ISABELA I 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 or you may contact us through telephone numbers (02) 840-2173 and (02) 479-2900 local 202.

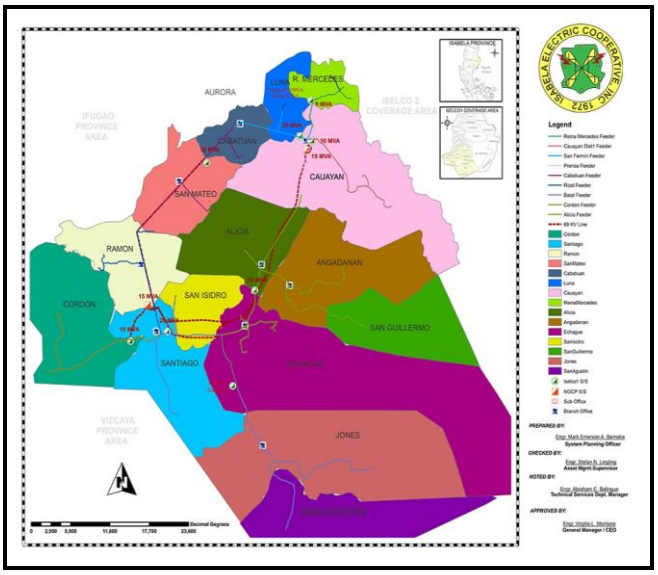
TABLE OF CONTENTS

INTRODUCTION

DISTRIBUTION UTILITIES PROFILE

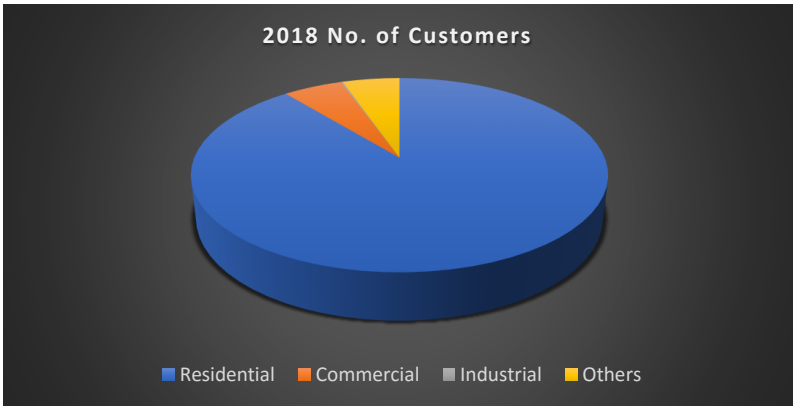
The Isabela I Electric Cooperative, Inc. (ISELCO I) has been in existence for the past 46 years. It is serving Southern most part of Isabela province consisting of thirteen (13) municipalities and two (2) cities with more or less 200,000 member -consumers. consumers. And all barangays within ISELCO I coverage area are 100% energized.
ISELCO I is classified as Mega Large Electric Cooperative and categorized as AAA for the past three (3) years.

DU's Franchise MAP



Number of Customer Connections in	ACTUAL	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Residential	176,026	183,325	190,427	198,222	206,737	215,989	225,991	236,754	248,284	260,589	273,672
Commercial	10,786	11,394	11,836	12,320	12,849	13,424	14,046	14,714	15,431	16,196	17,009
Industrial	336	359	372	388	404	422	442	462	485	509	535
Others	10,374	10,547	10,955	11,403	11,893	12,426	13,001	13,620	14,283	14,992	15,744
Contestable Cust	3	3	3	3	3	3	3	3	3	3	3
Total (Captive Cu	197,525	205,628	213,593	222,336	231,886	242,264	253,483	265,553	278,486	292,289	306,963

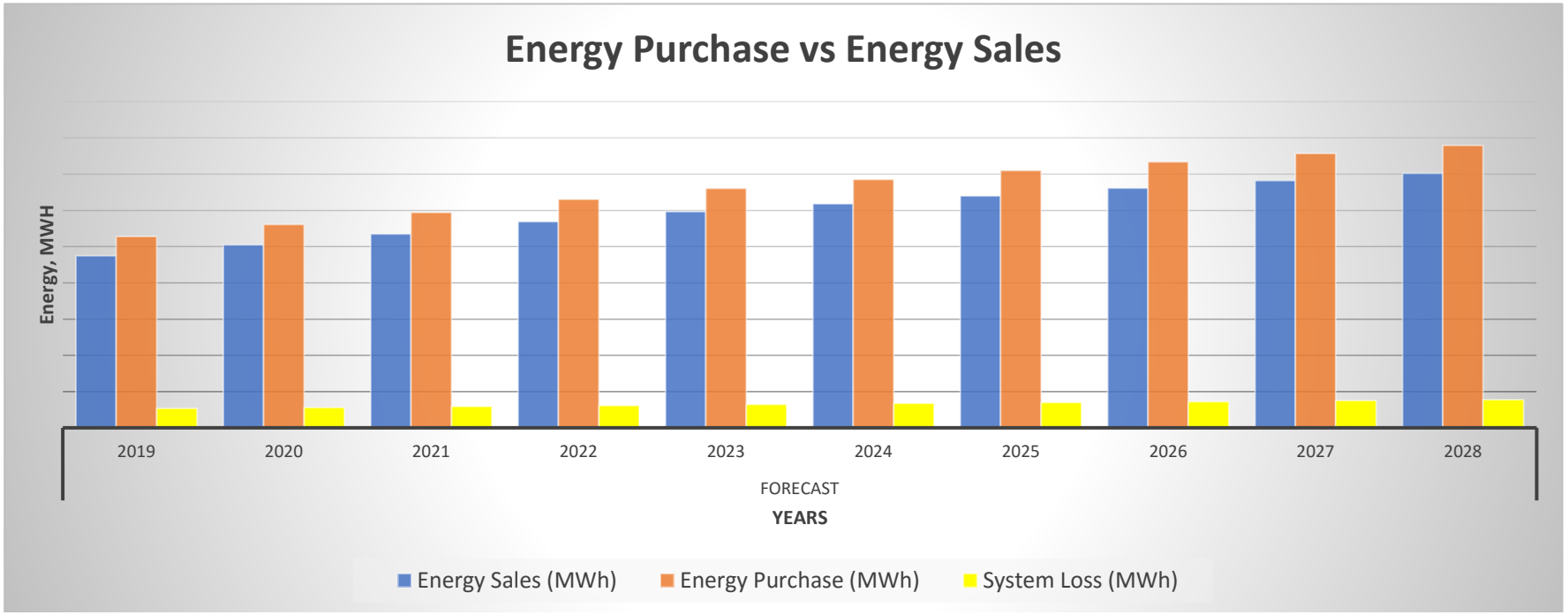
The customers profile is presented in the chart and it shows that the residential customers has a greater number of percentage with 88.16% as compared to other customer type such as commercial customers with 5.92%. In terms of average kwh energy sales, residential costumers has a dominant percentage of 42.23% compared to commercial and Industrial customers of 30.10% and 20.45%, respectively, and others such as public building, street light and sale for resale.



ENERGY SALES AND PURCHASE

ENERGY SALES AND PURCHASE	HISTORICAL									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Energy Sales (MWh)	209,671	218,348	222,366	242,821	268,380	289,730	322,460	368,350	391,967	407,285
Energy Purchase (MWh)	241,992	251,727	257,116	290,141	314,650	334,175	367,667	419,305	435,441	458,466
System Loss (MWh)	32,321	33,379	34,750	47,320	46,270	44,445	45,207	50,955	43,474	51,181

ENERGY SALES AND PURCHASE	FORECAST									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Energy Sales (MWh)	474,441	504,954	535,164	569,159	596,329	618,358	639,963	661,152	681,936	702,328
Energy Purchase (MWh)	527,993	560,924	593,993	630,797	660,724	685,457	709,714	733,504	756,840	779,736
System Loss (MWh)	53,553	55,970	58,829	61,638	64,394	67,099	69,751	72,352	74,904	77,407

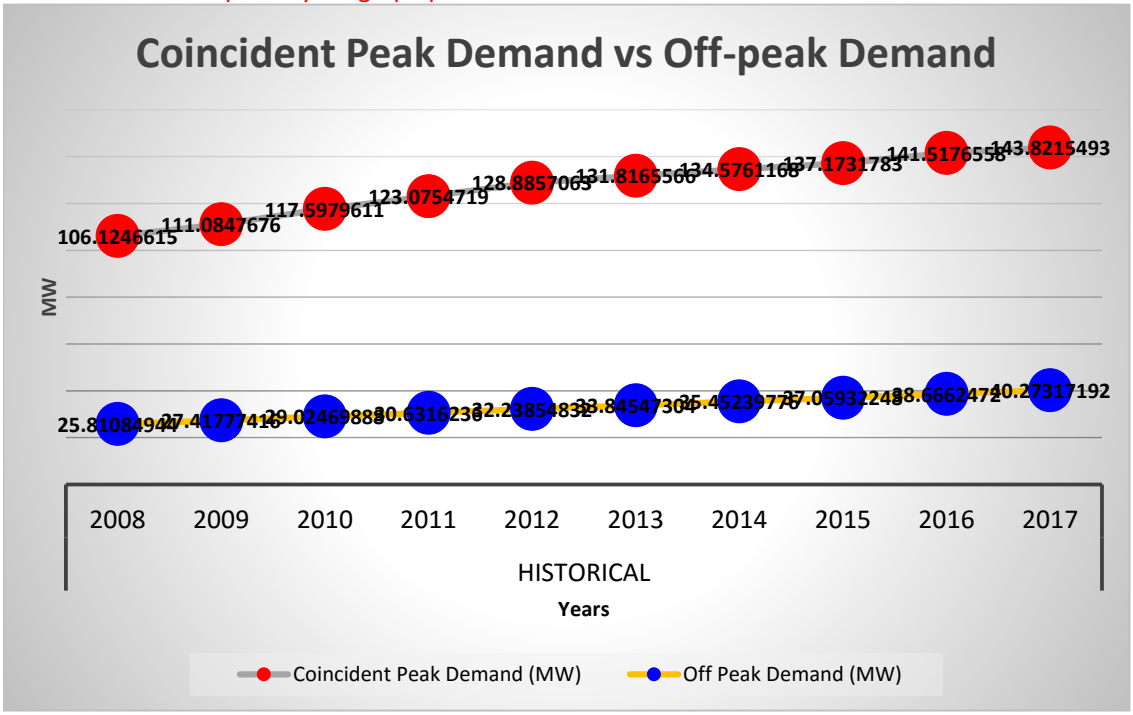


DEMAND

Demand	HISTORICAL									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Coincident Peak Demand (MW)	46.6	49.52	50.64	53.55	54.9	60.81	72	78.82	78.97	86.07
Off Peak Demand (MW)	13.23	14.8	16.34	17.86	19.36	20.35	20.83	20.99	22.6	13.49

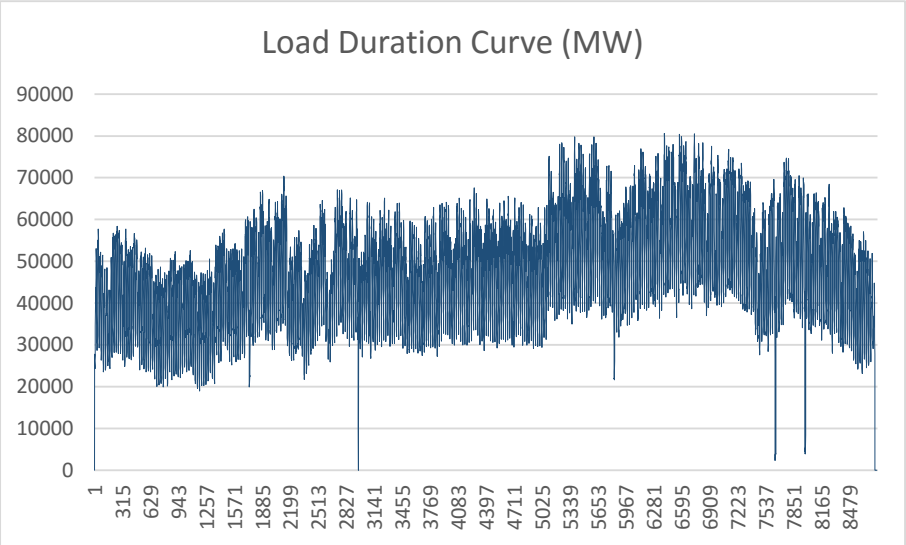
Demand	FORECAST									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Coincident Peak Demand (MW)	106.1	111.1	117.6	123.1	128.9	131.8	134.6	137.2	141.5	143.8
Off Peak Demand (MW)	25.81	27.42	29.02	30.63	32.24	33.85	35.45	37.06	38.67	40.27

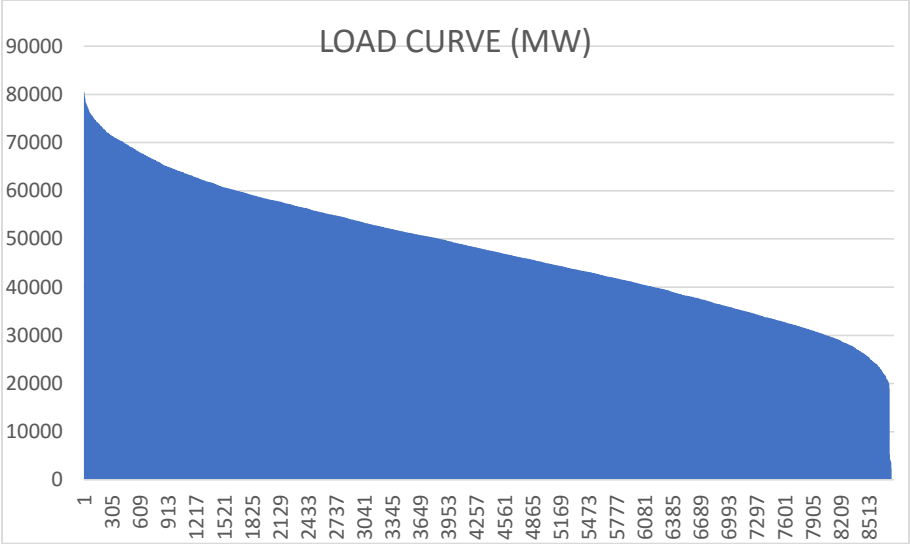
Note: Data are sample only for graph presentation



The most appropriate forecasting methodology for distribution utilities is Small Area forecasting to capture both magnitude and spatial characteristics of the load within the franchise or coverage area of the utility company. However, the current state of database and analytical models of the Electric Cooperatives are not sufficient yet to apply this approach or methodology. There are two forecasting methodology that can be used by the ECs. These are the Econometric Analysis which uses economic and demographic information to forecast the load and Trend Analysis which requires only historical load data. It is advisable for the ECs to gather sufficient and reliable historical load, economic and demographic data so that the two methodologies can be used in forecasting.

LOAD PROFILE AND LOAD DURATION CURVE



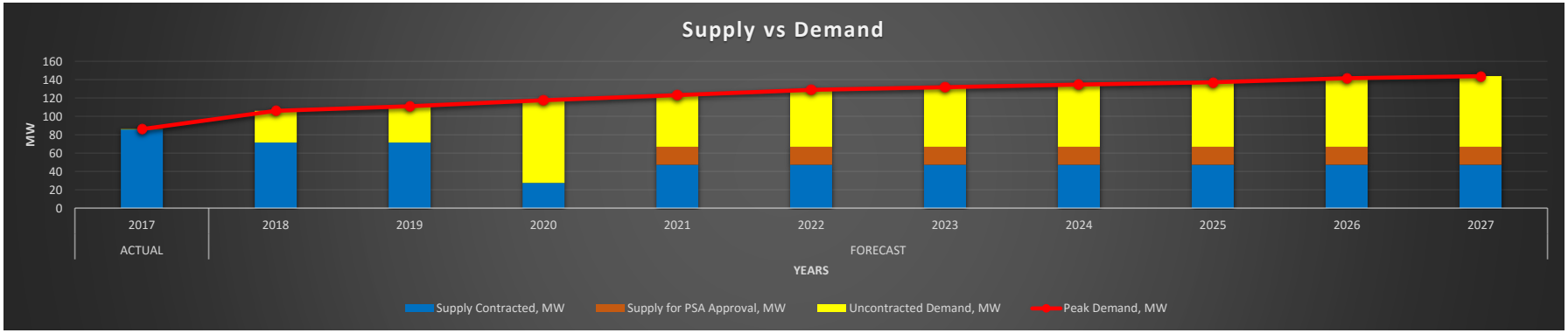


Base = 48 MW Peak = 81 MW

The figures above represent the load duration curve and load profile of ISELCO I for the year 2017. The combination demand of base and mid-merit load register at 48MW and for peaking demand registered at 81 MW.

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	**86.07**	**106.12**	**111.08**	**117.60**	**123.08**	**128.89**	**131.82**	**134.58**	**137.17**	**141.52**	**143.82**
Supply Contracted, MW	**85.73**	**71.52**	**71.52**	**27.52**	**47.22**	**47.22**	**47.22**	**47.22**	**47.22**	**47.22**	**47.22**
ISELCO 1 Minihydro	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52
San Miguel Energy Corporation / SMEC Extension	83.21	25									
San Miguel Energy Corporation / Base Load (with MR)		5	20.00	5	5	5	5	5	5	5	5
San Miguel Energy Corporation / Load Following (with MR)		20	30.00	20	20	20	20	20	20	20	20
Isabela Power Corporation/SPDC with COE		19									
New SPDC with COE			19.00								
Rio Norte Hydro Power Corporation					19.7	19.7	19.7	19.7	19.7	19.7	19.7
Supply for PSA Approval, MW	**0**	**0**	**0**	**0**	**19.7**	**19.7**	**19.7**	**19.7**	**19.7**	**19.7**	**19.7**
Mariveles Power Generation Company		25	25	25	25	25	25	25	25	25	25
Uncontracted Demand, MW	**0.34**	**34.60**	**39.56**	**90.08**	**56.16**	**61.97**	**64.90**	**67.66**	**70.25**	**74.60**	**76.90**



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)
MiniHydro	ISELCO	45%	1984	N/A	2.52	9,933	Base	Embeded	Utility Owned	Operational	Hydro	2.52	
SMEC	SMEC	100%	12/26/2016	12/25/2017	81.33	712,450	Intermediate	Grid	IPP	Operational	Coal Fired		
SMEC	SMEC	100%	12/26/2017	12/25/2018	83.21	728,920	Intermediate	Grid	IPP	Operational	Coal Fired		
SMEC	SMEC	100%	12/26/2018	12/25/2028	5	43,800	Base	Grid	IPP	Operational	Coal Fired		
SMEC	SMEC	100%	12/26/2018	12/25/2028	20	175,200	Peaking	Grid	IPP	Operational	Coal Fired		
MPGC	MPGC	100%	12/26/2018	12/25/2038	25	219,000	Base	Grid	IPP	Operational	Coal Fired		
IPC	IPC	45%	6/26/2021	5/25/2046	19	84,631	Base	Embeded	IPP	Under Constr	Hydro		
RNHC	RNHC	45%	12/26/2021	12/25/2046	19.7	84,607	Base	Embeded	IPP	For ERC Appr	Hydro		

Majority of energy requirements of the cooperative comes from San Miguel Energy Corporation (SMEC) for the years 2010-2018 (ERC Case No. 2011-113RC). ISELCO I signed another contract by 2019 with SMEC SUAL (ERC Case No. 2016-109RC) and Isabela Power Corporation(IPC)(ERC Case No. 2016-070RC) with capacity of 25MW and 19 MW respectively. Another additional contract is the 19.7MW supply capacity from Rio Norte HydroPower Corporation (RNHC)(ERC Case No. 2018-080RC) to be delivered on 2022. On the other hand, contract with Mariveles Power Generation Company (MPGC)(ERC Case No. 2016-156RC) is undergoing process for ERC approval with supply capacity of another 25MW. Due to the delays on the MPGC application at ERC and IPC's delay on plant commercial operation, ISELCO 1 resorted to the 1 year extension of the SMEC 2018 contract (ERC Case No. 2011-113RC) for the supposed 25 MW MPGC supply contract and 1 year emergency power supply contract / CSP exemption for the supposed 19 MW IPC supply contract for 2019 respectively. Both contract extension and CSP exemption were coordinated to the consent and approval of the concerned governing and regulatory offices. But with the May 3, 2019 Supreme Court descision re_Alyansa Para sa Bagong Pilipinas, Inc Vs. ERC, all contracts except for the RNHC Contract (ERC Case No. 2018-080RC) will be affected. Except for the SMEC SUAL (ERC Case No. 2016-109RC) in which both ISELCO 1 and SMEC filed motion for recconsideration before the ERC, ISELCO I will be conducting CSP for 5MW Renewable Energy Supply Contract and 19MW Long Term Energy Contract aside from the request for Certificates of Exemptions for the affected Supply Contracts to suppress the effect of the SC descision and to assure sufficient supply for the energy requirement of our member-consumer-owners.

DISTRIBUTION IMPACT STUDY

Brief discussion on the following:
Readiness of substation, distribution lines on the forecasted increase of loads
Impact on the entry of a new power plant which may affects transmission congestion
Loading of substations
Compliance with the PDC and PEC

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
Peaking	5	14,600	12/26/2020	12/25/2030	2/6/2020	2/19/2020	3/20/2020	3/30/2020	4/15/2020	4/29/2020	5/15/2020
Peaking	19	166,440	2/26/2021	2/25/2031	3/22/2020	4/2/2020	4/15/2020	4/24/2020	5/11/2020	6/11/2020	7/3/2020

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)
2019									
Jan	85.72	25.81	35,760	71.52	37,328	14.20	(1,568)		
Feb	81.04	28.21	35,441	71.52	37,328	9.52	(1,887)		
Mar	96.55	35.39	39,281	71.52	51,198	25.03	(11,917)		
Apr	100.93	35.48	47,339	71.52	51,198	29.41	(3,859)		
May	104.66	45.86	50,377	71.52	51,198	33.14	(821)		
Jun	106.12	46.88	53,005	71.52	51,198	34.60	1,807		
Jul	101.30	45.95	47,893	71.52	51,198	29.78	(3,305)		
Aug	100.66	45.67	49,653	71.52	51,198	29.14	(1,545)		
Sep	92.01	39.06	45,068	71.52	51,198	20.49	(6,129)		
Oct	99.29	45.43	48,654	71.52	51,198	27.77	(2,544)		
Nov	89.27	43.83	36,015	71.52	51,198	17.75	(15,183)		
Dec	87.97	40.62	39,507	71.52	51,198	16.45	(11,691)		
2020									
Jan	89.72	27.42	37,990	71.52	51,198	18.20	(13,208)		
Feb	84.83	34.50	37,652	71.52	51,198	13.31	(13,546)		
Mar	101.06	43.28	41,731	71.52	51,198	29.54	(9,467)		
Apr	105.64	43.38	50,291	71.52	51,198	34.12	(906)		
May	109.55	56.08	53,519	71.52	51,198	38.03	2,321		
Jun	111.08	57.33	56,311	71.52	51,198	39.56	5,113		
Jul	106.04	56.19	50,880	71.52	51,198	34.52	(317)		
Aug	105.37	55.85	52,750	71.52	51,198	33.85	1,552		
Sep	96.31	47.76	47,879	71.52	51,198	24.79	(3,318)		
Oct	103.93	55.55	51,688	71.52	51,198	32.41	491		
Nov	93.44	53.59	38,261	71.52	51,198	21.92	(12,937)		
Dec	92.08	49.67	41,971	71.52	51,198	20.56	(9,227)		
2021									
Jan	94.98	29.02	40,230	76.52	51,855	18.46	(11,625)		
Feb	89.80	36.52	39,871	76.52	51,855	13.28	(11,984)		
Mar	106.99	45.82	44,191	76.52	51,855	30.47	(7,664)		
Apr	111.84	45.93	53,256	76.52	51,855	35.32	1,401		
May	115.98	59.36	56,674	76.52	51,855	39.46	4,820		
Jun	117.60	60.69	59,631	76.52	51,855	41.08	7,776		
Jul	112.25	59.48	53,880	76.52	51,855	35.73	2,025		
Aug	111.54	59.13	55,860	76.52	51,855	35.02	4,005		
Sep	101.96	50.56	50,702	76.52	51,855	25.44	(1,153)		
Oct	110.02	58.81	54,736	76.52	51,855	33.50	2,881		
Nov	98.92	56.73	40,517	76.52	51,855	22.40	(11,338)		

Dec	97.48	52.58	44,446	76.52	51,855	20.96	(7,409)		
2022									
Jan	99.41	30.63	42,723	96.22	47,161	3.19	(4,439)		
Feb	93.99	38.54	42,342	96.22	43,573	(2.23)	(1,231)		
Mar	111.97	48.36	46,929	96.22	56,663	15.75	(9,734)		
Apr	117.05	48.47	56,556	96.22	55,694	20.83	862		
May	121.38	62.65	60,186	96.22	53,595	25.16	6,591		
Jun	123.08	64.05	63,325	96.22	55,513	26.86	7,812		
Jul	117.48	62.77	57,218	96.22	55,583	21.26	1,635		
Aug	116.74	62.40	59,321	96.22	56,913	20.52	2,408		
Sep	106.71	53.36	53,844	96.22	56,923	10.49	(3,080)		
Oct	115.15	62.06	58,127	96.22	65,989	18.93	(7,862)		
Nov	103.52	59.87	43,027	96.22	65,530	7.30	(22,503)		
Dec	102.02	55.49	47,199	96.22	65,989	5.80	(18,790)		
2023									
Jan	104.10	32.24	44,749	96.22	61,031	7.88	(16,282)		
Feb	98.42	40.56	44,351	96.22	57,443	2.20	(13,092)		
Mar	117.25	50.89	49,156	96.22	56,663	21.03	(7,507)		
Apr	122.57	51.01	59,239	96.22	55,694	26.35	3,546		
May	127.11	65.94	63,041	96.22	53,595	30.89	9,447		
Jun	128.89	67.41	66,330	96.22	55,513	32.67	10,817		
Jul	123.03	66.06	59,933	96.22	55,583	26.81	4,350		
Aug	122.25	65.67	62,135	96.22	56,913	26.03	5,222		
Sep	111.75	56.16	56,398	96.22	56,923	15.53	(525)		
Oct	120.58	65.32	60,885	96.22	65,989	24.36	(5,104)		
Nov	108.41	63.02	45,068	96.22	65,530	12.19	(20,461)		
Dec	106.84	58.41	49,439	96.22	65,989	10.62	(16,550)		
2024									
Jan	106.47	33.85	46,425	96.22	61,031	10.25	(14,607)		
Feb	100.66	42.58	46,011	96.22	57,443	4.44	(11,432)		
Mar	119.92	53.43	50,996	96.22	56,663	23.70	(5,667)		
Apr	125.36	53.55	61,457	96.22	55,694	29.14	5,763		
May	130.00	69.22	65,401	96.22	53,595	33.78	11,807		
Jun	131.82	70.77	68,813	96.22	55,513	35.60	13,300		
Jul	125.83	69.36	62,176	96.22	55,583	29.61	6,593		
Aug	125.03	68.95	64,461	96.22	56,913	28.81	7,548		
Sep	114.29	58.96	58,509	96.22	56,923	18.07	1,586		
Oct	123.32	68.57	63,164	96.22	65,989	27.10	(2,825)		
Nov	110.88	66.16	46,755	96.22	65,530	14.66	(18,774)		
Dec	109.27	61.32	51,289	96.22	65,989	13.05	(14,700)		
2025									
Jan	108.70	35.45	48,067	96.22	61,031	12.48	(12,964)		
Feb	102.77	44.61	47,639	96.22	57,443	6.55	(9,804)		
Mar	122.43	55.97	52,800	96.22	56,663	26.21	(3,863)		
Apr	127.99	56.10	63,632	96.22	55,694	31.77	7,938		

May	132.72	72.51	67,716	96.22	53,595	36.50	14,121		
Jun	134.58	74.13	71,248	96.22	55,513	38.36	15,735		
Jul	128.46	72.65	64,377	96.22	55,583	32.24	8,794		
Aug	127.65	72.22	66,742	96.22	56,913	31.43	9,829		
Sep	116.68	61.76	60,580	96.22	56,923	20.46	3,657		
Oct	125.90	71.83	65,399	96.22	65,989	29.68	(590)		
Nov	113.20	69.30	48,410	96.22	65,530	16.98	(17,120)		
Dec	111.56	64.23	53,104	96.22	65,989	15.34	(12,885)		
2026									
Jan	110.80	37.06	49,679	96.22	61,031	14.58	(11,352)		
Feb	104.75	46.63	49,236	96.22	57,443	8.53	(8,207)		
Mar	124.79	58.50	54,570	96.22	56,663	28.57	(2,093)		
Apr	130.46	58.64	65,765	96.22	55,694	34.24	10,071		
May	135.28	75.80	69,985	96.22	53,595	39.06	16,391		
Jun	137.17	77.49	73,636	96.22	55,513	40.95	18,123		
Jul	130.94	75.94	66,535	96.22	55,583	34.72	10,952		
Aug	130.11	75.49	68,979	96.22	56,913	33.89	12,067		
Sep	118.93	64.56	62,610	96.22	56,923	22.71	5,687		
Oct	128.33	75.09	67,591	96.22	65,989	32.11	1,602		
Nov	115.38	72.44	50,033	96.22	65,530	19.16	(15,497)		
Dec	113.71	67.14	54,884	96.22	65,989	17.49	(11,105)		
2027									
Jan	114.30	38.67	51,259	96.22	61,031	18.08	(9,772)		
Feb	108.07	48.65	50,802	96.22	57,443	11.85	(6,641)		
Mar	128.75	61.04	56,306	96.22	56,663	32.53	(357)		
Apr	134.59	61.18	67,857	96.22	55,694	38.37	12,163		
May	139.57	79.08	72,212	96.22	53,595	43.35	18,617		
Jun	141.52	80.85	75,979	96.22	55,513	45.30	20,466		
Jul	135.09	79.24	68,651	96.22	55,583	38.87	13,068		
Aug	134.23	78.77	71,174	96.22	56,913	38.01	14,261		
Sep	122.70	67.36	64,602	96.22	56,923	26.48	7,679		
Oct	132.40	78.34	69,742	96.22	65,989	36.18	3,753		
Nov	119.04	75.58	51,625	96.22	65,530	22.82	(13,905)		
Dec	117.31	70.05	56,631	96.22	65,989	21.09	(9,358)		
2028									
Jan	116.17	40.27	52,810	96.22	61,031	19.95	(8,221)		
Feb	109.83	50.67	52,339	96.22	57,443	13.61	(5,104)		
Mar	130.84	63.58	58,010	96.22	56,663	34.62	1,347		
Apr	136.78	63.72	69,910	96.22	55,694	40.56	14,216		
May	141.84	82.37	74,397	96.22	53,595	45.62	20,802		
Jun	143.82	84.21	78,277	96.22	55,513	47.60	22,764		
Jul	137.29	82.53	70,728	96.22	55,583	41.07	15,145		
Aug	136.42	82.04	73,327	96.22	56,913	40.20	16,414		
Sep	124.70	70.16	66,557	96.22	56,923	28.48	9,633		
Oct	134.55	81.60	71,851	96.22	65,989	38.33	5,862		
Nov	120.98	78.72	53,186	96.22	65,530	24.76	(12,343)		
Dec	119.22	72.96	58,344	96.22	65,989	23.00	(7,645)		