

BEZ POWER SUPPLY PROCUREMENT PLAN

TABLE OF CONTENTS

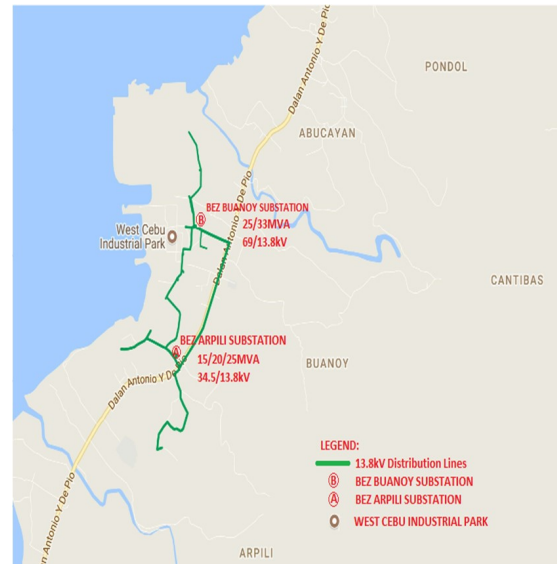
- I. Table of Contents
- II. Introduction
- III. Energy and Demand Forecast (10 year historical and forecast)
- IV. Energy Sales and Purchase
- V. Daily Load Profile and Load Duration Curve
- VI. Existing Contracts and Existing GenCos due diligence Report
- VII. DU's Current Supply and Demand
- VIII. Distribution Impact Study
- IX. Schedule of Power Supply Procurement
- X. Timeline of CSP

INTRODUCTION

DISTRIBUTION UTILITIES PROFILE

Balamban Enerzone Corporation (BEZ) engages in the distribution of electricity to the West Cebu Industrial Park (WCIP), Special Economic Zone, Buanoy, Balamban, Cebu under the authority of Philippine Economic Zone Authority (PEZA). The economic zone has an area of 280 hectares and has not been fully occupied. BEZ has a total of 31 customers as of May 2018 composed of 11 commercial and 20 industrial wherein 6 of it are contestable customers. In 2017 BEZ has a maximum demand of 26,517 kW, 1,500 kW for captive customers while 25,017 kW is for the contestable customers.

DU's FRANCHISE MAP



Number of Customer	ACTUAL	FORECAST									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	0	0	0	0	0	0	0	0	0	0	0
Commercial	11	12	12	12	12	12	12	12	12	12	12
Industrial	14	14	15	15	15	15	15	15	15	15	15
Others	0	0	0	0	0	0	0	0	0	0	0
Contestable Customers	6	6	6	6	6	6	6	6	6	6	6
Total (Captive Customers)	25	26	27	27	27	27	27	27	27	27	27

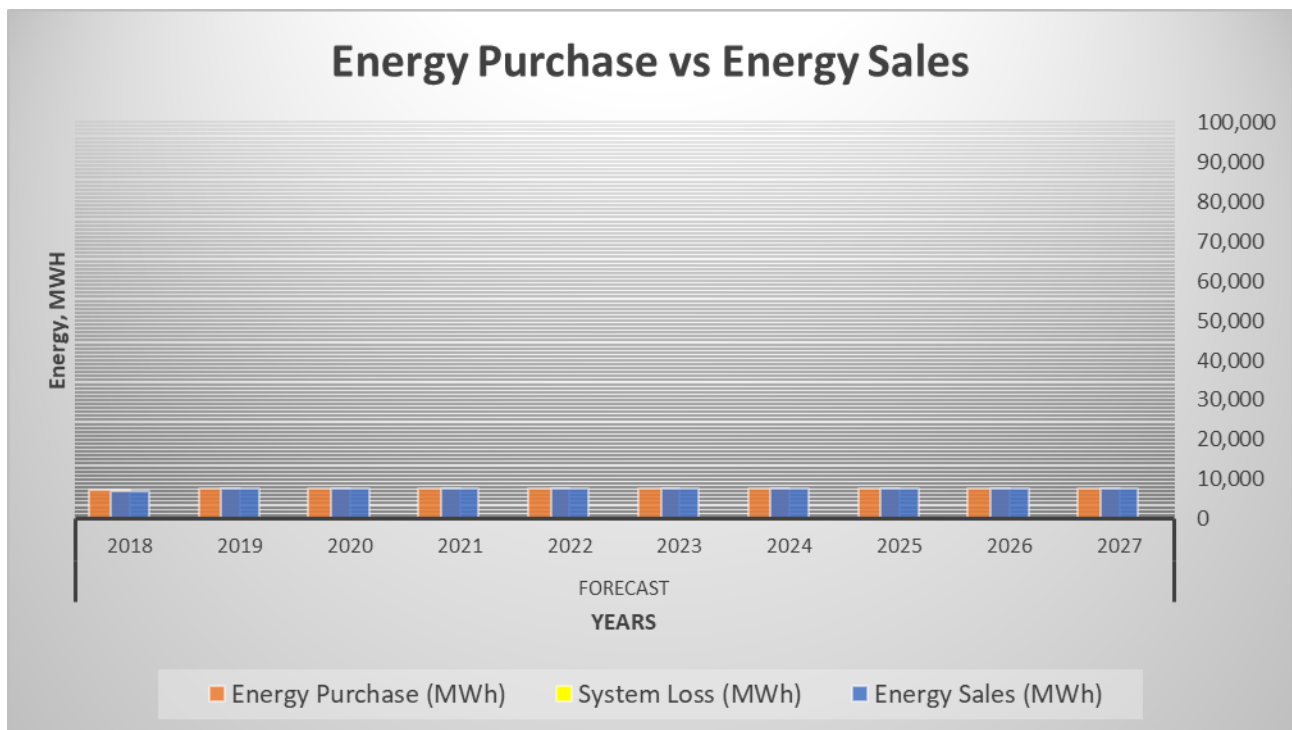
In year 2017, BEZ recorded the maximum demand of 26,517 kW, and lowest at 24,604 kW. Currently, there are available lots for lease at the West Cebu Industrial Park and has potential for growth.



ENERGY SALES AND PURCHASE

ENERGY SALES AND PURCHASE	HISTORICAL									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Energy Sales (MWh)	63,329	60,376	90,174	116,377	124,299	113,779	107,329	113,874	93,572	8,663
Energy Purchase (MWh)	64,205	61,691	91,522	117,958	126,269	115,364	108,330	114,911	94,286	8,727
System Loss (MWh)	876	1,315	1,348	1,581	1,970	1,585	1,001	1,037	714	64

ENERGY SALES AND PURCHASE	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Energy Sales (MWh)	7,176	7,730	7,730	7,730	7,730	7,730	7,730	7,730	7,730	7,730
Energy Purchase (MWh)	7,238	7,794	7,795	7,795	7,795	7,795	7,795	7,795	7,795	7,795
System Loss (MWh)	62	64	65	65	65	65	65	65	65	65

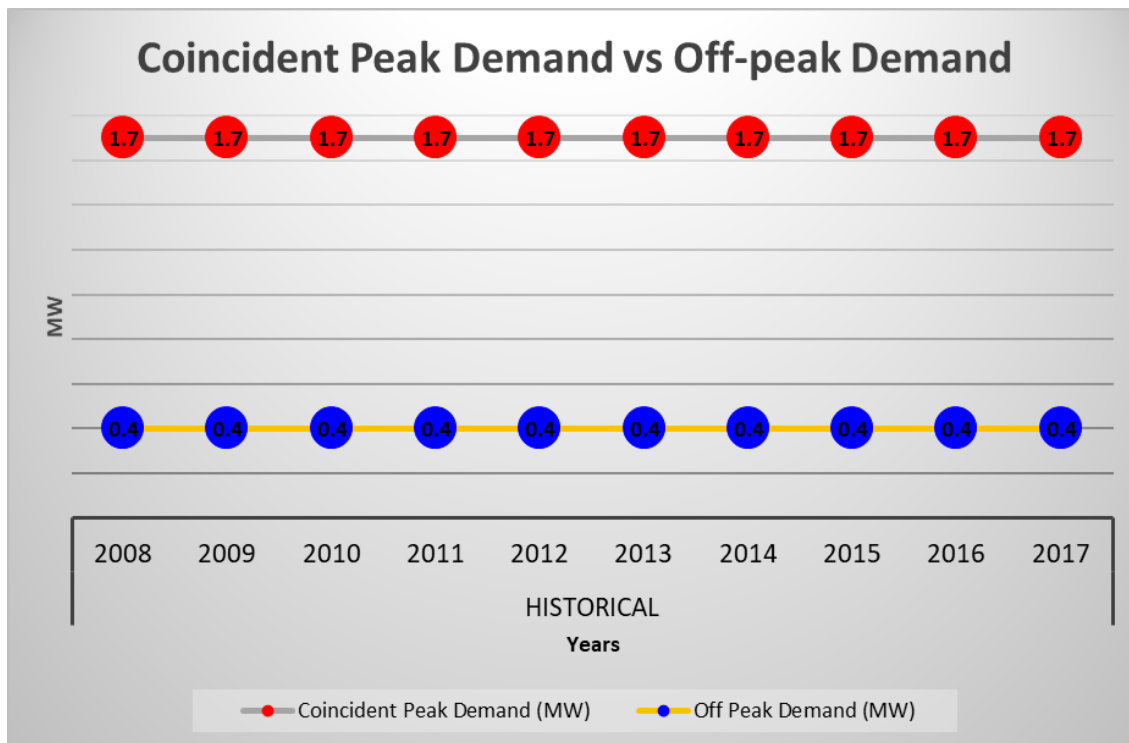


With the operation of RCOA in the Visayas in June 2016 all the 6 BEZ contestable customers switched to the RES starting with ALPLUS in June 26, 2016. In January 26, 2017, the remaining 5 contestable customers already switched to their respective RES. BEZ energy purchased dropped by 90%.

DEMAND

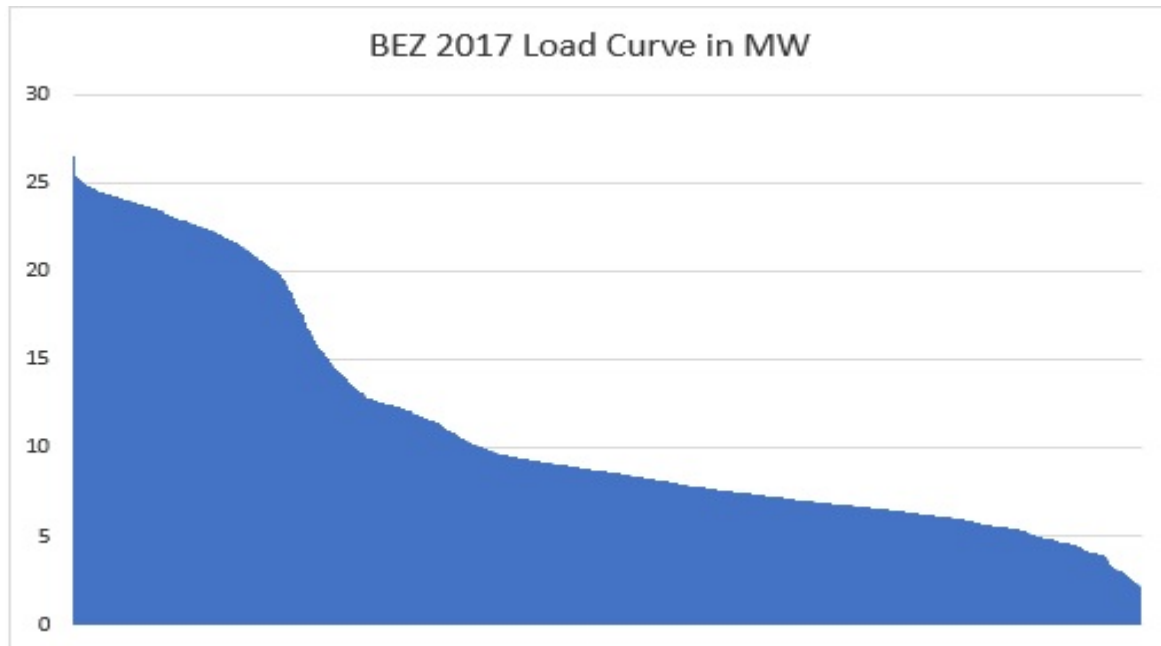
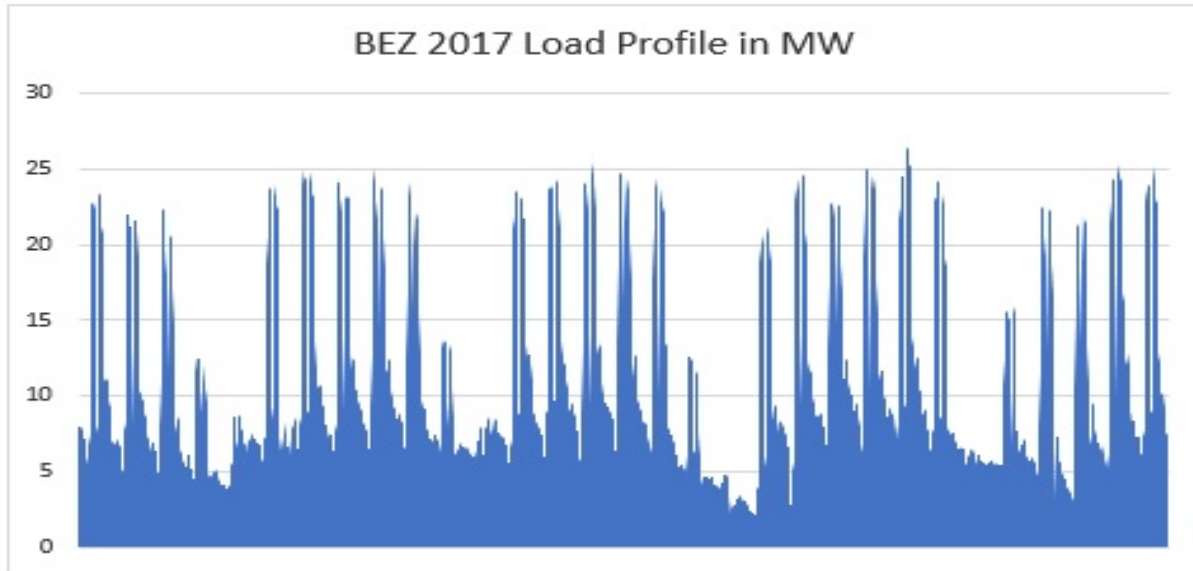
Demand	HISTORICAL									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Coincident Peak Demand (MW)	15.93	21.23	26.82	32.12	34.32	32.84	28.41	30.38	22.6	1.5
Off Peak Demand (MW)	10.69	12.5	16	19.23	19.99	18.16	19.63	18.71	20.19	0.4

Demand	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Coincident Peak Demand (MW)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Off Peak Demand (MW)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



With the entry of RCOA BEZ captive demand dropped to 1.7 MW

LOAD PROFILE AND LOAD DURATION CURVE

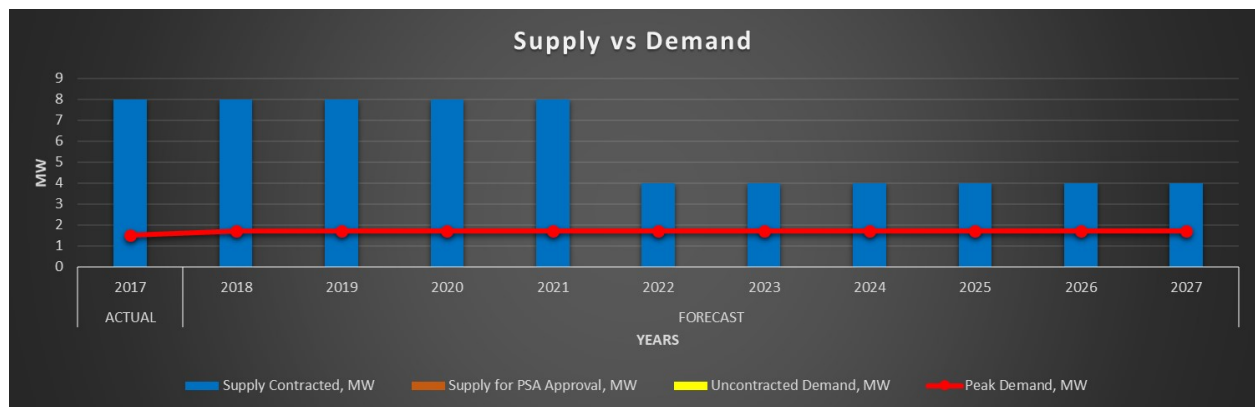


Load Profile shows the total demand of BEZ including the demand of the 6 contestable customers served by RES.

POWER SUPPLY PROCUREMENT PLAN

MIX SUPPLY VS DEMAND AND THE OPTIMAL SUPPLY

Supply Demand	ACTUAL	FORECAST									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Peak Demand, MW	1.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Supply Contracted, MW	8	8	8	8	8	4	4	4	4	4	4
Cebu Energy development Cor	8	8	8	8	8	4	4	4	4	4	4
Generation Plant Name 2											
Generation Plant Name 3											
Supply for PSA Approval, MW	0	0	0	0	0	0	0	0	0	0	0
Generation Plant Name 1	0	0	0	0	0	0	0	0	0	0	0
Generation Plant Name 2	0	0	0	0	0	0	0	0	0	0	0
Generation Plant Name 3	0	0	0	0	0	0	0	0	0	0	0
Uncontracted Demand, MW	0	0	0	0	0	0	0	0	0	0	0



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)
CEDC	GBPC	75%	Dec. 2010	Feb 2025	4	26,280	Base	Grid	IPP	Active	Coal	246	210
CEDC	GBPC	75%	Sept 2011	Sept. 2021	4	26,280	Base	Grid	IPP	Active	Coal	246	210

BEZ has 2 firm contracts with Cebu Energy Development Corporation (CEDC). CEDC has 3 coal fired power plants located at Sangi, Toledo City with an installed capacity of 246 MW and net dependable capacity of 210 MW. BEZ 1st PSA with CEDC is 4MW at a load factor of 75% while the 2nd PSA with CEDC is another 4MW at 75% . Total BEZ contracted demand with CEDC is 8MW.

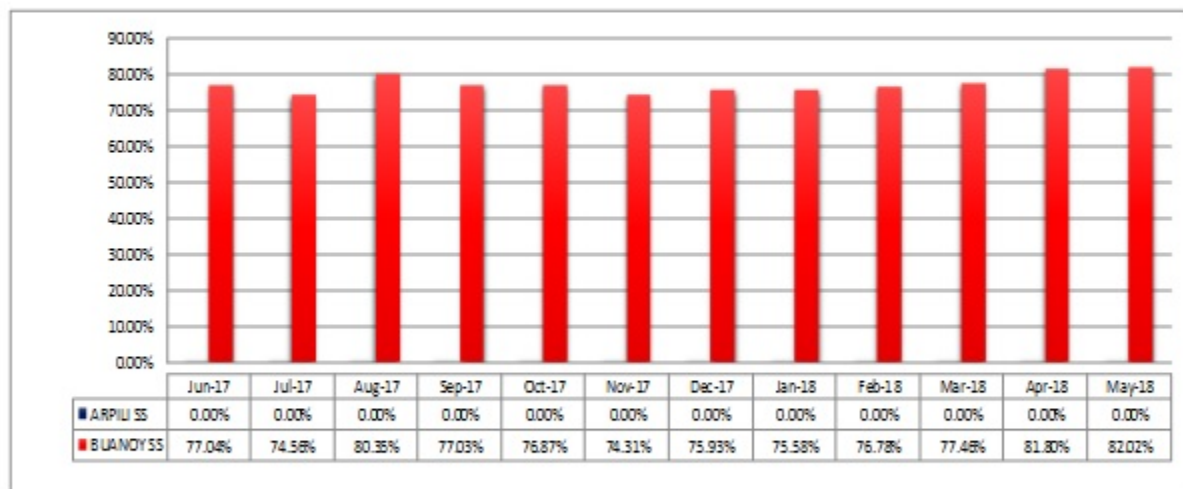
With the full RCOA implementation in 2017 BEZ demand dropped to 1.7 MW .

BEZ existing contracted demand with CEDC is more than enough to serve BEZ captive customers demand until 2025.

DISTRIBUTION IMPACT STUDY

Balamban Enerzone Corporation has 2 power substations namely, Arpili SS and Buanoy SS rated at 25 MVA and 33 MVA respectively for a total transformation capacity of 58 MVA. Arpili SS has 3 feeders while Buanoy SS has 4 feeders. Currently only the Buanoy SS is energized loaded at 82% as of May 2018. BEZ Arpili SS is on hot standby and can be energized anytime to serve the additional BEZ loading. BEZ peak demand as of May 2018 is 27,065 MW.

% SUBSTATION LOADING



POWER SUPPLY PROCUREMENT PLAN

SCHEDULE OF CSP

Base / mid-merit / peaking	For CSP		Proposed contract		Proposed schedule (MM/YYYY)						
	Demand (MW)	Energy (MWh)	Start Month and Year	End Month and Year	Publication of Invitation to Bid	Pre-bid Conference	Submission and Opening of Bids	Bid Evaluation	Awarding	PSA Signing	Joint Application to ERC
NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

BEZ intends to procure the uncontracted demand in 2025 – 2027 at the WESM

POWER SUPPLY PROCUREMENT PLAN

10 Year Monthly Data

Year	Forecast			Contracted and For PSA Approval Demand and Energy		Uncontracted Demand and Energy		Committed for CSP	
	Coincident Peak Demand (MW)	Off Peak Demand (MW)	Energy Requirement (MWh)	Demand (MW)	Energy (MWh)	Uncontracte d Demand (MW)	Uncontract ed Energy (MWh)	Demand (MW)	Energy (MWh)
2018								-	-
Jan	1.70	0.40	533.56	8.00	4,464.00	-	-	-	-
Feb	1.70	0.40	608.10	8.00	4,464.00	-	-	-	-
Mar	1.70	0.40	503.54	8.00	4,032.00	-	-	-	-
Apr	1.70	0.40	563.74	8.00	4,464.00	-	-	-	-
May	1.70	0.40	638.37	8.00	4,320.00	-	-	-	-
Jun	1.70	0.40	555.89	8.00	4,464.00	-	-	-	-
Jul	1.70	0.40	611.52	8.00	4,320.00	-	-	-	-
Aug	1.70	0.40	628.63	8.00	4,464.00	-	-	-	-
Sep	1.70	0.40	628.63	8.00	4,464.00	-	-	-	-
Oct	1.70	0.40	657.17	8.00	4,320.00	-	-	-	-
Nov	1.70	0.40	621.78	8.00	4,464.00	-	-	-	-
Dec	1.70	0.40	624.78	8.00	4,320.00	-	-	-	-
2019									
Jan	1.70	0.40	537.49	8.00	4,464.00	-	-	-	-
Feb	1.70	0.40	633.43	8.00	4,464.00	-	-	-	-
Mar	1.70	0.40	530.36	8.00	4,032.00	-	-	-	-
Apr	1.70	0.40	583.33	8.00	4,464.00	-	-	-	-
May	1.70	0.40	666.55	8.00	4,320.00	-	-	-	-
Jun	1.70	0.40	598.78	8.00	4,464.00	-	-	-	-
Jul	1.70	0.40	663.63	8.00	4,320.00	-	-	-	-
Aug	1.70	0.40	687.30	8.00	4,464.00	-	-	-	-
Sep	1.70	0.40	671.32	8.00	4,464.00	-	-	-	-
Oct	1.70	0.40	729.83	8.00	4,320.00	-	-	-	-
Nov	1.70	0.40	704.09	8.00	4,464.00	-	-	-	-
Dec	1.70	0.40	724.43	8.00	4,320.00	-	-	-	-
2020									
Jan	1.70	0.40	537.49	8.00	4,464.00	-	-	-	-
Feb	1.70	0.40	633.43	8.00	4,464.00	-	-	-	-
Mar	1.70	0.40	530.36	8.00	4,032.00	-	-	-	-
Apr	1.70	0.40	583.33	8.00	4,464.00	-	-	-	-
May	1.70	0.40	666.55	8.00	4,320.00	-	-	-	-
Jun	1.70	0.40	598.78	8.00	4,464.00	-	-	-	-
Jul	1.70	0.40	663.63	8.00	4,320.00	-	-	-	-
Aug	1.70	0.40	687.30	8.00	4,464.00	-	-	-	-
Sep	1.70	0.40	671.32	8.00	4,464.00	-	-	-	-
Oct	1.70	0.40	729.83	8.00	4,320.00	-	-	-	-
Nov	1.70	0.40	704.09	8.00	4,464.00	-	-	-	-
Dec	1.70	0.40	724.43	8.00	4,320.00	-	-	-	-

POWER SUPPLY PROCUREMENT PLAN

2021									
Jan	1.70	0.40	537.49	8.00	4,464.00	-	-	-	-
Feb	1.70	0.40	633.43	8.00	4,464.00	-	-	-	-
Mar	1.70	0.40	530.36	8.00	4,176.00	-	-	-	-
Apr	1.70	0.40	583.33	8.00	4,464.00	-	-	-	-
May	1.70	0.40	666.55	8.00	4,320.00	-	-	-	-
Jun	1.70	0.40	598.78	8.00	4,464.00	-	-	-	-
Jul	1.70	0.40	663.63	8.00	4,320.00	-	-	-	-
Aug	1.70	0.40	687.30	8.00	4,464.00	-	-	-	-
Sep	1.70	0.40	671.32	8.00	4,464.00	-	-	-	-
Oct	1.70	0.40	729.83	4.00	2,160.00	-	-	-	-
Nov	1.70	0.40	704.09	4.00	2,232.00	-	-	-	-
Dec	1.70	0.40	724.43	4.00	2,160.00	-	-	-	-
2022									
Jan	1.70	0.40	537.49	4.00	2,232.00	-	-	-	-
Feb	1.70	0.40	633.43	4.00	2,232.00	-	-	-	-
Mar	1.70	0.40	530.36	4.00	2,016.00	-	-	-	-
Apr	1.70	0.40	583.33	4.00	2,232.00	-	-	-	-
May	1.70	0.40	666.55	4.00	2,160.00	-	-	-	-
Jun	1.70	0.40	598.78	4.00	2,232.00	-	-	-	-
Jul	1.70	0.40	663.63	4.00	2,160.00	-	-	-	-
Aug	1.70	0.40	687.30	4.00	2,232.00	-	-	-	-
Sep	1.70	0.40	671.32	4.00	2,232.00	-	-	-	-
Oct	1.70	0.40	729.83	4.00	2,160.00	-	-	-	-
Nov	1.70	0.40	704.09	4.00	2,232.00	-	-	-	-
Dec	1.70	0.40	724.43	4.00	2,160.00	-	-	-	-
2023									
Jan	1.70	0.40	537.49	4.00	2,232.00	-	-	-	-
Feb	1.70	0.40	633.43	4.00	2,232.00	-	-	-	-
Mar	1.70	0.40	530.36	4.00	2,016.00	-	-	-	-
Apr	1.70	0.40	583.33	4.00	2,232.00	-	-	-	-
May	1.70	0.40	666.55	4.00	2,160.00	-	-	-	-
Jun	1.70	0.40	598.78	4.00	2,232.00	-	-	-	-
Jul	1.70	0.40	663.63	4.00	2,160.00	-	-	-	-
Aug	1.70	0.40	687.30	4.00	2,232.00	-	-	-	-
Sep	1.70	0.40	671.32	4.00	2,232.00	-	-	-	-
Oct	1.70	0.40	729.83	4.00	2,160.00	-	-	-	-
Nov	1.70	0.40	704.09	4.00	2,232.00	-	-	-	-
Dec	1.70	0.40	724.43	4.00	2,160.00	-	-	-	-
2024									
Jan	1.70	0.40	537.49	4.00	2,232.00	-	-	-	-
Feb	1.70	0.40	633.43	4.00	2,232.00	-	-	-	-
Mar	1.70	0.40	530.36	4.00	2,016.00	-	-	-	-
Apr	1.70	0.40	583.33	4.00	2,232.00	-	-	-	-
May	1.70	0.40	666.55	4.00	2,160.00	-	-	-	-
Jun	1.70	0.40	598.78	4.00	2,232.00	-	-	-	-
Jul	1.70	0.40	663.63	4.00	2,160.00	-	-	-	-
Aug	1.70	0.40	687.30	4.00	2,232.00	-	-	-	-
Sep	1.70	0.40	671.32	4.00	2,232.00	-	-	-	-
Oct	1.70	0.40	729.83	4.00	2,160.00	-	-	-	-

POWER SUPPLY PROCUREMENT PLAN

Nov	1.70	0.40	704.09	4.00	2,232.00	-	-	-	-
Dec	1.70	0.40	724.43	4.00	2,160.00	-	-	-	-
2025									
Jan	1.70	0.40	537.49	4.00	2,232.00	-	-	-	-
Feb	1.70	0.40	633.43	4.00	2,232.00	-	-	-	-
Mar	1.70	0.40	530.36	-		1.70	530.36	-	-
Apr	1.70	0.40	583.33	-		1.70	583.33	-	-
May	1.70	0.40	666.55	-		1.70	666.55	-	-
Jun	1.70	0.40	598.78	-		1.70	598.78	-	-
Jul	1.70	0.40	663.63	-		1.70	663.63	-	-
Aug	1.70	0.40	687.30	-		1.70	687.30	-	-
Sep	1.70	0.40	671.32	-		1.70	671.32	-	-
Oct	1.70	0.40	729.83	-		1.70	729.83	-	-
Nov	1.70	0.40	704.09	-		1.70	704.09	-	-
Dec	1.70	0.40	724.43	-		1.70	724.43	-	-
2026									
Jan	1.70	0.40	537.49	-	-	1.70	537.49	-	-
Feb	1.70	0.40	633.43	-	-	1.70	633.43	-	-
Mar	1.70	0.40	530.36	-	-	1.70	530.36	-	-
Apr	1.70	0.40	583.33	-	-	1.70	583.33	-	-
May	1.70	0.40	666.55	-	-	1.70	666.55	-	-
Jun	1.70	0.40	598.78	-	-	1.70	598.78	-	-
Jul	1.70	0.40	663.63	-	-	1.70	663.63	-	-
Aug	1.70	0.40	687.30	-	-	1.70	687.30	-	-
Sep	1.70	0.40	671.32	-	-	1.70	671.32	-	-
Oct	1.70	0.40	729.83	-	-	1.70	729.83	-	-
Nov	1.70	0.40	704.09	-	-	1.70	704.09	-	-
Dec	1.70	0.40	724.43	-	-	1.70	724.43	-	-
2027									
Jan	1.70	0.40	537.49	-	-	1.70	537.49	-	-
Feb	1.70	0.40	633.43	-	-	1.70	633.43	-	-
Mar	1.70	0.40	530.36	-	-	1.70	530.36	-	-
Apr	1.70	0.40	583.33	-	-	1.70	583.33	-	-
May	1.70	0.40	666.55	-	-	1.70	666.55	-	-
Jun	1.70	0.40	598.78	-	-	1.70	598.78	-	-
Jul	1.70	0.40	663.63	-	-	1.70	663.63	-	-
Aug	1.70	0.40	687.30	-	-	1.70	687.30	-	-
Sep	1.70	0.40	671.32	-	-	1.70	671.32	-	-
Oct	1.70	0.40	729.83	-	-	1.70	729.83	-	-
Nov	1.70	0.40	704.09	-	-	1.70	704.09	-	-
Dec	1.70	0.40	724.43	-	-	1.70	724.43	-	-

POWER SUPPLY PROCUREMENT PLAN

Jul	1.50	0.50	657.56	4.00	2,160.00	(2.50)	(1,502.44)	-	-
Aug	1.50	0.50	681.24	4.00	2,232.00	(2.50)	(1,550.76)	-	-
Sep	1.50	0.50	665.25	4.00	2,232.00	(2.50)	(1,566.75)	-	-
Oct	1.50	0.50	723.77	4.00	2,160.00	(2.50)	(1,436.23)	-	-
Nov	1.50	0.50	698.03	4.00	2,232.00	(2.50)	(1,533.97)	-	-
Dec	1.50	0.50	718.37	4.00	2,160.00	(2.50)	(1,441.63)	-	-
2025				-		-	-		
Jan	1.50	0.50	531.43	4.00	2,232.00	(2.50)	(1,700.57)	-	-
Feb	1.50	0.50	627.36	4.00	2,232.00	(2.50)	(1,604.64)	-	-
Mar	1.50	0.50	524.29		-	1.50	524.29	-	-
Apr	1.50	0.50	577.26		-	1.50	577.26	-	-
May	1.50	0.50	660.49		-	1.50	660.49	-	-
Jun	1.50	0.50	592.72		-	1.50	592.72	-	-
Jul	1.50	0.50	657.56		-	1.50	657.56	-	-
Aug	1.50	0.50	681.24		-	1.50	681.24	-	-
Sep	1.50	0.50	665.25		-	1.50	665.25	-	-
Oct	1.50	0.50	723.77		-	1.50	723.77	-	-
Nov	1.50	0.50	698.03		-	1.50	698.03	-	-
Dec	1.50	0.50	718.37		-	1.50	718.37	-	-
2026				-		-	-		
Jan	1.50	0.50	531.43		-	1.50	531.43	-	-
Feb	1.50	0.50	627.36		-	1.50	627.36	-	-
Mar	1.50	0.50	524.29		-	1.50	524.29	-	-
Apr	1.50	0.50	577.26		-	1.50	577.26	-	-
May	1.50	0.50	660.49		-	1.50	660.49	-	-
Jun	1.50	0.50	592.72		-	1.50	592.72	-	-
Jul	1.50	0.50	657.56		-	1.50	657.56	-	-
Aug	1.50	0.50	681.24		-	1.50	681.24	-	-
Sep	1.50	0.50	665.25		-	1.50	665.25	-	-
Oct	1.50	0.50	723.77		-	1.50	723.77	-	-
Nov	1.50	0.50	698.03		-	1.50	698.03	-	-
Dec	1.50	0.50	718.37		-	1.50	718.37	-	-
2027				-		-	-		
Jan	1.50	0.50	531.43		-	1.50	531.43	-	-
Feb	1.50	0.50	627.36		-	1.50	627.36	-	-
Mar	1.50	0.50	524.29		-	1.50	524.29	-	-
Apr	1.50	0.50	577.26		-	1.50	577.26	-	-
May	1.50	0.50	660.49		-	1.50	660.49	-	-
Jun	1.50	0.50	592.72		-	1.50	592.72	-	-
Jul	1.50	0.50	657.56		-	1.50	657.56	-	-
Aug	1.50	0.50	681.24		-	1.50	681.24	-	-
Sep	1.50	0.50	665.25		-	1.50	665.25	-	-
Oct	1.50	0.50	723.77		-	1.50	723.77	-	-
Nov	1.50	0.50	698.03		-	1.50	698.03	-	-
Dec	1.50	0.50	718.37		-	1.50	718.37	-	-

POWER SUPPLY PROCUREMENT PLAN