

**SURIGAO 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 PSSP 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](mailto:doe.csp@gmail.com) or you may contact us through telephone numbers (02) 840-2173 and (02) 479-2900 local 202.

## TABLE OF CONTENTS

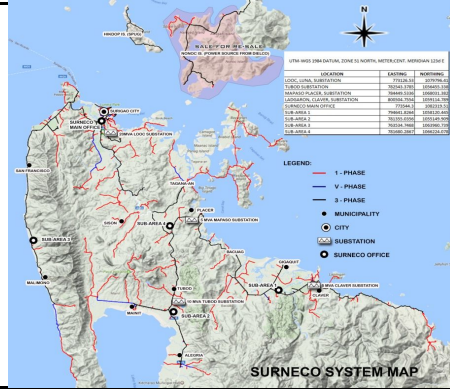
<b>1. Introduction</b>	<b>1</b>
<b>2. Energy and Demand Forecast (10 year historical and forecast)</b>	<b>2</b>
<b>3. Energy Sales and Purchase</b>	<b>3</b>
<b>4. Daily Load Profile and Load Duration Curve</b>	<b>4</b>
<b>5. Existing Contracts &amp; Existing GenCos due diligence report</b>	<b>5</b>
<b>6. Currently approved SAGR for Off-Grid ECs to be passed-on to consumers</b>	<b>5</b>
<b>7. DU's Current Supply and Demand</b>	<b>6</b>
<b>8. Distribution Impact Study</b>	<b>7</b>
<b>9. Schedule of Power Supply Procurement</b>	<b>8</b>
<b>10. Timeline of the CSP</b>	<b>9</b>

## INTRODUCTION

### DISTRIBUTION UTILITIES PROFILE

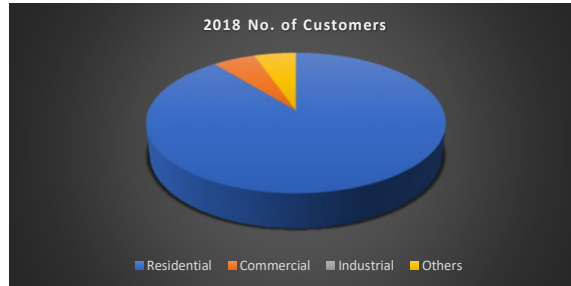
Surigao del Norte Electric Cooperative, Inc. (SURNECO) a A+++ electric cooperative under NEA categorization. It has grid, off-grid and sale for re-sale systems in its franchise area which consists of 1 city and 11 municipalities comprising the 2nd legislative district located in the mainland portion of Surigao del Norte. In the year 2006, a 100% barangay energization was attained. The city and municipalities covered are namely as follows: Surigao City, the municipalities of Alegria, Bacuag, Claver, Gigaquit, Mainit, Malimono, Placer, San Francisco, Sison, Taganaan, and Tubod connected to the Grid. Other system is off-Grid consisting the 7 island barangays in Hikdop Island of Surigao City and the sale for re-sale customers supplied by DIELCO comprising the 8 barangays of Nonoc Island. In the year 2018, SURNECO has a coincident peak demand of 27.39 MW serving 78,294 customers in its franchise area.

SURNECO's Franchise MAP



Number of Customer	ACTUAL	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Residential	69,805	73,615	77,296	81,154	85,148	89,231	93,359	97,486	101,565	105,548	109,390
Commercial	4,281	4,514	4,741	4,977	5,222	5,472	5,726	5,978	6,229	6,473	6,709
Industrial	4	4	4	5	5	5	5	6	6	6	6
Others	4,204	4,433	4,655	4,887	5,128	5,340	5,623	5,871	6,117	6,357	6,588
Contestable Customers served by RES	-	-	-	-	-	-	-	-	-	-	-
Total (Captive Customers)	78,294	82,566	86,696	91,023	95,503	100,048	104,713	109,341	113,917	118,384	122,693

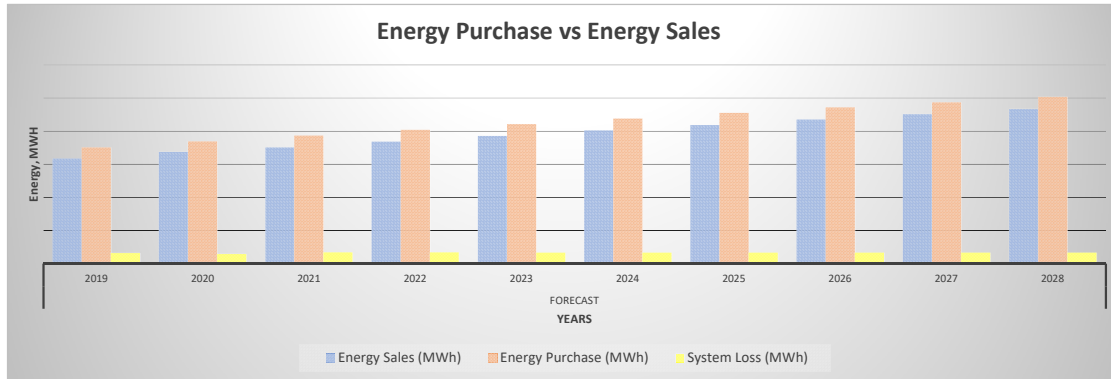
SURNECO's customer profile composed mostly of residential consumers having 78,294 connections which comprised 88.16% of the total customers. Followed by minority composed of Commercial and Industrial which is 5.47% and 0.01% respectively. Others herein, are composed of public building and streetlights which comprised for about less than 5.37% of the total customers. As of to date there is no indication of a large load consumers entering the SURNECO.



**ENERGY SALES AND PURCHASE**

ENERGY SALES AND PURCHASE	HISTORICAL									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Energy Sales (MWh)	93,631.30	111,676.57	129,880.70	138,869.24	139,684.14	124,218.88	135,257.85	141,634.38	138,282.53	148,292.36
Energy Purchase (MWh)	108,737.54	127,594.70	143,249.78	155,516.00	154,348.10	140,705.88	150,667.23	157,577.55	155,730.23	167,454.11
System Loss (MWh)	15,154.23	15,918.13	13,369.08	16,646.76	14,663.96	16,364.20	15,029.65	15,338.33	16,557.97	18,137.87

ENERGY SALES AND PURCHASE	FORECAST									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Energy Sales (MWh)	158,527.11	168,505.41	175,185.76	183,877.35	192,439.37	200,863.63	209,146.60	217,287.68	225,288.18	233,150.62
Energy Purchase (MWh)	175,334.80	184,264.17	193,102.10	201,828.42	210,424.66	218,882.62	227,198.74	235,372.43	243,405.00	251,298.98
System Loss (MWh)	15,713.16	14,595.33	16,706.79	16,681.50	16,656.61	16,632.15	16,608.11	16,584.51	16,561.34	16,538.59

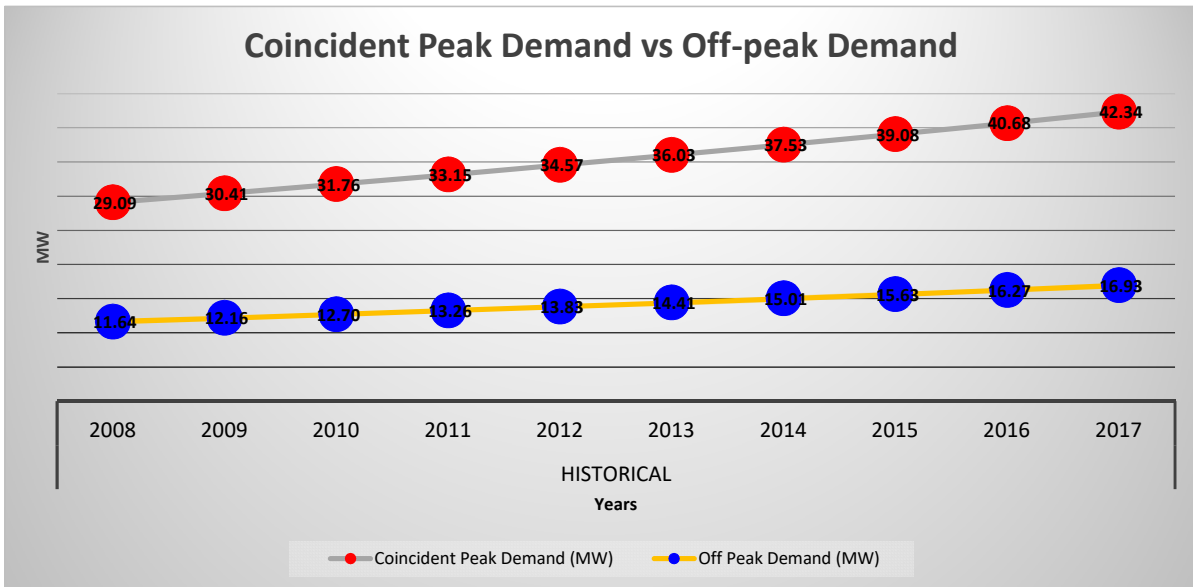


**Brief Highlight/Report:** Energy Sales and Purchased are forecasted from 2019 - 2028 having an average growth rate of 4.1% and 4.6% respectively for Grid connected system and 4.6% and 4.2% for Off-Grid connected system. On-grid system has no committed large load to enter thus, the forecast mainly relies the natural load growth based on the available data composed mostly of residential loads. Off-Grid system particularly Hikdop Island adjusted its number of hours of electric service from 16 hours per day to 24 hours pwer day, in which we can expect an increase in energy sales in the area.

## DEMAND

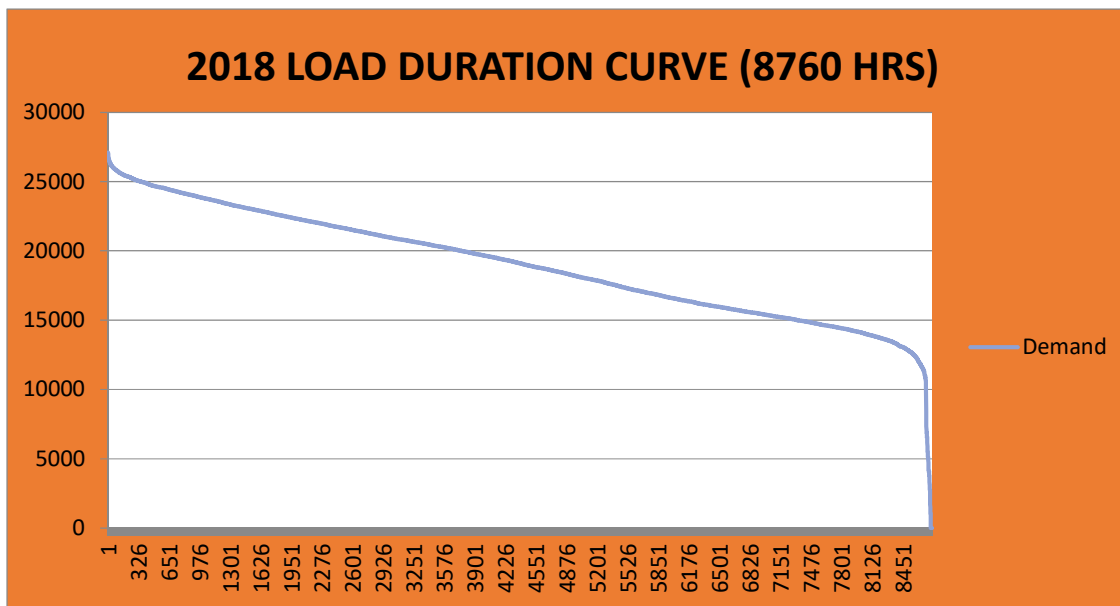
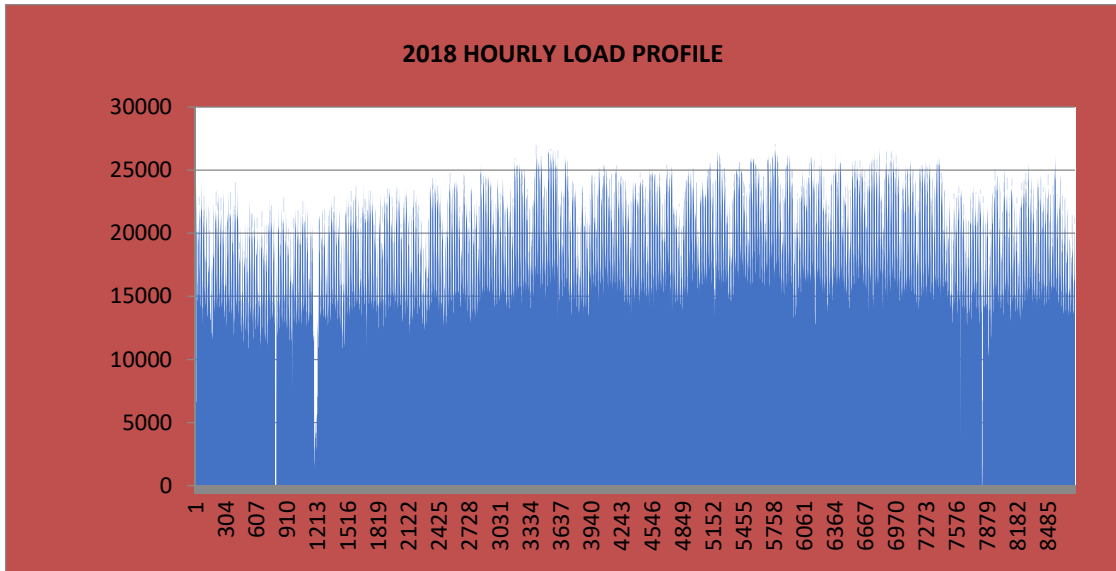
Demand	HISTORICAL									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Coincident Peak Demand (MW)	17.89	20.39	23.23	23.04	23.86	25.28	29.71	26.47	27.39	27.50
Off Peak Demand (MW)	7.16	8.16	9.29	9.22	9.54	10.11	11.88	10.59	10.96	11.00

Demand	HISTORICAL									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Coincident Peak Demand (MW)	29.09	30.41	31.76	33.15	34.57	36.03	37.53	39.08	40.68	42.34
Off Peak Demand (MW)	11.64	12.16	12.70	13.26	13.83	14.41	15.01	15.63	16.27	16.93



Brief highlight of historical demand and forecasting methodology and result

## LOAD PROFILE AND LOAD DURATION CURVE



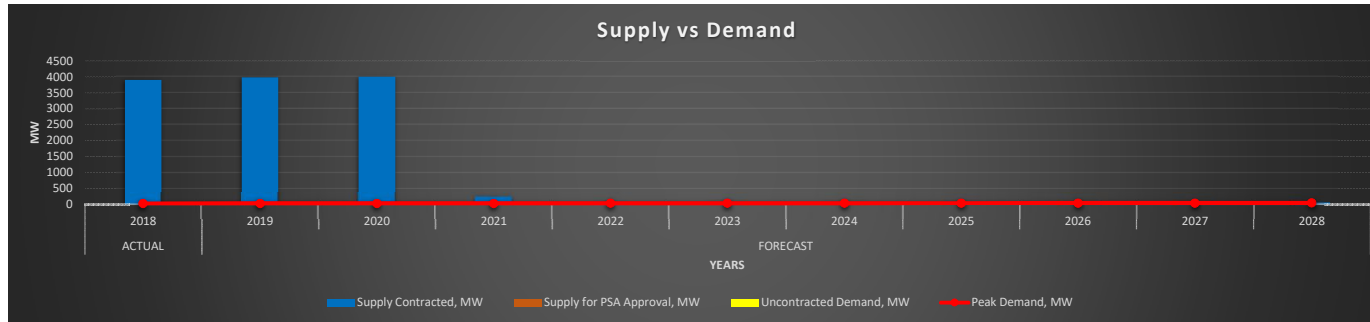
**Brief highlight:**

SURNECO peak demand occurs between 7-9 in the evening and occurrence of its lowest peak is at 6-7 in the morning.

# POWER SUPPLY PROCUREMENT PLAN

**MIXSUPPLY VS DEMAND AND THE OPTIMAL SUPPLY**

Supply Demand	ACTUAL	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Peak Demand, MW	27.50	29.09	30.41	31.76	33.15	34.57	36.03	37.53	39.08	40.68	42.34
Supply Contracted, MW	3896.33	3976.66	3995	222	36	39	51.8	51.8	51.8	51.8	51.8
NPC-PSALM	3,723	3,788	3,784								
THERMA SOUTH INC.	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
FDC COAL	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
NICKEL ASIA CORP.	3.33	6.66	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
GN POWER	-	-	8.00	8.00	8.00	11.00	23.80	23.80	23.80	23.80	23.80
NPC SPUG - HIKDOP	152	164	175	186							
Supply for PSA Approval, MW	0	0	0	0	0	0	0	0	0	0	0
Uncontracted Demand, MW	-	-	-	-	-	-	-	-	-	-	-



**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)
NPC-PSALM	NPC-PSALM		12/1/2017	12/1/2020	3.72		Base	Grid Connected	NPC	Operational	Hydro-Hybrid		
THERMA SOUTH INC.	THERMA SOUTH INC.		2/26/2013	2/26/2040	5		Base	Grid Connected	IPP	Operational	COAL	300	
FDC COAL	FDC MISAMIS CORPORATION		2/27/2014	2/28/2031	13	113,880.00	Base	Grid Connected	IPP	Operational	COAL		
GN POWER	GN POWER LTD COMPANY		2012	2023	23.8		Base	Grid Connected	IPP	On going Construction	COAL		
NICKEL ASIA	NICKEL ASIA CORP. INC		2010	2032	10		Peaking	Embedded	IPP	Operational	Diesel	11.22	10
NPC SPUG - HIKDOP	NPC-SPUG HIKDOP		2018	2021	0.148		Base	Off-Grid Connected	NPC	Operational	Diesel		



Discuss the following:

Performance of the existing Contracted Generation Companies.

For off-grid DUs specify the approved SAGR

Further, discuss the **optimal supply mix** for the DU given the load curve, performance of the existing contracted generation companies and other factors as found significant

## DISTRIBUTION IMPACT STUDY

Brief discussion on the following:

**ON-GRID:**

SURNECO will propose a new 20 MVA Lipata Substation to address the diminishing capacity of existing 20 MVA Looc Substation which catered the loads of Surigao City, part in the municipality of Sison, San Francisco and Malimono. The later is expected to be significantly start overloaded by year 2019. Another substation capacity problem is the 5 MVA Mapaso Substation which will overload in 2020 and another propose substation project will be proposed at Bad-as, Placer having the capacity of 10 MVA. Based on simulations, voltage qulity problems were corrected by the installation of the substations aside from resolving capacity problems in thier respective areas. Claver 5 MVA substation needs replacement due to deterioration attributed to old age. Other projects concerned on the stability of conductors compromised by corrosion especially in the coastal areas and islands which resulted to power failure. Capex projects is applied for this particular concerns.

**OFF-GRID:**

Hikdop Island experienced significantly low power quality due to single phase line and v-phase lines. SURNECO will rehabilitate the said lines to improve its power quality in th island.



## 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)	Uncontracted Demand (MW)	Uncontracted Energy (MWh)	Demand (MW)	Energy (MWh)
<b>2009</b>									
Jan	15.53	6.81	6,961.93	16.31	6,660.97	0.78	-300.96		
Feb	15.17	7.27	7,312.15	15.32	6,613.36	0.15	-698.80		
Mar	15.14	7.45	6,907.59	15.66	6,200.78	0.52	-706.81		
Apr	15.31	7.71	7,750.16	16.02	7,303.23	0.70	-446.93		
May	15.48	7.30	7,849.38	16.52	7,338.71	1.04	-510.67		
Jun	16.07	7.72	8,494.84	16.63	7,781.88	0.56	-712.96		
Jul	16.13	7.36	8,174.37	16.72	7,225.61	0.58	-948.75		
Aug	16.53	8.12	8,438.14	16.52	7,599.32	-0.01	-838.82		
Sep	16.51	8.29	8,545.77	17.38	7,958.22	0.87	-587.55		
Oct	16.55	8.26	8,288.17	17.16	7,526.28	0.61	-761.89		
Nov	16.28	8.15	7,913.50	17.44	7,551.13	1.16	-362.38		
Dec	16.27	7.32	7,514.58	17.88	7,201.28	1.61	-313.30		
<b>2010</b>									
Jan	21.30	8.16	9,936.73	17.23	7,008.45	- 4.07	- 2,928.28		
Feb	19.78	9.02	9,656.82	16.18	6,958.35	- 3.60	- 2,698.46		
Mar	19.49	9.26	8,398.67	16.55	6,524.25	- 2.94	- 1,874.42		
Apr	18.47	10.28	9,413.98	16.93	7,684.22	- 1.54	- 1,729.77		
May	21.61	8.65	10,184.38	17.45	7,721.55	- 4.15	- 2,462.83		
Jun	21.61	10.75	11,747.27	17.57	8,187.84	- 4.04	- 3,559.44		
Jul	19.75	10.05	10,176.78	17.66	7,602.55	- 2.08	- 2,574.23		
Aug	22.08	8.78	10,846.07	17.46	7,995.75	- 4.62	- 2,850.32		
Sep	23.13	11.64	12,660.31	18.37	8,373.38	- 4.76	- 4,286.93		
Oct	23.37	11.85	12,072.72	18.13	7,918.90	- 5.24	- 4,153.82		
Nov	23.23	10.61	11,669.12	18.42	7,945.05	- 4.81	- 3,724.07		
Dec	22.76	8.74	10,663.14	18.90	7,576.95	- 3.86	- 3,086.19		
<b>2011</b>									
Jan	21.73	10.50	10,981.50	23.15	11,006.27	1.43	24.77		
Feb	21.78	8.79	9,876.74	22.05	10,953.69	0.27	1076.95		
Mar	21.84	10.81	10,682.00	22.44	10,498.05	0.60	-183.95		
Apr	22.03	11.38	11,258.44	22.83	11,715.58	0.80	457.14		
May	23.00	11.54	12,020.82	23.39	11,754.76	0.39	-266.06		
Jun	22.67	10.38	11,926.02	23.51	12,244.19	0.84	318.17		
Jul	23.00	11.91	12,210.29	23.61	11,629.86	0.61	-580.43		
Aug	23.53	12.05	13,057.41	23.39	12,042.57	-0.14	-1014.84		
Sep	24.37	12.94	13,605.46	22.53	13,458.32	-1.85	-147.14		
Oct	23.13	9.55	11,372.95	20.59	12,120.22	-2.54	747.27		
Nov	24.68	10.28	12,938.09	21.33	12,812.88	-3.35	-125.20		
Dec	25.71	12.22	13,153.39	22.93	13,392.25	-2.78	238.85		
<b>2012</b>									
Jan	20.57	8.22	12,587.21	24.59	15,117.54	4.02	2530.33		
Feb	23.34	12.62	12,130.30	25.79	15,762.00	2.45	3631.70		
Mar	23.16	13.07	11,790.65	25.81	14,851.77	2.65	3061.12		
Apr	23.51	11.83	12,599.69	20.79	12,975.46	-2.72	375.78		
May	25.03	15.37	12,855.27	26.89	16,063.82	1.86	3208.55		
Jun	25.14	15.17	14,471.26	25.60	15,712.34	0.46	1241.08		
Jul	24.68	14.67	13,436.45	25.42	15,301.45	0.74	1865.00		
Aug	25.79	15.59	13,789.66	26.63	16,199.38	0.85	2409.72		
Sep	25.95	11.40	13,302.53	25.19	15,463.83	-0.76	2161.30		
Oct	25.61	15.21	13,295.77	26.42	15,827.71	0.81	2531.94		
Nov	23.77	13.85	12,889.01	25.65	15,686.18	1.89	2797.17		

POWER SUPPLY PROCUREMENT PLAN

Dec	25.50	12.08	12,033.97	25.44	15,265.33	-0.06	3231.37		
<b>2013</b>									
Jan	23.44	12.66	12,278.40	21.03	13,894.27	-2.42	1615.87		
Feb	23.70	12.55	12,441.75	18.72	12,473.62	-4.98	31.87		
Mar	23.43	11.90	10,858.01	19.42	12,254.15	-4.00	1396.14		
Apr	24.76	14.37	12,168.45	18.33	12,254.15	-6.43	85.70		
May	26.61	14.84	13,841.30	17.85	11,722.81	-8.76	-2118.50		
Jun	25.24	13.94	13,951.12	16.51	11,126.61	-8.73	-2824.51		
Jul	25.35	12.85	13,348.08	17.22	11,351.06	-8.14	-1997.02		
Aug	24.22	12.69	13,011.88	21.03	13,894.27	-3.19	882.38		
Sep	24.75	12.52	13,193.37	18.72	12,473.62	-6.03	-719.75		
Oct	25.00	13.37	13,320.92	19.42	12,254.15	-5.58	-1066.77		
Nov	24.41	12.45	12,619.40	18.33	12,254.15	-6.08	-365.25		
Dec	26.78	13.87	13,142.60	17.85	11,722.81	- 8.93	- 1,419.79		
<b>2014</b>									
Jan	25.28	10.41	10,951.02	17.22	11,351.06	-8.07	400.04		
Feb	23.65	12.14	11,694.27	19.90	13,228.75	-3.74	1534.48		
Mar	22.71	12.23	10,541.15	19.83	13,228.13	-2.88	2686.98		
Apr	23.11	12.93	12,098.19	18.78	12,298.23	-4.33	200.04		
May	21.89	11.73	11,227.89	20.28	13,443.13	-1.61	2215.24		
Jun	21.87	12.53	12,093.04	21.43	13,937.74	-0.44	1844.71		
Jul	21.45	11.99	11,252.75	21.21	21,453.77	-0.25	10201.02		
Aug	21.92	11.72	11,814.90	20.96	21,918.60	-0.96	10103.70		
Sep	23.36	12.43	12,322.04	21.23	23,363.86	-2.13	11041.82		
Oct	23.84	13.64	12,172.46	19.89	23,842.96	-3.95	11670.50		
Nov	24.69	12.85	13,090.31	19.45	24,692.60	-5.24	11602.29		
Dec	24.63	14.78	12,140.80	22.32	24,234.18	-2.32	12093.38		
<b>2015</b>									
Jan	22.96	12.61	9,932.59	26.03	24,422.27	3.07	14489.68		
Feb	22.15	12.05	11,390.27	23.72	21,417.62	1.57	10027.35		
Mar	22.25	12.02	10,524.28	24.42	22,782.15	2.18	12257.87		
Apr	22.69	13.41	12,022.23	23.33	22,261.13	0.64	10238.90		
May	24.10	14.35	12,909.29	22.85	22,250.81	-1.25	9341.52		
Jun	24.51	13.07	13,428.41	21.51	21,126.61	-3.00	7698.20		
Jul	24.64	14.29	12,655.41	27.22	21,879.06	2.58	9223.65		
Aug	25.23	14.67	13,711.95	29.90	23,756.75	4.67	10044.80		
Sep	25.03	14.35	13,819.68	29.83	23,178.13	4.80	9358.45		
Oct	28.60	14.18	14,719.07	28.78	22,826.23	0.17	8107.16		
Nov	26.23	14.29	12,809.87	30.28	23,443.13	4.05	10633.26		
Dec	25.26	13.79	12,482.08	31.43	24,465.74	6.17	11983.66		
<b>2016</b>									
Jan	23.49	12.70	12,188.13	25.42	30,446.53	1.93	18,258.40		
Feb	22.65	12.20	12,050.34	24.72	28,433.94	2.08	16,383.60		
Mar	23.29	11.29	11,453.87	25.04	29,953.44	1.75	18,499.57		
Apr	23.40	14.21	13,102.88	24.28	29,234.24	0.88	16,131.36		
May	24.72	14.63	13,734.72	24.45	29,436.24	- 0.26	15,701.52		
Jun	25.17	14.27	14,488.04	24.77	28,869.99	- 0.39	14,381.95		
Jul	25.42	15.15	13,120.10	24.86	29,146.87	- 0.56	16,026.77		
Aug	25.79	15.27	14,240.24	37.37	29,809.99	11.58	15,569.75		
Sep	26.78	14.44	14,622.06	37.78	29,533.31	11.00	14,911.25		
Oct	25.84	15.10	13,576.11	37.65	29,843.62	11.81	16,267.51		
Nov	24.93	12.27	12,698.44	38.17	29,767.85	13.24	17,069.41		
Dec	25.24	12.03	12,702.59	38.68	30,486.54	13.43	17,783.95		
<b>2017</b>									
Jan	24.69	12.73	11,079.82	35.00	23,064.00	10.31	11,984.18		
Feb	22.99	12.12	11,157.62	35.00	22,416.00	12.01	11,258.38		
Mar	23.73	12.91	11,090.08	35.00	21,480.00	11.27	10,389.92		
Apr	23.45	14.30	12,642.16	35.00	22,848.00	11.55	10,205.84		
May	24.57	14.76	13,291.61	35.00	22,536.00	10.43	9,244.39		
Jun	24.99	13.66	14,050.78	35.00	22,848.00	10.01	8,797.22		
Jul	24.18	14.54	12,990.63	35.00	22,536.00	10.82	9,545.37		

## POWER SUPPLY PROCUREMENT PLAN

Aug	25.65	14.20	14,324.30	27.00	20,088.00	1.35	5,763.70		
Sep	27.39	13.34	14,529.24	27.00	19,968.00	- 0.39	5,438.76		
Oct	26.25	14.11	13,250.19	27.00	19,560.00	0.75	6,309.81		
Nov	25.14	14.70	13,467.07	27.00	19,786.00	1.86	6,318.93		
Dec	25.50	13.66	12,876.27	27.00	19,690.00	1.50	6,813.73		
<b>2018</b>									
Jan	24.48	10.26	12,997.04	21.72	12,997.40	- 2.76	0.35		
Feb	23.35	9.55	12,092.52	21.43	12,092.89	- 1.92	0.36		
Mar	24.30	9.86	12,460.49	21.55	12,460.82	- 2.74	0.33		
Apr	24.13	9.74	12,550.17	21.44	15,744.00	- 2.69	3,193.84		
May	25.28	10.21	13,205.28	21.51	15,724.40	- 3.77	2,519.12		
Jun	25.71	10.38	13,964.97	21.67	15,831.84	- 4.05	1,866.86		
Jul	24.88	10.05	12,904.22	24.21	16,168.48	- 0.67	3,264.26		
Aug	26.40	10.66	14,216.93	27.65	18,531.40	1.25	4,314.47		
Sep	28.19	11.38	14,414.36	28.43	18,410.26	0.24	3,995.90		
Oct	27.01	10.90	13,139.14	28.81	18,569.59	1.80	5,430.46		
Nov	25.88	10.45	13,368.28	28.63	19,003.22	2.76	5,634.94		
Dec	26.24	10.60	12,788.92	28.84	18,970.41	2.59	6,181.48		
<b>2019</b>									
Jan	26.18	10.57	13,875.94	31.64	17,245.93	5.46	3,370.00		
Feb	24.37	9.84	12,910.25	31.78	16,992.46	7.40	4,082.21		
Mar	25.16	10.16	13,303.10	31.63	16,850.38	6.47	3,547.29		
Apr	24.86	10.04	13,398.84	31.45	16,976.28	6.58	3,577.44		
May	26.04	10.51	14,098.25	31.73	17,193.11	5.69	3,094.86		
Jun	26.49	10.70	14,909.32	31.75	17,226.14	5.25	2,316.83		
Jul	25.64	10.35	13,776.84	30.96	17,632.60	5.32	3,855.77		
Aug	27.20	10.98	15,178.32	41.44	24,536.11	14.24	9,357.79		
Sep	29.04	11.72	15,389.09	41.43	24,408.43	12.39	9,019.34		
Oct	27.83	11.23	14,027.64	41.44	24,153.54	13.61	10,125.90		
Nov	26.66	10.76	14,272.28	41.36	24,356.89	14.70	10,084.61		
Dec	27.04	10.92	13,653.74	41.47	24,199.18	14.43	10,545.44		
<b>2020</b>									
Jan	25.65	10.88	14,335.91	55.58	36,064.06	29.93	21,728.16		
Feb	25.10	10.13	13,338.21	55.32	34,506.37	30.21	21,168.16		
Mar	25.91	10.46	13,744.08	55.43	32,938.92	29.52	19,194.84		
Apr	25.61	10.34	13,842.99	55.35	34,764.25	29.75	20,921.25		
May	27.25	10.83	14,565.59	55.42	34,251.30	28.17	19,685.71		
Jun	27.28	11.01	15,403.54	55.44	34,860.04	28.16	19,456.50		
Jul	26.40	10.66	14,233.52	55.52	34,321.74	29.12	20,088.21		
Aug	28.01	11.31	15,681.46	54.58	34,315.48	26.57	18,634.02		
Sep	29.91	12.07	15,899.22	55.14	34,609.17	25.23	18,709.95		
Oct	28.66	11.57	14,492.64	55.34	34,166.11	26.68	19,673.48		
Nov	28.66	11.08	14,745.39	55.18	34,637.23	26.52	19,891.84		
Dec	27.45	11.24	14,106.35	55.28	34,148.04	27.83	20,041.69		
<b>2021</b>									
Jan	26.39	11.20	14,743.70	51.80	33,372.78	25.41	18,629.09		
Feb	25.83	10.43	13,717.62	51.55	31,937.04	25.72	18,219.42		
Mar	26.66	10.76	14,135.03	51.66	30,483.27	25.00	16,348.24		
Apr	26.35	10.64	14,236.77	51.58	32,166.69	25.23	17,929.92		
May	28.04	11.14	14,979.91	51.65	31,707.27	23.61	16,727.36		
Jun	28.07	11.33	15,841.71	51.67	32,279.70	23.60	16,437.99		
Jul	27.17	10.97	14,638.40	51.74	31,768.27	24.57	17,129.87		
Aug	28.82	11.64	16,127.53	50.86	31,759.37	22.04	15,631.84		
Sep	30.78	12.43	16,351.48	51.39	32,025.78	20.61	15,674.29		
Oct	29.49	11.91	14,904.89	51.57	31,603.76	22.08	16,698.87		
Nov	29.49	11.41	15,164.83	51.42	32,053.57	21.93	16,888.74		
Dec	28.25	11.57	14,507.61	51.52	31,606.74	23.27	17,099.13		

POWER SUPPLY PROCUREMENT PLAN

<b>2022</b>								
Jan	27.14	11.52	15,329.33	51.80	33,372.78	24.66	18,043.45	
Feb	26.56	10.72	14,262.50	51.55	31,937.04	24.99	17,674.54	
Mar	27.42	11.07	14,696.49	51.66	30,483.27	24.24	15,786.78	
Apr	27.10	10.94	14,802.26	51.58	32,166.69	24.48	17,364.43	
May	28.83	11.46	15,574.93	51.65	31,707.27	22.82	16,132.35	
Jun	28.87	11.66	16,470.95	51.67	32,279.70	22.80	15,808.75	
Jul	27.93	11.28	15,219.85	51.74	31,768.27	23.81	16,548.42	
Aug	29.64	11.97	16,768.12	50.86	31,759.37	21.22	14,991.24	
Sep	31.65	12.78	17,000.98	51.39	32,025.78	19.74	15,024.80	
Oct	30.33	12.24	15,496.92	51.57	31,603.76	21.24	16,106.84	
Nov	30.33	11.73	15,767.19	51.42	32,053.57	21.09	16,286.38	
Dec	29.05	11.90	15,083.86	51.52	31,606.74	22.47	16,522.87	
<b>2023</b>								
Jan	27.89	11.83	15,622.16	51.80	33,372.78	23.91	17,750.63	
Feb	27.29	11.02	14,534.95	51.55	31,937.04	24.26	17,402.09	
Mar	28.17	11.37	14,977.23	51.66	30,483.27	23.49	15,506.04	
Apr	27.84	11.24	15,085.02	51.58	32,166.69	23.74	17,081.66	
May	29.63	11.77	15,872.45	51.65	31,707.27	22.02	15,834.82	
Jun	29.66	11.97	16,785.59	51.67	32,279.70	22.01	15,494.11	
Jul	28.70	11.59	15,510.59	51.74	31,768.27	23.04	16,257.68	
Aug	30.45	12.29	17,088.44	50.86	31,759.37	20.41	14,670.93	
Sep	32.52	13.13	17,325.74	51.39	32,025.78	18.87	14,700.04	
Oct	31.16	12.58	15,792.95	51.57	31,603.76	20.41	15,810.81	
Nov	31.16	12.05	16,068.38	51.42	32,053.57	20.26	15,985.19	
Dec	29.84	12.22	15,372.00	51.52	31,606.74	21.68	16,234.73	
<b>2024</b>								
Jan	28.63	12.15	16,105.65	51.80	33,372.78	23.17	17,267.13	
Feb	28.01	11.31	14,984.79	51.55	31,937.04	23.54	16,952.25	
Mar	28.92	11.67	15,440.76	51.66	30,483.27	22.74	15,042.51	
Apr	28.58	11.54	15,551.89	51.58	32,166.69	23.00	16,614.80	
May	30.41	12.09	16,363.69	51.65	31,707.27	21.24	15,343.59	
Jun	30.45	12.29	17,305.09	51.67	32,279.70	21.22	14,974.61	
Jul	29.46	11.90	15,990.63	51.74	31,768.27	22.28	15,777.64	
Aug	31.26	12.62	17,617.31	50.86	31,759.37	19.60	14,142.06	
Sep	33.38	13.48	17,861.95	51.39	32,025.78	18.01	14,163.82	
Oct	31.99	12.91	16,281.73	51.57	31,603.76	19.58	15,322.03	
Nov	31.99	12.37	16,565.68	51.42	32,053.57	19.43	15,487.89	
Dec	30.64	12.55	15,847.75	51.52	31,606.74	20.88	15,758.98	
<b>2025</b>								
Jan	29.36	12.46	16,765.55	51.80	33,372.78	22.44	16,607.24	
Feb	28.73	11.60	15,598.76	51.55	31,937.04	22.82	16,338.28	
Mar	29.66	11.97	16,073.42	51.66	30,483.27	22.00	14,409.86	
Apr	29.31	11.83	16,189.10	51.58	32,166.69	22.27	15,977.59	
May	31.19	12.40	17,034.16	51.65	31,707.27	20.46	14,673.12	
Jun	31.23	12.61	18,014.13	51.67	32,279.70	20.44	14,265.57	
Jul	30.22	12.20	16,645.81	51.74	31,768.27	21.52	15,122.46	
Aug	32.06	12.94	18,339.14	50.86	31,759.37	18.80	13,420.22	
Sep	34.24	13.82	18,593.81	51.39	32,025.78	17.15	13,431.97	
Oct	32.81	13.24	16,948.84	51.57	31,603.76	18.76	14,654.92	
Nov	32.81	12.69	17,244.43	51.42	32,053.57	18.61	14,809.14	
Dec	31.42	12.87	16,497.08	51.52	31,606.74	20.10	15,109.65	

POWER SUPPLY PROCUREMENT PLAN

<b>2026</b>									
Jan	30.09	12.77	17,181.33	51.80	33,372.78	21.71	16,191.45		
Feb	29.44	11.89	15,985.61	51.55	31,937.04	22.11	15,951.42		
Mar	30.39	12.27	16,472.04	51.66	30,483.27	21.27	14,011.24		
Apr	30.04	12.13	16,590.59	51.58	32,166.69	21.54	15,576.10		
May	31.97	12.70	17,456.60	51.65	31,707.27	19.68	14,250.67		
Jun	32.00	12.92	18,460.88	51.67	32,279.70	19.67	13,818.82		
Jul	30.97	12.50	17,058.63	51.74	31,768.27	20.77	14,709.64		
Aug	32.86	13.27	18,793.96	50.86	31,759.37	18.00	12,965.41		
Sep	35.09	14.16	19,054.94	51.39	32,025.78	16.30	12,970.84		
Oct	33.62	13.57	17,369.17	51.57	31,603.76	17.95	14,234.58		
Nov	33.62	13.00	17,672.09	51.42	32,053.57	17.80	14,381.48		
Dec	32.20	13.19	16,906.21	51.52	31,606.74	19.32	14,700.52		
<b>2027</b>									
Jan	30.81	13.07	17,593.03	51.80	33,372.78	20.99	15,779.76		
Feb	30.15	12.17	16,368.65	51.55	31,937.04	21.40	15,568.38		
Mar	31.12	12.56	16,866.74	51.66	30,483.27	20.54	13,616.54		
Apr	30.76	12.42	16,988.13	51.58	32,166.69	20.82	15,178.56		
May	32.73	13.01	17,874.89	51.65	31,707.27	18.92	13,832.38		
Jun	32.77	13.23	18,903.23	51.67	32,279.70	18.90	13,376.47		
Jul	31.71	12.80	17,467.38	51.74	31,768.27	20.03	14,300.89		
Aug	33.64	13.58	19,244.29	50.86	31,759.37	17.22	12,515.07		
Sep	35.93	14.50	19,511.53	51.39	32,025.78	15.46	12,514.25		
Oct	34.43	13.90	17,785.37	51.57	31,603.76	17.14	13,818.39		
Nov	34.43	13.31	18,095.54	51.42	32,053.57	16.99	13,958.03		
Dec	32.97	13.50	17,311.31	51.52	31,606.74	18.55	14,295.42		
<b>2028</b>									
Jan	38.16	15.33	19,180.41	51.80	33,372.78	13.64	14,192.37		
Feb	36.37	14.61	17,895.72	51.55	31,937.04	15.18	14,041.32		
Mar	37.83	15.19	18,358.26	51.66	30,483.27	13.83	12,125.01		
Apr	39.82	15.99	20,751.02	51.58	32,166.69	11.77	11,415.67		
May	42.31	16.99	21,992.68	51.65	31,707.27	9.34	9,714.59		
Jun	40.97	16.45	22,034.90	51.67	32,279.70	10.70	10,244.80		
Jul	40.04	16.08	21,683.02	51.74	31,768.27	11.70	10,085.25		
Aug	42.34	17.00	23,509.89	50.86	31,759.37	8.53	8,249.47		
Sep	41.82	16.79	22,511.28	51.39	32,025.78	9.57	9,514.50		
Oct	42.28	16.98	22,468.21	51.57	31,603.76	9.29	9,135.55		
Nov	41.27	16.57	20,564.32	51.42	32,053.57	10.15	11,489.25		
Dec	41.67	16.73	20,349.26	51.52	31,606.74	9.85	11,257.47		