logarithmic Trending with Smoothing & Horizon. The forecasted demand will have an annual average growth rate of 4% for years 2018-2022 and 3.1% for years 2023-2027. Based on the result, the forecasted peak demand by end of the first-five year is 47.56MW and 55.29MW in the next five-year period.

LOAD PROFILE AND LOAD DURATION CURVE

2017 ZANECO's Hourly Load Profile (MW)



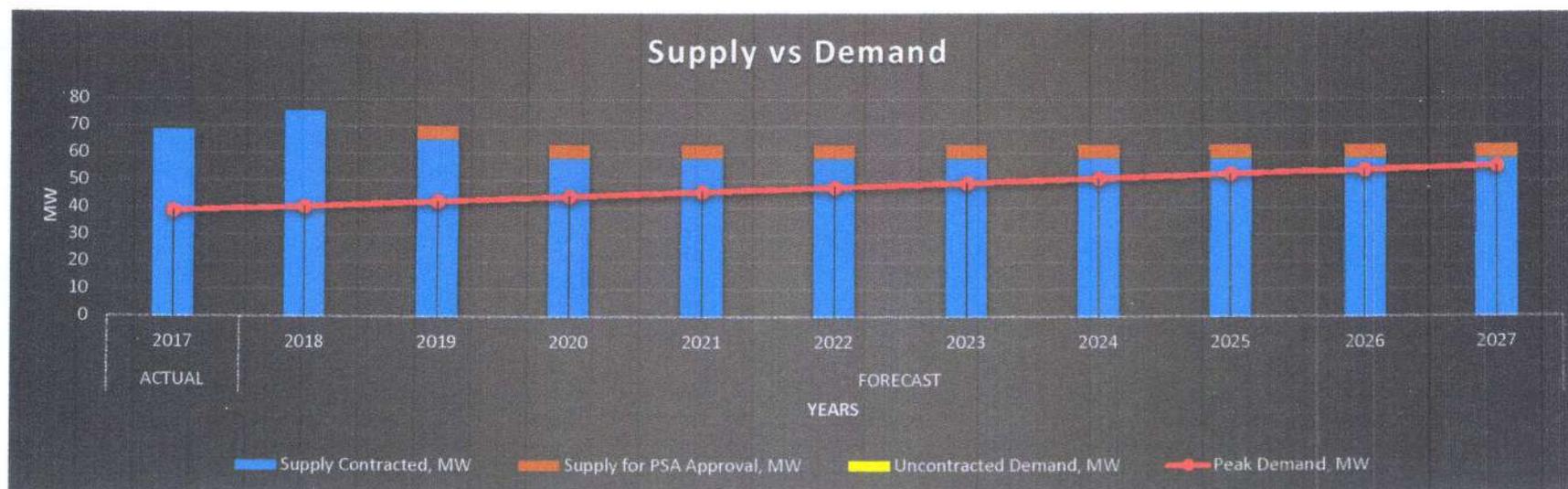
2017 ZANECO's Load Curve (MW)



Based on the 2017 load curve of ZANECO, the baseload is 41%, 37% is mid-merit load and 22% as peaking load. The equivalent demand based on the 2017 peak demand of 39.078MW is 16MW for baseload, the peak load is 8.9MW and the mid-merit load is 14MW. The mid merit load is supplied by the NPC/PSALM which is a mix of hydro and coal.

MIXSUPPLY VS DEMAND AND THE OPTIMAL SUPPLY

Supply Demand	ACTUAL	FORECAST									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Peak Demand, MW	39.078	40.495	42.340	44.133	45.874	47.563	49.201	50.791	52.334	53.834	55.292
Supply Contracted, MW	68.80458333	75.797	65.3525	58.1485	58.1485	58.1485	58.1485	58.1485	58.1485	58.1485	58.1485
PSALM	9	23.797	20.3525	13.1485	13.1485	13.1485	13.1485	13.1485	13.1485	13.1485	13.1485
TMI	15	7									
TSI	5	5	5	5	5	5	5	5	5	5	5
MPC	5	5									
GNPOWER	35	35	35	35	35	35	35	35	35	35	35
SEC			5	5	5	5	5	5	5	5	5
Supply for PSA Approval, MW	0	0	5	5	5	5	5	5	5	5	5
ASTRONERGY			5	5	5	5	5	5	5	5	5
Uncontracted Demand, MW	0	0	0	0	0	0	0	0	0	0	0



POWER SUPPLY PROCUREMENT PLAN

List of Existing Contracts and Details

Supply Contracted	Plant Owner/ Operator	Capacity Factor	PSA Effectivity (MM/YR)	PSA Expiration (MM/YR)	Contracted Capacity, MW	Contracted Energy, MWH	Base / Mid-merit / Peaking	Embedded/ Grid Connected	Utility-owned/ NPC/ IPP/ NPC-IPP	Status	Fuel Type	Installed Capacity (MW)	Net Dependable Capacity (MW)
PSALM	NPC/PSALM		Dec-17	Dec-20	23797	166568.8	Base	Grid Connected	NPC & NPC-IPP		HYDRO & COAL	1727	1038
Therma M	Aboitiz Power		Jan-12	Jan-19	7000	17812.43	Peaking	Grid Connected	IPP		DIESEL	200	198
Therma S	Aboitiz Pwer		Sep-15	Sep-40	5000	38400	Base	Grid Connected	IPP		COAL	300	260
Mapalad P	Alcantara Group		Aug-14	Jul-18	5000	21717.5	Peaking	Grid Connected	IPP		DIESEL	103	98
Sarangani Energy Corp.			Jan-19	Dec-43	5000	39600	Base	Grid Connected	IPP		COAL	236	210
GN Power Kauswagan, Inc.			Aug-18	Jul-38	35000	109900	Base	Grid Connected	IPP		COAL	405	330

ZANECO has just renewed its CSEE for years 2018-2020 for a higher contracted capacity and energy as compared to the subsequent reductions in the last contract periods. From an average contracted capacity of 8.804MW in 2017, ZANECO renewed for a capacity of 23.797MW in 2018, 20.353MW in 2019 and 13.149MW in 2020. ZANECO opted to contract higher capacity from PSALM for 2018 due to the unavailability of the full contracted capacity from GNPowder which is expected to commence in 2019, and the expiration of supply contract with MPC on August 2018. For 2019 contracted capacity, aside from increase in demand, the supply contract with TMI will expire on January 2019. During 2017, the supply of PSALM was fluctuating which is dependent on the actual water level but they have provided ZANECO a supply higher than the contracted capacity. TMI due to its diesel-fuel can operate for a limited hours in a day, that's why it only supplied ZANECO for intervals 1000H-2200H. When some of the generators reduced their daily allocations to ZANECO, the cooperative managed to source out additional supply through a non-firm basis from Mapalad Power Corporation. Sarangani Energy Corporation (SEC) will be operational on 2019. Based on 2017 data, the optimal supply mix of ZANECO is 80% mix of baseload and intermediate load and 20% from peaking supply.

DISTRIBUTION IMPACT STUDY

ZANECO has a total capacity of 55 MVA with 6 Substations. In terms of readiness, the management always planned ahead the scheduling of procurement and uprating of substations to address the capacity and load growth. When it comes to the distribution lines, there are network capex projects for rehabilitation/reconductoring and construction of distribution lines applied in CapEx 2009-2013 & 2016-2018 and the on-going preparation of CapEx projects 2019-2021. For the Loading capacity of existing substations, the Polo will be replaced by a 20 MVA and the target date of energization will be this year while Liloy Substation is for refurbishing and relocation to load center. Based on the results of forecasting and comprehensive planning, several projects are being laid out in order to improve the capacity, security, power quality, reliability, and efficiency of ZANECO's distribution system. The cooperative already filed its Multi-year Capital Expenditure Projects (CapEx) for the year 2016-2018 and by this year will apply for Capital Expenditure Projects (CapEx) 2019-2021. Though, we are still waiting for the decision from the Commission, some of the projects were implemented because of provisional authority from ERC. For the year 2018, ZANECO will construct the 5-MVA Sindangan Substation, 20- MVA Polo Substation and continue the construction of a 66-km 69 kV Sub-transmission Line from Piao, Roxas to Poblacion, Sindangan. Also, we expect ERC's approval on our acquisition of the 69 kV Sub-transmission Assets of TRANSCO. A commercial building (CITY MALL) is expected to operate this 2019 with an estimated demand of 2.0 Megawatt. All efforts of ZANECO are also aligned with the compliance of the Philippine Grid Code and Philippine Distribution Code. ZANECO has 15 full compliant for Philippine Distribution Code Compliance.

10 Year Monthly Forecasted Data

Year	Forecast			Contracted and For PSA Approval Demand and Energy		Uncontracted Demand and Energy		Committed for CSP	
	Coinciden t Peak Demand (MW)	Off Peak Demand (MW)	Energy Requireme nt (MWh)	Demand (MW)	Energy (MWh)	Uncontrac ted Demand (MW)	Uncontrac ted Energy (MWh)	Demand (MW)	Energy (MWh)
2018									
Jan	38.65		18,434	43.48	23,713	-	-		
Feb	37.02		18,246	43.77	23,880	-	-		
Mar	37.16		17,188	44.83	22,142	-	-		
Apr	38.67		19,059	45.19	24,729	-	-		
May	37.99		19,338	46.19	24,509	-	-		
Jun	39.00		19,393	45.63	24,993	-	-		
Jul	38.06		18,076	43.72	23,085	-	-		
Aug	38.63		19,428	64.72	37,587	-	-		
Sep	38.38		18,973	64.47	37,442	-	-		
Oct	39.00		18,376	65.08	36,584	-	-		
Nov	39.87		19,261	65.93	38,310	-	-		
Dec	40.49		18,911	66.54	37,424	-	-		
2019									
Jan	40.47		19,061	69.66	40,420	-	-		
Feb	38.76		18,864	68.82	39,923	-	-		
Mar	38.90		17,767	69.89	36,636	-	-		
Apr	40.47		19,698	70.66	41,014	-	-		
May	39.76		19,982	70.31	39,493	-	-		
Jun	40.80		20,036	70.82	41,111	-	-		
Jul	39.82		18,672	69.34	38,932	-	-		
Aug	40.41		20,066	70.62	40,996	-	-		
Sep	40.14		19,592	70.50	40,919	-	-		
Oct	40.79		18,973	70.81	39,780	-	-		
Nov	41.69		19,883	71.25	41,368	-	-		
Dec	42.34		19,518	71.56	40,214	-	-		
2020									
Jan	42.25		19,659	63.18	36,869	-	-		
Feb	40.45		19,452	62.83	36,661	-	-		
Mar	40.60		18,319	62.86	33,129	-	-		
Apr	42.23		20,306	63.17	36,867	-	-		
May	41.48		20,596	63.03	35,594	-	-		
Jun	42.56		20,648	63.24	36,905	-	-		
Jul	41.53		19,239	63.04	35,600	-	-		
Aug	42.14		20,673	63.16	36,857	-	-		
Sep	41.86		20,182	63.10	36,824	-	-		
Oct	42.53		19,540	63.23	35,711	-	-		
Nov	43.47		20,475	63.41	37,010	-	-		
Dec	44.13		20,097	63.54	35,890	-	-		
2021									

POWER SUPPLY PROCUREMENT PLAN

Jan	43.85		20,202	63.18	36,788	-	-	10.00	4,836
Feb	41.99		19,992	62.83	36,580	-	-	10.00	4,836
Mar	42.15		18,830	62.86	33,056	-	-	10.00	4,368
Apr	43.85		20,876	63.17	36,785	-	-	10.00	4,836
May	43.08		21,178	63.03	35,515	-	-	10.00	4,680
Jun	44.21		21,235	63.24	36,824	-	-	10.00	4,836
Jul	43.14		19,789	63.04	35,521	-	-	10.00	4,680
Aug	43.78		21,267	63.16	36,775	-	-	10.00	4,836
Sep	43.49		20,765	63.10	36,742	-	-	10.00	4,836
Oct	44.19		20,108	63.23	35,632	-	-	10.00	4,680
Nov	45.17		21,073	63.41	36,928	-	-	10.00	4,836
Dec	45.87		20,687	63.54	35,811	-	-	10.00	4,680
2022									
Jan	45.47		20,748	63.18	36,869	-	-	10.00	4,836
Feb	43.53		20,533	62.83	36,661	-	-	10.00	4,836
Mar	43.70		19,339	62.86	33,129	-	-	10.00	4,368
Apr	45.46		21,441	63.17	36,867	-	-	10.00	4,836
May	44.67		21,751	63.03	35,594	-	-	10.00	4,680
Jun	45.84		21,809	63.24	36,905	-	-	10.00	4,836
Jul	44.73		20,324	63.04	35,600	-	-	10.00	4,680
Aug	45.39		21,842	63.16	36,857	-	-	10.00	4,836
Sep	45.09		21,327	63.10	36,824	-	-	10.00	4,836
Oct	45.82		20,652	63.23	35,711	-	-	10.00	4,680
Nov	46.84		21,643	63.41	37,010	-	-	10.00	4,836
Dec	47.56		21,246	63.54	35,890	-	-	10.00	4,680
2023									
Jan	47.03		21,288	63.18	36,563	-	-	10.00	4,836
Feb	45.03		21,068	62.83	36,357	-	-	10.00	4,836
Mar	45.21		19,843	62.86	32,854	-	-	10.00	4,368
Apr	47.03		21,999	63.17	36,561	-	-	10.00	4,836
May	46.20		22,317	63.03	35,299	-	-	10.00	4,680
Jun	47.42		22,377	63.24	36,599	-	-	10.00	4,836
Jul	46.27		20,854	63.04	35,304	-	-	10.00	4,680
Aug	46.96		22,411	63.16	36,551	-	-	10.00	4,836
Sep	46.65		21,882	63.10	36,518	-	-	10.00	4,836
Oct	47.40		21,190	63.23	35,415	-	-	10.00	4,680
Nov	48.45		22,207	63.41	36,703	-	-	10.00	4,836
Dec	49.20		21,800	63.54	35,592	-	-	10.00	4,680
2024									
Jan	48.55		21,831	63.18	36,573	-	-	10.00	4,836
Feb	46.49		21,605	62.83	36,367	-	-	10.00	4,836
Mar	46.67		20,349	62.86	32,863	-	-	10.00	4,368
Apr	48.55		22,560	63.17	36,571	-	-	10.00	4,836
May	47.70		22,886	63.03	35,309	-	-	10.00	4,680
Jun	48.95		22,948	63.24	36,609	-	-	10.00	4,836
Jul	47.76		21,385	63.04	35,314	-	-	10.00	4,680
Aug	48.47		22,982	63.16	36,561	-	-	10.00	4,836
Sep	48.15		22,440	63.10	36,529	-	-	10.00	4,836
Oct	48.93		21,730	63.23	35,425	-	-	10.00	4,680
Nov	50.02		22,773	63.41	36,713	-	-	10.00	4,836

POWER SUPPLY PROCUREMENT PLAN

Dec	50.79		22,356	63.54	35,602	-	-	10.00	4,680
2025									
Jan	50.03		22,384	63.18	36,869	-	-	10.00	4,836
Feb	47.90		22,152	62.83	36,661	-	-	10.00	4,836
Mar	48.09		20,864	62.86	33,129	-	-	10.00	4,368
Apr	50.02		23,131	63.17	36,867	-	-	10.00	4,836
May	49.15		23,465	63.03	35,594	-	-	10.00	4,680
Jun	50.44		23,528	63.24	36,905	-	-	10.00	4,836
Jul	49.21		21,927	63.04	35,600	-	-	10.00	4,680
Aug	49.95		23,564	63.16	36,857	-	-	10.00	4,836
Sep	49.62		23,008	63.10	36,824	-	-	10.00	4,836
Oct	50.42		22,280	63.23	35,711	-	-	10.00	4,680
Nov	51.54		23,350	63.41	37,010	-	-	10.00	4,836
Dec	52.33		22,921	63.54	35,890	-	-	10.00	4,680
2026									
Jan	51.46		22,852	63.18	36,869	-	-	10.00	4,836
Feb	49.27		22,616	62.83	36,661	-	-	10.00	4,836
Mar	49.46		21,301	62.86	33,129	-	-	10.00	4,368
Apr	51.46		23,616	63.17	36,867	-	-	10.00	4,836
May	50.55		23,957	63.03	35,594	-	-	10.00	4,680
Jun	51.88		24,021	63.24	36,905	-	-	10.00	4,836
Jul	50.62		22,386	63.04	35,600	-	-	10.00	4,680
Aug	51.38		24,057	63.16	36,857	-	-	10.00	4,836
Sep	51.04		23,490	63.10	36,824	-	-	10.00	4,836
Oct	51.86		22,747	63.23	35,711	-	-	10.00	4,680
Nov	53.01		23,839	63.41	37,010	-	-	10.00	4,836
Dec	53.83		23,401	63.54	35,890	-	-	10.00	4,680
2027									
Jan	52.85		23,341	63.18	36,482	-	-	10.00	4,836
Feb	50.61		23,099	62.83	36,276	-	-	10.00	4,836
Mar	50.80		21,757	62.86	32,781	-	-	10.00	4,368
Apr	52.85		24,120	63.17	36,479	-	-	10.00	4,836
May	51.92		24,469	63.03	35,220	-	-	10.00	4,680
Jun	53.29		24,535	63.24	36,518	-	-	10.00	4,836
Jul	52.00		22,864	63.04	35,226	-	-	10.00	4,680
Aug	52.77		24,572	63.16	36,469	-	-	10.00	4,836
Sep	52.42		23,992	63.10	36,437	-	-	10.00	4,836
Oct	53.27		23,233	63.23	35,336	-	-	10.00	4,680
Nov	54.45		24,348	63.41	36,621	-	-	10.00	4,836
Dec	55.29		23,902	63.54	35,513	-	-	10.00	4,680

10 Year Monthly Historical Data

Year	Historical			Contracted and For PSA Approval Demand and Energy		Uncontracted Demand and Energy		Committed for CSP	
	Coinciden t Peak Demand (MW)	Off Peak Demand (MW)	Energy Requireme nt (MWh)	Demand (MW)	Energy (MWh)	Uncontrac ted Demand (MW)	Uncontracted Energy (MWh)	Demand (MW)	Energy (MWh)
2008									
Jan	24.09		11,219	27.10	9,506	-	1,712.59		
Feb	22.47		11,069	26.81	9,180	-	1,888.83		
Mar	23.09		10,525	26.98	9,364	-	1,161.02		
Apr	23.25		11,896	27.16	9,551	-	2,345.22		
May	22.73		10,804	27.34	9,742	-	1,061.63		
Jun	23.03		11,386	27.51	9,937	-	1,449.43		
Jul	22.95		10,881	27.69	10,135	-	745.69		
Aug	22.57		11,143	27.87	10,135	-	1,007.48		
Sep	22.92		11,151	24.81	10,254	-	896.94		
Oct	23.66		11,420	25.72	10,188	-	1,232.39		
Nov	24.66		11,692	25.06	10,039	-	1,653.10		
Dec	25.37		11,523	27.11	10,520	-	1,002.74		
2009									
Jan	23.87		10,168	29.81	10,135	-	32.07		
Feb	23.71		11,914	29.49	9,410	-	2,504.17		
Mar	24.23		11,220	29.68	9,598	-	1,622.16		
Apr	23.89		12,490	29.88	9,790	-	2,700.25		
May	24.04		11,920	30.07	9,985	-	1,934.51		
Jun	24.06		12,588	30.26	10,185	-	2,403.32		
Jul	23.71		11,863	30.46	10,389	-	1,473.82		
Aug	24.77		12,320	30.65	10,389	-	1,930.92		
Sep	24.54		12,253	27.29	10,511	-	1,741.74		
Oct	24.60		11,527	28.30	10,443	-	1,083.94		
Nov	24.04		12,496	27.57	10,290	-	2,205.99		
Dec	25.32		11,981	29.82	10,783	-	1,198.31		
2010									
Jan	25.52		12,442	32.20	10,511	-	1,931.38		
Feb	23.54		12,079	31.85	9,645	-	2,433.83		
Mar	23.26		10,699	32.06	9,838	-	861.73		
Apr	25.65		11,813	32.27	10,034	-	1,778.72		
May	25.37		12,534	32.48	10,235	-	2,299.18		
Jun	25.34		13,178	32.68	10,440	-	2,737.85		
Jul	24.98		12,315	32.90	10,649	-	1,666.53		
Aug	24.74		12,804	33.10	10,649	-	2,155.43		
Sep	25.16		12,878	29.48	10,774	-	2,104.79		
Oct	25.18		12,446	30.56	10,704	-	1,741.86		
Nov	26.72		13,240	29.78	10,548	-	2,692.33		
Dec	26.95		12,829	32.20	11,053	-	1,776.01		
2011									

POWER SUPPLY PROCUREMENT PLAN

Jan	26.72		13,126	34.45	10,649	-	2,477.31		
Feb	25.41		12,760	34.08	9,886	-	2,874.48		
Mar	23.78		11,834	34.30	10,084	-	1,750.86		
Apr	24.77		13,699	34.52	10,285	-	3,414.08		
May	26.06		14,222	34.75	10,491	-	3,731.29		
Jun	27.29		13,744	34.97	10,701	-	3,043.67		
Jul	25.96		13,335	35.20	10,915	-	2,420.11		
Aug	27.31		14,234	35.42	10,915	-	3,319.64		
Sep	26.57		13,918	21.20	7,376	5.36	6,541.72		
Oct	28.05		13,684	19.75	6,584	8.30	7,100.32		
Nov	28.59		14,352	19.91	7,052	8.69	7,300.75		
Dec	29.48		13,705	23.19	7,959	6.29	5,746.15		
2012									
Jan	29.22		14,309	27.53	7,545	1.69	6,763.61		
Feb	28.77		14,304	31.30	7,920	-	6,384.40		
Mar	28.88		13,621	31.07	8,446	-	5,175.60		
Apr	29.02		14,827	24.81	7,760	4.21	7,066.34		
May	28.08		14,762	35.91	10,016	-	4,746.45		
Jun	29.82		14,808	34.11	9,199	-	5,609.44		
Jul	29.16		13,709	33.92	9,515	-	4,193.97		
Aug	29.61		14,731	36.06	10,274	-	4,456.55		
Sep	29.17		14,316	29.80	9,605	-	4,711.49		
Oct	28.91		13,829	32.33	11,194	-	2,634.68		
Nov	29.91		14,362	30.52	11,175	-	3,186.57		
Dec	29.82		14,405	31.55	10,192	-	4,213.12		
2013									
Jan	29.81		14,765	27.58	13,526	2.23	1,239.04		
Feb	29.33		14,622	24.85	12,908	4.48	1,713.82		
Mar	29.84		13,980	25.72	13,065	4.12	915.20		
Apr	29.77		15,305	23.97	12,205	5.80	3,099.08		
May	29.44		15,296	23.03	12,194	6.40	3,102.44		
Jun	30.05		15,417	21.14	11,061	8.91	4,356.21		
Jul	28.92		14,196	22.18	11,091	6.73	3,105.07		
Aug	29.81		14,661	26.28	14,402	3.53	259.08		
Sep	29.66		15,016	23.31	13,653	6.35	1,362.76		
Oct	28.89		14,122	22.65	12,424	6.24	1,698.63		
Nov	30.67		14,986	23.97	13,505	6.70	1,481.03		
Dec	31.42		15,352	26.37	13,324	5.05	2,027.96		
2014									
Jan	31.55		14,069	28.68	13,871	2.87	197.97		
Feb	28.92		14,271	27.92	14,873	0.99	-		
Mar	29.49		12,593	27.85	14,338	1.65	-		
Apr	30.50		15,334	25.23	15,842	5.27	-		
May	29.92		14,900	26.02	15,961	3.90	-		
Jun	31.11		16,571	27.56	14,015	3.55	2,556.20		
Jul	29.89		14,822	27.89	12,583	2.00	2,239.55		
Aug	30.96		15,493	32.82	14,692	-	800.07		
Sep	30.31		15,334	30.01	14,028	0.30	1,306.50		
Oct	31.45		15,395	29.06	12,439	2.40	2,956.50		
Nov	31.33		15,595	27.96	12,787	3.37	2,807.42		

POWER SUPPLY PROCUREMENT PLAN

Dec	32.72		16,143	32.52	15,240	0.20	902.99		
2015									
Jan	30.88		15,141	25.08	9,299	5.80	5,841.46		
Feb	30.66		15,477	23.44	9,907	7.22	5,570.48		
Mar	31.64		14,644	24.07	9,721	7.57	4,923.15		
Apr	33.40		17,098	24.50	11,431	8.90	5,667.24		
May	32.10		16,917	25.61	13,094	6.49	3,822.98		
Jun	31.85		16,842	23.54	11,986	8.31	4,856.30		
Jul	31.51		15,572	24.52	12,620	6.99	2,951.84		
Aug	32.99		16,974	27.30	15,339	5.70	1,635.24		
Sep	32.90		17,083	30.01	13,630	2.88	3,453.32		
Oct	33.52		16,486	29.85	13,422	3.67	3,063.94		
Nov	34.35		17,733	30.34	15,124	4.01	2,608.77		
Dec	33.98		17,148	31.43	15,227	2.55	1,920.29		
2016									
Jan	33.70		18,092	29.59	16,853	4.11	1,238.58		
Feb	33.30		17,664	28.94	17,195	4.36	468.94		
Mar	33.26		16,632	29.30	17,258	3.96	-		
Apr	35.16		17,342	28.10	18,152	7.05	-		
May	35.44		19,327	27.54	17,544	7.91	1,782.55		
Jun	36.08		18,832	27.13	15,430	8.95	3,402.58		
Jul	34.78		16,072	26.87	13,393	7.91	2,678.84		
Aug	35.65		16,860	28.24	15,621	7.41	1,238.57		
Sep	35.58		17,261	27.20	14,815	8.38	2,445.75		
Oct	36.51		16,635	27.42	12,849	9.08	3,785.75		
Nov	35.48		17,916	27.74	14,124	7.74	3,791.34		
Dec	36.53		17,342	28.93	13,063	7.60	4,279.37		
2017									
Jan	36.02		18,076	30.18	14,230	5.85	3,845.87		
Feb	35.96		16,983	33.96	15,113	2.00	1,869.89		
Mar	34.92		15,470	34.47	13,093	0.46	2,376.98		
Apr	37.04		18,510	32.96	14,563	4.09	3,946.64		
May	36.98		17,707	32.72	15,873	4.26	1,833.98		
Jun	36.78		18,414	32.27	14,458	4.52	3,955.48		
Jul	36.09		16,812	32.72	11,831	3.38	4,980.99		
Aug	37.09		18,787	33.96	15,254	3.13	3,533.49		
Sep	36.31		19,250	34.03	14,387	2.28	4,862.50		
Oct	38.09		16,975	34.00	15,614	4.09	1,361.35		
Nov	38.10		18,123	34.38	16,938	3.72	1,185.00		
Dec	39.08		14,353	35.58	14,112	3.50	241.23		