

Busuanga Island Electric Cooperative, Inc. (BISELCO)  
Mabintangen Road, Brgy. Pob. 6, Coron, Palawan

# POWER SUPPLY PROCUREMENT PLAN (PSPP)

FY 2018

*An Integral Part of BISELCO's Distribution Development Plan (DDP)*

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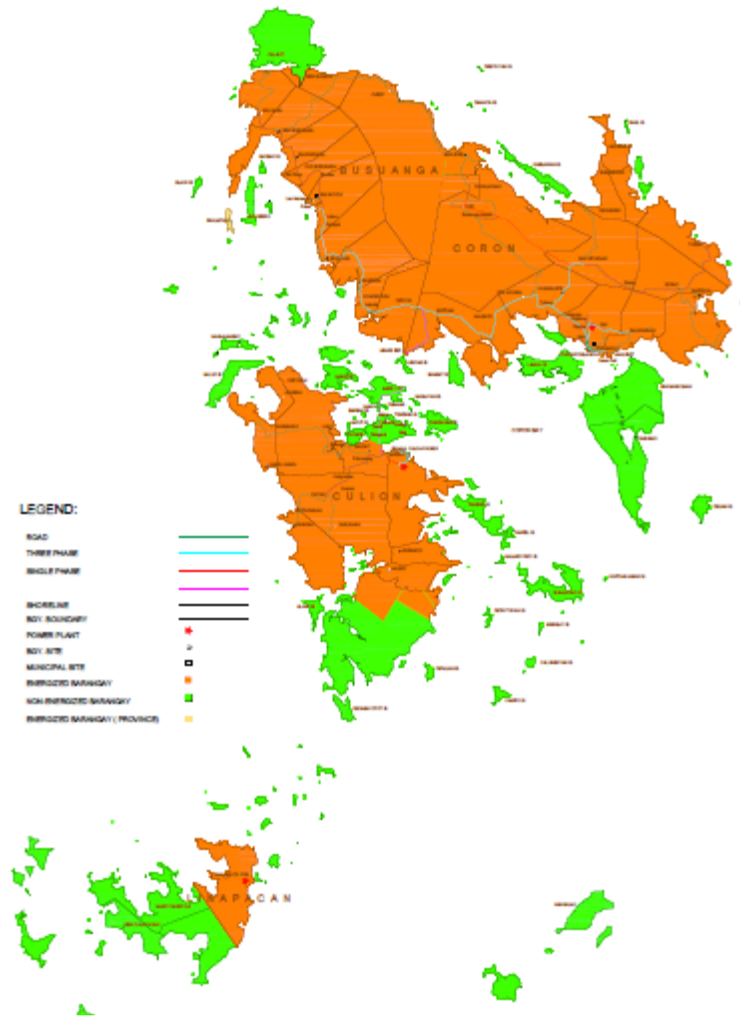
# INTRODUCTION

## Introduction

### DU PROFILE

BISELCO Franchise covers the entire Calamian Group of Islands located on the northern Palawan. The Calamian Group of Islands, also called the Calamianes, consist of over 80 islands and islets located 200 nautical miles southwest of Manila. Figure below shows the franchise map of BISELCO. Energized areas are indicated by yellow color, they are connected to BISELCO's grid, while green indicates areas currently unenergized (mostly islands).

Busuanga Island is the largest island in the Calamian Group. Within the island are two neighboring municipalities namely Coron and Busuanga. Coron is the major energy sales generating area on the three islands. Busuanga Island covers two municipalities namely Coron and Busuanga.



# INTRODUCTION

The other two Islands are Culion and Linapacan Islands. Culion Island is two hours by pumpboat while Linapacan Island is five hours. Coron town is the commercial business and transportation center on the Calamianes Group where rapid commercialization is going on with the increasing volume of tourists flocking each year especially during summer.

## OPERATION AND PERFORMANCE

BISELCO is composed of six districts represented by six board of directors and a General Manager with sixty two employees. There are four areas on which each has its own sub-offices namely: Busuanga, Culion, San Miguel and Nangalao.

It was classified as Medium Electric Cooperative and was categorized by NEA as AAA electric cooperative last 2017 due to its satisfactory performance indicated by the following:

System's Loss	:	11%
Collection Efficiency	:	100%
Reliability	:	SAIFI – 28.49    SAIDI – 779.65

## CUSTOMER COUNTS AND LEVEL OF ENERGIZATION

MUNICIPALITIES		BARANGAYS				SITIOS			CONNECTIONS		
COVERAGE/ ENERGIZED	%	POTENTIAL	ENERGIZED/ COMPLETED	%	UNENERGIZED	POTENTIAL	ENERGIZED/ COMPLETED	%	POTENTIAL	SERVED	%
			TO DATE				TO DATE			TO DATE	
4	100	61	61	100	0	127	120	94	23,900	15,717	66

Among sixty-one barangays covered by BISELCO sixteen are still unenergized mostly island barangays. With the implementation of DOE's PV mainstreaming, three thousand seven hundred eleven households mostly on these island barangays are schedule to be energized this year 2018.

# ENERGY AND DEMAND FORECAST

## Energy and Demand Forecast

### 10 YEAR HISTORICAL

Since Busuanga/Coron is the largest island grid within the franchise area of BISELCO, it is the main contributor in terms of sales revenue. During the time when NPC-SPUG is the power supplier, electricity demand and consumption is suppressed because of power curtailments due to aging plant assets and fuel supply delivery issues. When BISELCO finally succeeded on the conduct of Competitive Selection Process (CSP) which established it selected New Power Provider (NPP), the Calamian Islands Power Corporation on 2014; growth on demand and energy consumption became abrupt due to fast growing tourism activities in the island driven by stable power supply.

There was also increase in energy consumption in the island of Culion when the NPC\_SPUG started to increase its operating hours for twelve (12) to 24 hours on the year 2015.

Meanwhile, there is no significant energy consumption growth in the island of Linapacan since the number of operating hours is still twelve hours up to this date.

### 10-YEARS HISTORICAL

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Energy Purchased (Mwhr)	6,515	8,100	9,531	9,668	10,889	12,088	14,954	20,169	24,135	29,855
Energy Sales (Mwhr)	5,670	7,099	8,415	8,585	9,747	10,680	13,147	17,539	21,517	26,573
System's Loss (Mwhr)	845	1,001	1,116	1,082	1,142	1,407	1,807	2,631	2,618	3,282

### 10-YEARS FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Energy Purchased (Mwhr)	35,147	38,855	44,848	49,042	53,804	58,607	63,795	69,385	75,387	81,813
Energy Sales (Mwhr)	31,703	35,276	40,812	44,678	49,069	53,508	58,309	63,487	69,055	75,023

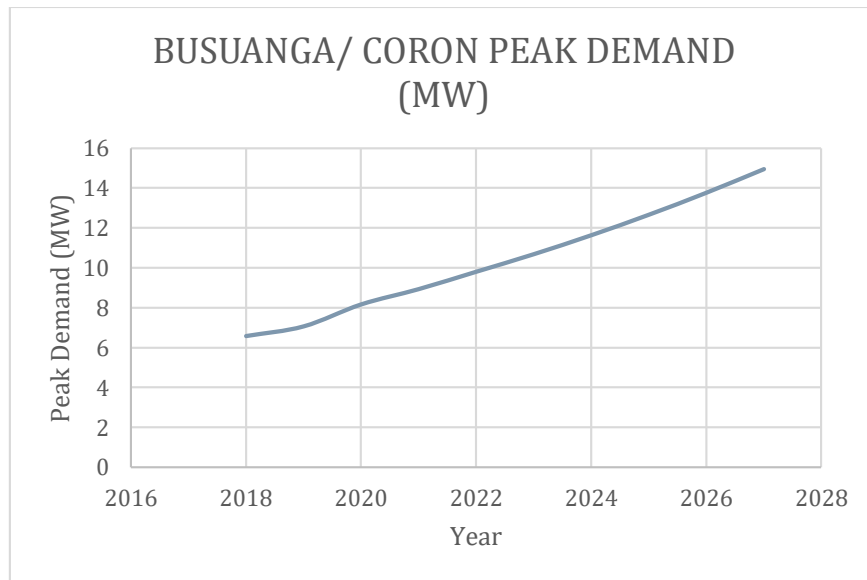
BISELCO considered an aggressive forecast on its projection on energy consumption due to increasing commercial viability of area manifested by continuous construction of hotel buildings specially in the island of Busuanga.

# ENERGY DEMAND AND FORECAST

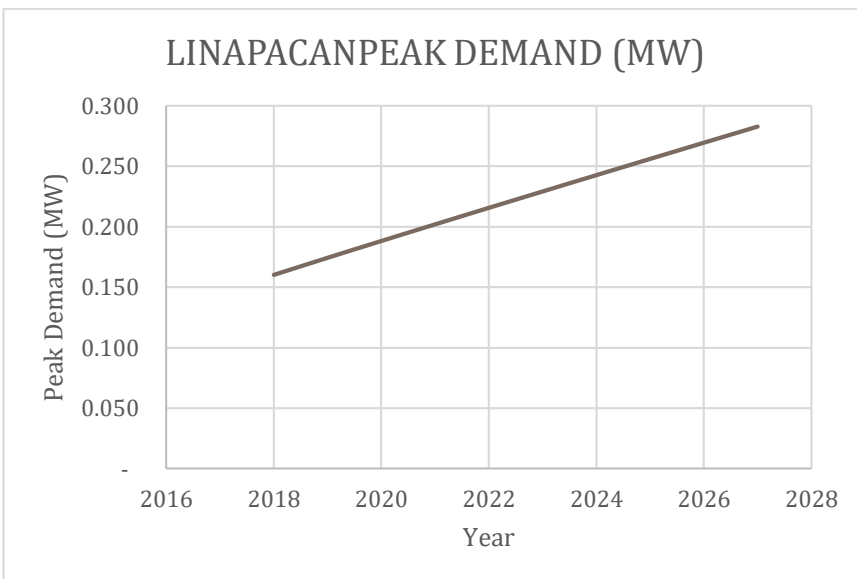
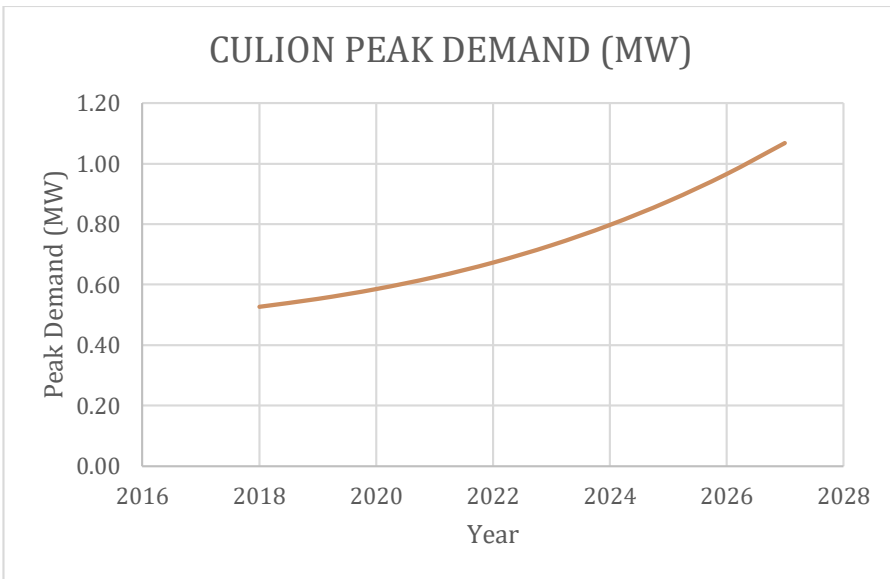
## Energy Demand and Forecast

### PEAK DEMAND

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BUSUANGA/ CORON (MW)	6.567	7.053	8.154	8.922	9.793	10.674	11.627	12.654	13.758	14.941
CULION (MW)	0.527	0.553	0.585	0.625	0.673	0.730	0.797	0.876	0.966	1.068
LINAPACAN (MW)	0.160	0.174	0.188	0.202	0.216	0.229	0.243	0.256	0.269	0.283
TOTAL	7.254	7.780	8.928	9.749	10.682	11.633	12.667	13.785	14.993	16.292



# ENERGY DEMAND AND FORECAST



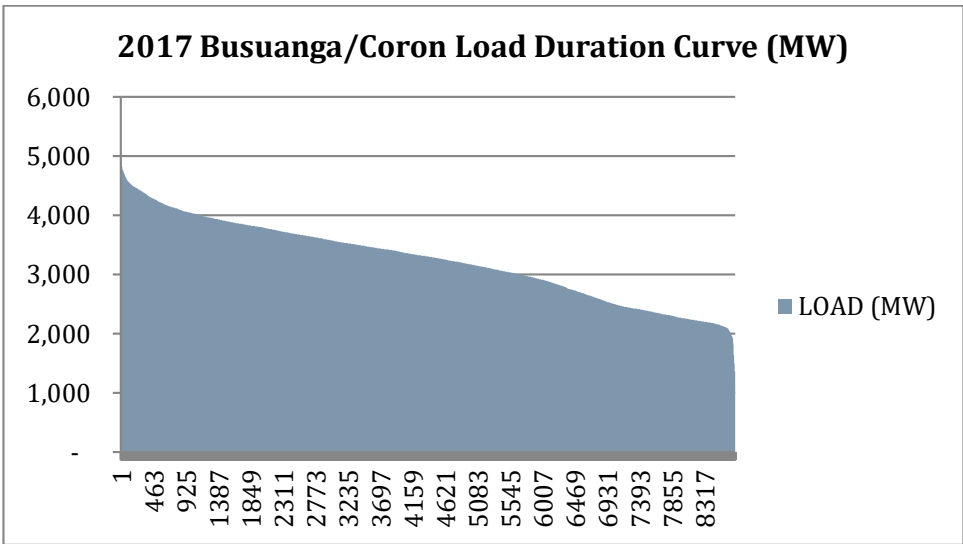
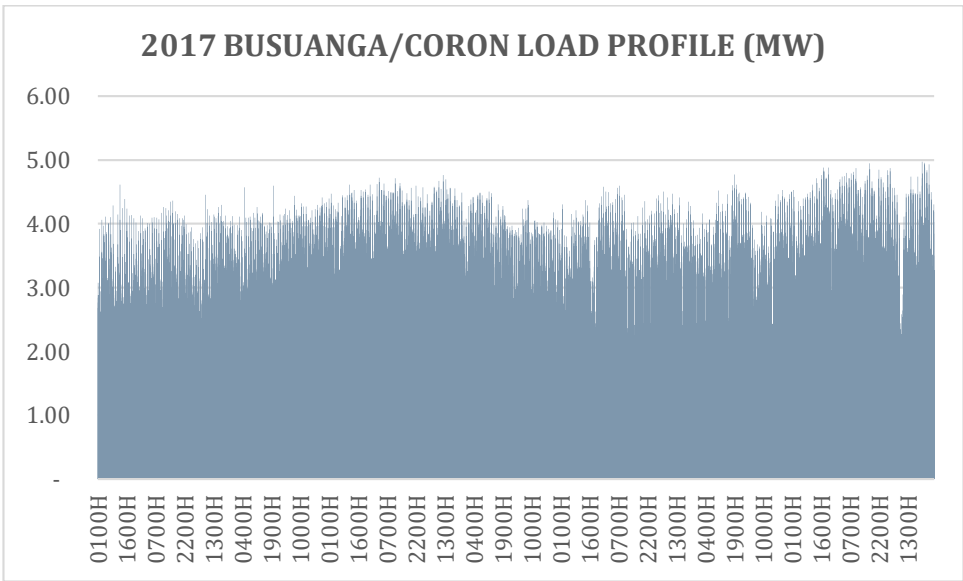
## FORECAST METHODOLOGY AND RESULT

BISELCO preferred to use Regression Analysis on its forecasting methodology. There were up to 130 polynomial equations used and among these models that passed the validity and accuracy tests, the best and most realistic model was chosen. Because each Island Grid has different economic growth, forecast was done separately for each of the islands.

# LOAD PROFILE AND LOAD DURATION CURVE

## LOAD PROFILE AND LOAD DURATION CURVE

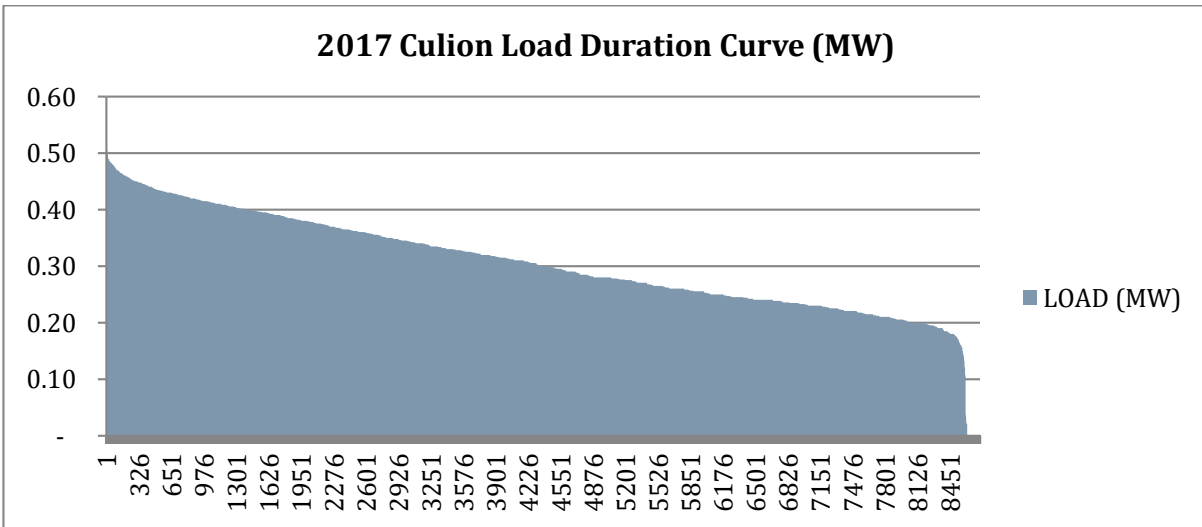
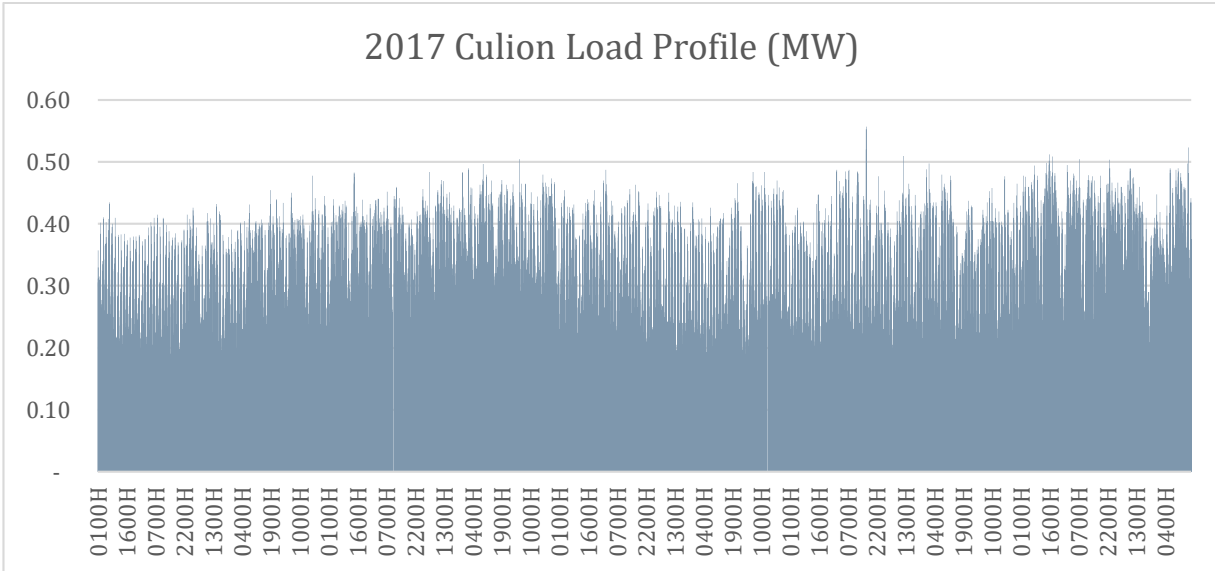
BUSUANGA/CORON



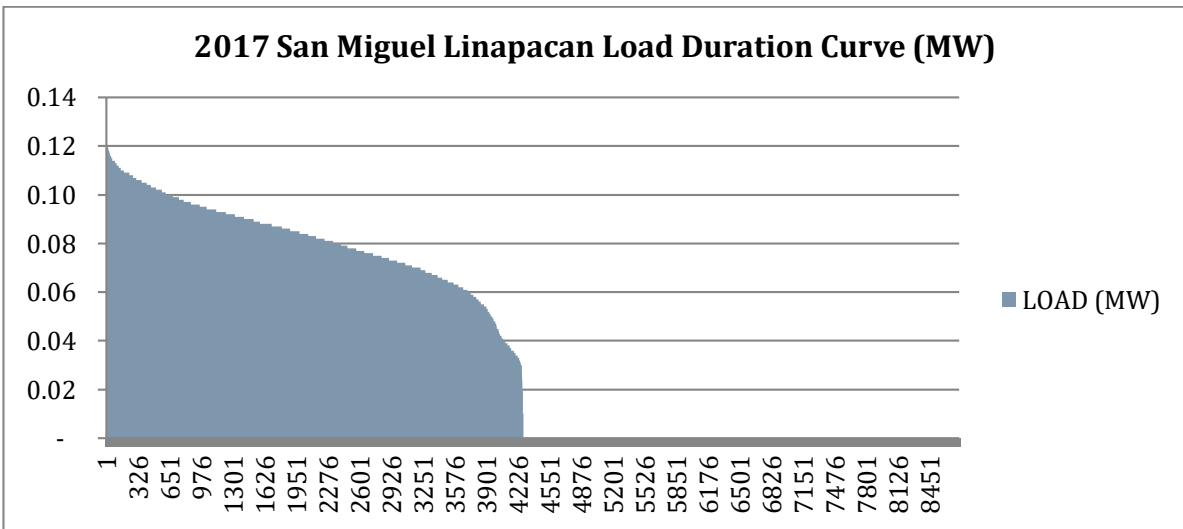
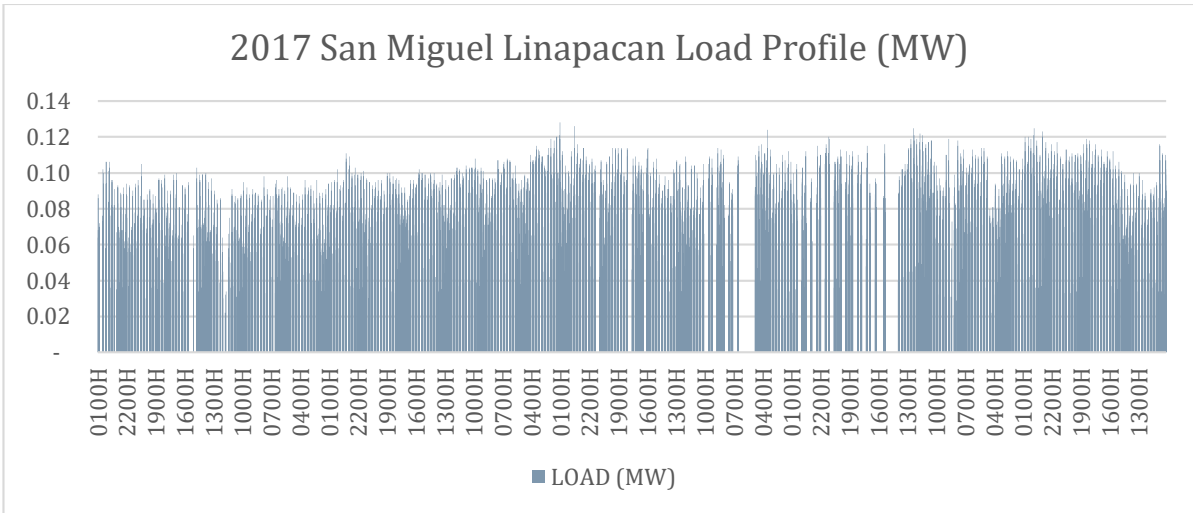


# LOAD PROFILE AND LOAD DURATION CURVE

## CULION & LINAPACAN



# LOAD PROFILE AND LOAD DURATION CURVE



With the pending application for 20-year term Power Supply Agreement between BISELCO and Culna Renewable Energy Corporation (CREC), BISELCO for now assumes that the baseload and peaking requirements for the island of Culion and Linapacan will be sufficient during the entire term of the PSA. However, BISELCO believes that there is a big possibility that the load growth trend will be most probably be transformer into an aggressive when a much reliable power supply is already established on these two municipalities.

# EXISTING POWER SUPPLY CONTRACTS

## EXISTING POWER SUPPLY CONTRACTS

### SUMMARY OF EXISTING CONTRACT 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)
Coron Power Station	CIPC	0.85	20-Aug-14	20-Aug-29	6.334		Base/ Peaking	Grid Connected	NPP	OPERATIONAL	HFO	8.12	6.334
Busuanga Power Station	CIPC	0.85	8-Dec-13	8-Dec-28	0.608		Peaking	Grid Connected	NPP	OPERATIONAL	LFO	0.7	0.608
Culion Diesel Power Plant	NPC-SPUG		25-Dec-18	25-Dec-21	693	3,189	Base/ Peaking	Grid Connected	NPC	OPERATIONAL	LFO		0.63
Linapacan Diesel Power Plant	NPC-SPUG		25-Dec-18	25-Dec-21	174	617	Base/ Peaking	Grid Connected	NPC	OPERATIONAL	LFO		

### BISELCO-CIPC PSA

After several Competitive Selection Process transactions and extensive negotiations, BISELCO and CIPC entered a fifteen (15) – year PSA on August 8, 2011 as amended on December 20, 2011.

ERC Case No. 2012-05 RC or Petition for Approval of Power Supply Agreement and Amendatory Agreement and NPP True Cost Generation Rate (NPP\_TCGR) with Provisional Authority was jointly filed by BISELCO and CIPC to the Energy Regulatory Commission (ERC) on January 16, 2012. The ERC issued its approval on December 10, 2012.

### SALIENT FEATURES OF THE CONTRACT

- The Agreements have term of Fifteen (15) years from the Commercial Operations Date (COD). CIPC constructed two power stations each for the municipalities of Busuanga and Coron. Busuanga Power Station COD is December 8, 2013; Coron Power Station (CPS) COD is August 20, 2014).
- CPS is the principal generating facility with a Net Dependable Capacity of 6.334 MW Bunker Fired engines and provides the full-service requirements of BISELCO (Baseload, Intermediate and Peaking) as well as its related ancillary requirements (Back-up and Spinning Reserves). It operates on 24/7 basis throughout the fifteen (15) – year term of the PSA.
- BPS will be the secondary generating facility with a Net Dependable Capacity of 0.608 MW Diesel Engines and provides the peaking and voltage regulation requirements for the Municipality of Busuanga. It is expected to operate during peak hours of each day throughout the fifteen (15) -year term of PSA.

# EXISTING POWER SUPPLY CONTRACTS

- The Agreements do not stipulate Minimum Energy Off-take (MEOT). However, a first priority dispatch for CIPC is indicated therein, a Net Expected Energy (NEE) of 18,302,156 kWh per annum and Maximum Deliverable Energy (MDE) of 37,200,000 kWh per annum.
- In the event that the actual downtime of the power stations exceeds the allowable downtime and CIPC fails to deliver the NEE per annum, CIPC shall provide alternative power and bear the positive difference between the generation cost of the alternative power supplier/s and true cost of generation.

## BISELCO-NPC-SPUG PSA

The existing PSA between BISELCO and NPC\_SPUG for Culion and Linapacan Diesel Power Plants expired last year-2017. Negotiations for 4-year PSA Renewal (2019-2022) for the island of Culion and Linapacan is currently ongoing, anticipating the entry of NPP, the Calamian Islands Renewable Energy Corp. (CREC). BISELCO-CREC 20-year term PSA is currently being applied to ERC for approval.

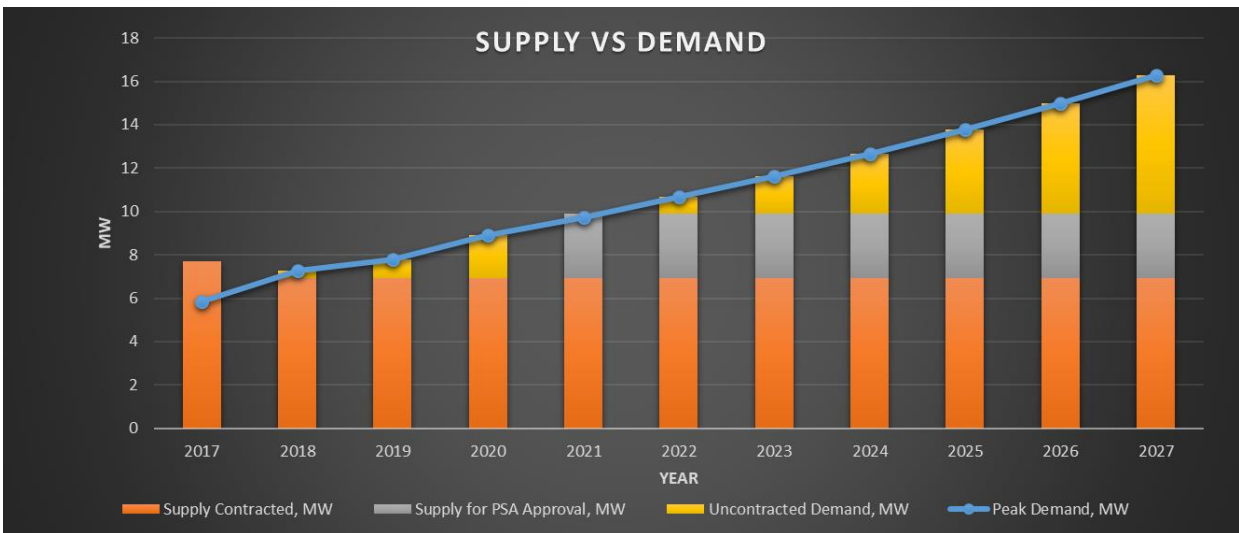
## CURRENTLY APPROVED SAGR

Currently approved SAGR for BISELCO is 4.024 Php/kWhr effective only last April 2018. BISELCO is included on Other Luzon Group 1 Area of NPC-SPUG.

# SUPPLY VS DEMAND

## SUPPLY VS DEMAND

Supply Demand	ACTUAL	FORECAST									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
<b>Peak Demand, MW</b>	5.858	7.254	7.780	8.928	9.749	10.682	11.633	12.667	13.785	14.993	16.292
<b>Supply Contracted, MW</b>	7.692	6.942	6.942	6.942	6.942	6.942	6.942	6.942	6.942	6.942	6.942
Calamian Islands Power Corporation - Coron Power Station	6.334	6.334	6.334	6.334	6.334	6.334	6.334	6.334	6.334	6.334	6.334
Calamian Islands Power Corporation - Busuanga Power Station	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608
NPC-SPUG Culion Diesel Power Plant	0.63										
NPC-SPUG Linapacan Diesel Power Plant	0.12										
<b>Supply for PSA Approval, MW</b>		-	-	-	2.953	2.953	2.953	2.953	2.953	2.953	2.953
CULNA Renewable Energy Corporation (CREC) - Culion Power					2.415	2.415	2.415	2.415	2.415	2.415	2.415
CULNA Renewable Energy Corporation (CREC) - Linapacan					0.538	0.538	0.538	0.538	0.538	0.538	0.538
<b>Uncontracted Demand, MW</b>	-	0.312	0.838	1.986	-	0.787	1.738	2.772	3.890	5.098	6.397



## DISTRIBUTION IMPACT STUDY

For purpose of Competitive Selection Process in Busuanga Island Grid on which this Power Supply Procurement Plan is formulated, the DIS made is only intended for Busuanga Island Grid.

Using the scenarios required by the Philippine Distribution Code (PDC) on the conduct of DIS, the condition of the island's distribution system was assessed based on thermal, voltage, and short circuit performance as it conforms with the requirements of the PDC.

The findings under thermal and voltage assessment are as follows:

- 1.) By years 2018 and 2023, the grid with the power plants will not experience overloading and over/undervoltages;
- 2.) By the year 2028, maximum loading of the lines during system peak will roughly be 80%. Low voltages at the extreme ends of the lines are expected,
- 3.) To address the expected low voltage problems in year 2028, capacitors will need to be installed. The generators will be able to regulate voltages during off-peak even with capacitors installed.
4. BISELCO will need to upgrade its lines from Coron to Busuanga to minimize the real power losses by 20 kW. This will be funded through Capital expenditure Projects (CAPEX).
5. Installation of Solar Plant will improve voltage regulation in the vicinity. No line improvement will be needed for the connection of the Solar Plant at its proposed location.

Short circuit studies indicated that fault levels of the buses in the system will no increase beyond the standard interrupting capacity of protection equipment.

In general, DIS suggests that a diesel-solar-battery plant could be connected to BISELCO's distribution system without violating the standard thermal, voltage and short circuit performance. Based on the forecasted demand, the said diesel-solar-battery hybrid power plant could support the power requirements of the island up to 2028.

Attached on Annex B is the complete and comprehensive copy of DIS.

# SCHEDULE OF CSP

## SCHEDULE OF CSP

### BUSUANG ISLAND GRID

Current NPP on Busuanga Island Grid has a total Net Dependable Capacity of 6.942 MW. This capacity is no longer sufficient this year 2019 if N-1 reliability criteria is concerned. Without the largest unit, there will be a 1.613 MW capacity deficit by 2019. This prompts BISELCO to conduct emergency power procurement in order to maintain adequate reserve while waiting for a long term power supply.

Additional capacity is expected as early as 2021. For Coron & Busuanga BISELCO plans to have another CSP by 2027 as indicated on the table below:

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029 (end of P&A with existing NPP)
Base	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800
Peaking	640	640	640	640	640	640	640	640	640	640	640	640
Reserve	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Additional Capacity 1				9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Additional Capacity 2										9,000	9,000	9,000
Peak Demand	6,567	7,053	8,154	8,922	9,793	10,674	11,627	12,654	13,758	14,941	15,799	16,600
<b>SURPLUS (w/o N-1)</b>	<b>1,273</b>	<b>787</b>	<b>(314)</b>	<b>7,918</b>	<b>7,047</b>	<b>6,166</b>	<b>5,213</b>	<b>4,186</b>	<b>3,082</b>	<b>10,899</b>	<b>10,041</b>	<b>25,840</b>
<b>SURPLUS (w/ N-1)</b>	<b>(1,127)</b>	<b>(1,613)</b>	<b>(2,714)</b>	<b>5,518</b>	<b>4,647</b>	<b>3,766</b>	<b>2,813</b>	<b>1,786</b>	<b>682</b>	<b>8,499</b>	<b>7,641</b>	<b>6,840</b>

Expiration of contract on the existing NPP and N-1 reliability criteria is considered on the timing of capacity additions.

# TIMELINE OF CSP

## TIMELINE 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
Base / mid-merit / peaking	9,000	363,054	01/2020	01/2034	03/2019	04/2019	05/2019	05/2019	06/2019	07/2019	08/2019



# 10-YEAR MONTHLY HISTORICAL DATA

## 10-YEAR MONTHLY HISTORICAL DATA

Year	Peak Demand (MW)	Energy Purchased (Mwh)	Energy Sales (Mwh)
2008			
Jan	1.46	503	452
Feb	1.54	488	415
Mar	1.54	416	361
Apr	1.68	563	490
May	1.68	503	446
Jun	1.73	535	478
Jul	1.61	541	461
Aug	1.55	534	459
Sep	1.53	576	514
Oct	1.71	588	489
Nov	1.67	632	550
Dec	1.78	637	556
<b>TOTAL</b>		<b>6,515</b>	<b>5,670</b>
2009			
Jan	1.61	637	548
Feb	1.71	669	580
Mar	1.71	627	552
Apr	1.86	727	647
May	1.86	681	603
Jun	1.91	671	593
Jul	1.78	656	569
Aug	1.71	675	591
Sep	1.69	660	597
Oct	1.89	685	576
Nov	1.85	767	681
Dec	1.97	645.705	562.846
<b>TOTAL</b>		<b>8,100</b>	<b>7,099</b>
2010			
Jan	1.96	533	516
Feb	2.08	584	457
Mar	2.08	722	634
Apr	2.26	877	772
May	2.26	888	794
Jun	2.33	899	803
Jul	2.17	806	711
Aug	2.08	839	738
Sep	2.06	858	764
Oct	2.31	800	735
Nov	2.25	869	769
Dec	2.40	856	721
<b>TOTAL</b>		<b>9,531</b>	<b>8,415</b>

# 10-YEAR MONTHLY HISTORICAL DATA

2011			
Jan	2.09	772	712
Feb	2.21	494	437
Mar	2.21	820	661
Apr	2.41	968	867
May	2.41	995	888
Jun	2.48	794	742
Jul	2.31	791	681
Aug	2.22	721	616
Sep	2.19	809	792
Oct	2.46	569	464
Nov	2.40	972	877
Dec	2.56	964.407	848.150
TOTAL		9,668	8,585
2012			
Jan	2.39	967	900
Feb	2.53	893	763
Mar	2.53	893	794
Apr	2.75	1,000	917
May	2.75	940	833
Jun	2.83	879	777
Jul	2.64	771	724
Aug	2.54	764	650
Sep	2.51	874	801
Oct	2.81	913	797
Nov	2.74	1,024	898
Dec	2.93	970	893
TOTAL		10,889	9,747
2013			
Jan	2.59	935	779
Feb	2.74	805	741
Mar	2.74	1,068	872
Apr	2.99	1,310	1,162
May	2.99	1,200	1,090
Jun	3.07	1,081	1,004
Jul	2.86	1,113	973
Aug	2.75	1,143	1,070
Sep	2.72	1,138	971
Oct	3.04	1,130	922
Nov	2.97	549	509
Dec	3.17	617	588
TOTAL		12,088	10,680

# 10-YEAR MONTHLY HISTORICAL DATA

2014			
Jan	3.43	975	737
Feb	3.63	969	935
Mar	3.63	1,038	899
Apr	3.95	1,310	1,111
May	3.95	1,330	1,197
Jun	4.07	1,272	1,196
Jul	3.79	1,081	999
Aug	3.64	1,307	1,051
Sep	3.60	1,299	1,144
Oct	4.03	1,385	1,248
Nov	3.94	1,505	1,305
Dec	4.20	1,483	1,325
TOTAL		14,954	13,147
2015			
Jan	3.68	1,457	1,277
Feb	3.89	1,468	1,264
Mar	3.89	1,401	1,299
Apr	4.23	1,731	1,582
May	4.24	1,832	1,546
Jun	4.36	1,850	1,627
Jul	4.06	1,581	1,325
Aug	3.90	1,693	1,459
Sep	3.86	1,762	1,585
Oct	4.32	1,691	1,544
Nov	4.22	1,881	1,630
Dec	4.50	1,821	1,401
TOTAL		20,169	17,539
2016			
Jan	3.95	1,886	1,748
Feb	4.18	1,891	1,663
Mar	4.18	1,893	1,681
Apr	4.55	2,166	1,888
May	4.55	2,229	1,975
Jun	4.68	2,160	1,924
Jul	4.36	1,901	1,726
Aug	4.19	1,891	1,750
Sep	4.14	2,006	1,791
Oct	4.64	1,884	1,696
Nov	4.53	2,155	1,896
Dec	4.84	2,072	1,779
TOTAL		24,135	21,517

# 10-YEAR MONTHLY HISTORICAL DATA

2017			
Jan	4.95	2,266	2,073
Feb	4.94	2,284	1,992
Mar	5.11	2,151	1,942
Apr	5.15	2,619	2,253
May	5.31	2,711	2,382
Jun	5.23	2,699	2,445
Jul	4.899	2,312	2,083
Aug	5.092	2,476	2,212
Sep	5.018	2,514	2,262
Oct	5.416	2,434	2,183
Nov	5.789	2,741	2,401
Dec	5.858	2,646	2,347
TOTAL		29,855	26,573

# 10-YEAR MONTHLY FORECAST DATA

## 10-YEAR MONTHLY FORECAST DATA

Year	Forecast			Contracted and For PSA Approval		Uncontracted Demand and Energy		Committed for CSP	
	Coinciden t Peak Demand (MW)	Off Peak Demand (MW)	Energy Requireme nt (MWh)	Demand (MW)	Energy (MWh)	Uncontracted Demand (MW)	Uncontracted Energy (MWh)	Demand (MW)	Energy (MWh)
<b>2018</b>									
Jan	6.73		2,249.84						
Feb	6.50		2,161.42						
Mar	6.71		2,106.50						
Apr	6.74		2,445.22						
May	6.95		2,585.65						
Jun	6.86		2,654.36						
Jul	6.39		2,260.00						
Aug	6.71		2,401.51						
Sep	6.60		2,455.79						
Oct	6.96		2,370.03						
Nov	7.13		2,607.59						
Dec	7.25		2,548.67						
<b>2019</b>									
Jan	7.22		2,514.87						
Feb	6.97		2,416.03						
Mar	7.19		2,354.64						
Apr	7.23		2,733.27						
May	7.46		2,890.23						
Jun	7.35		2,967.04						
Jul	6.85		2,526.22						
Aug	7.19		2,684.40						
Sep	7.08		2,745.07						
Oct	7.47		2,649.21						
Nov	7.65		2,914.76						
Dec	7.78		2,848.90						
<b>2020</b>									
Jan	8.28		2,931.66						
Feb	8.00		2,816.43						
Mar	8.25		2,744.87						
Apr	8.29		3,186.25						
May	8.56		3,369.23						
Jun	8.44		3,458.76						
Jul	7.86		2,944.89						
Aug	8.25		3,129.28						
Sep	8.12		3,200.01						
Oct	8.57		3,088.26						
Nov	8.78		3,397.82						
Dec	8.93		3,321.04						

# 10-YEAR MONTHLY FORECAST DATA

2021									
Jan	9.05		3,216.00						
Feb	8.74		3,089.61						
Mar	9.01		3,011.10						
Apr	9.05		3,495.29						
May	9.35		3,696.02						
Jun	9.21		3,794.23						
Jul	8.58		3,230.52						
Aug	9.01		3,432.80						
Sep	8.87		3,510.39						
Oct	9.36		3,387.80						
Nov	9.58		3,727.38						
Dec	9.75		3,643.16						
2022									
Jan	9.91		3,538.40						
Feb	9.58		3,399.33						
Mar	9.87		3,312.96						
Apr	9.92		3,845.69						
May	10.24		4,066.53						
Jun	10.10		4,174.60						
Jul	9.41		3,554.37						
Aug	9.87		3,776.93						
Sep	9.72		3,862.30						
Oct	10.25		3,727.42						
Nov	10.50		4,101.05						
Dec	10.68		4,008.38						
2023									
Jan	10.80		3,861.20						
Feb	10.43		3,709.44						
Mar	10.75		3,615.19						
Apr	10.80		4,196.51						
May	11.15		4,437.51						
Jun	10.99		4,555.43						
Jul	10.24		3,878.63						
Aug	10.75		4,121.49						
Sep	10.58		4,214.64						
Oct	11.17		4,067.46						
Nov	11.43		4,475.17						
Dec	11.63		4,374.05						

# 10-YEAR MONTHLY FORECAST DATA

2024									
Jan	11.75		4,208.60						
Feb	11.36		4,043.19						
Mar	11.71		3,940.45						
Apr	11.76		4,574.08						
May	12.14		4,836.76						
Jun	11.97		4,965.29						
Jul	11.15		4,227.59						
Aug	11.71		4,492.30						
Sep	11.52		4,593.84						
Oct	12.16		4,433.42						
Nov	12.45		4,877.81						
Dec	12.67		4,767.59						
2025									
Jan	12.79		4,581.41						
Feb	12.36		4,401.35						
Mar	12.74		4,289.51						
Apr	12.80		4,979.27						
May	13.22		5,265.22						
Jun	13.03		5,405.14						
Jul	12.14		4,602.09						
Aug	12.74		4,890.25						
Sep	12.54		5,000.78						
Oct	13.23		4,826.15						
Nov	13.55		5,309.91						
Dec	13.79		5,189.92						

# 10-YEAR MONTHLY FORECAST DATA

2026									
Jan	13.91		4,980.26						
Feb	13.44		4,784.52						
Mar	13.86		4,662.95						
Apr	13.92		5,412.75						
May	14.37		5,723.60						
Jun	14.17		5,875.70						
Jul	13.20		5,002.73						
Aug	13.86		5,315.98						
Sep	13.64		5,436.13						
Oct	14.39		5,246.30						
Nov	14.74		5,772.17						
Dec	14.99		5,641.74						
2027									
Jan	15.12		5,405.61						
Feb	14.61		5,193.16						
Mar	15.06		5,061.20						
Apr	15.13		5,875.05						
May	15.62		6,212.44						
Jun	15.40		6,377.53						
Jul	14.34		5,430.01						
Aug	15.06		5,770.01						
Sep	14.82		5,900.42						
Oct	15.64		5,694.37						
Nov	16.01		6,265.16						
Dec	16.29		6,123.59						