

POWER SUPPLY PROCUREMENT PLAN

NAME OF DU

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.

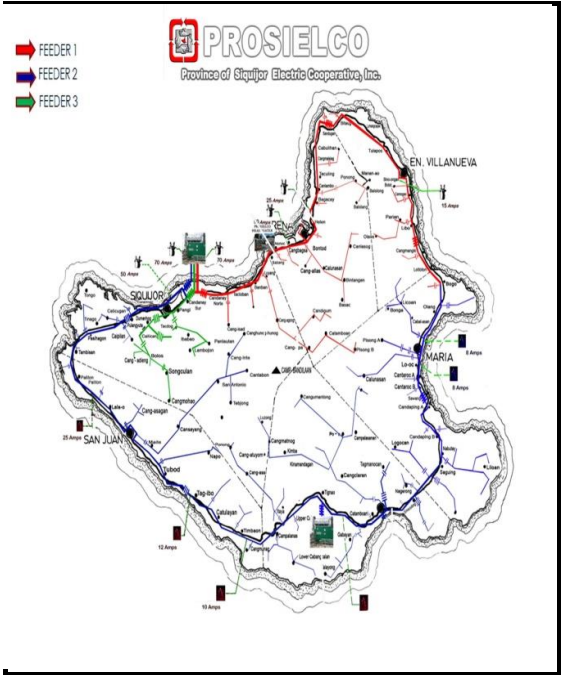
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INTRODUCTION

DISTRIBUTION UTILITIES PROFILE

DU's Franchise MAP

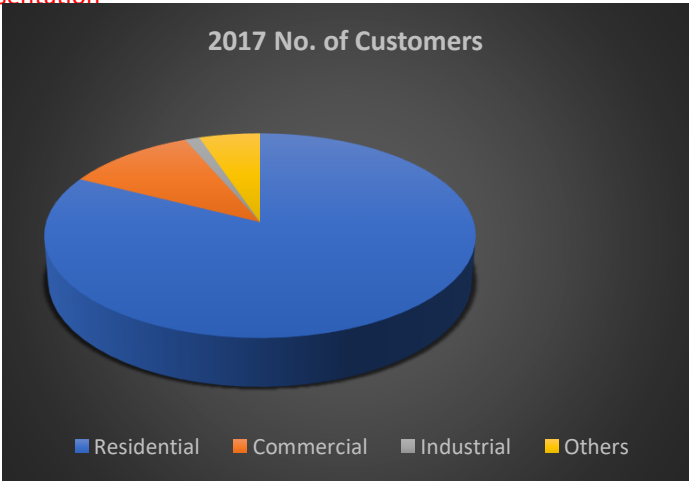
Located in Central Visayas, the franchise area of PROSIELCO is the entire Province of Siquijor covering six municipalities namely Larena, Enrique Villanueva, Maria, Lazi, San Juan and Siquijor.



Number of Customer	ACTUAL		FORECAST								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	20479	22430	23412	24374	25313	26232	27129	28007	28866	29706	30530
Commercial	2760	2309	2491	2679	2871	3066	3262	3459	3655	3851	4046
Industrial	308	175	182.2	190.7	200.4	211	222.5	234.8	247.7	261.2	275.1
Others	1289	1371	1457	1547	1640	1736	1835	1937	2041	2148	2257
Contestable Customers served by RES											
Total (Captive)	24836	26285	27543	28791	30025	31245	32449	33637	34810	35966	37108

Note: Data are sample only for graph presentation

Siquijor Island is one of the most visited tourist destinations due to its pristine and white sand beaches. One reason for the abrupt increase in power demand is the influx of tourists due to the closure of Boracay.

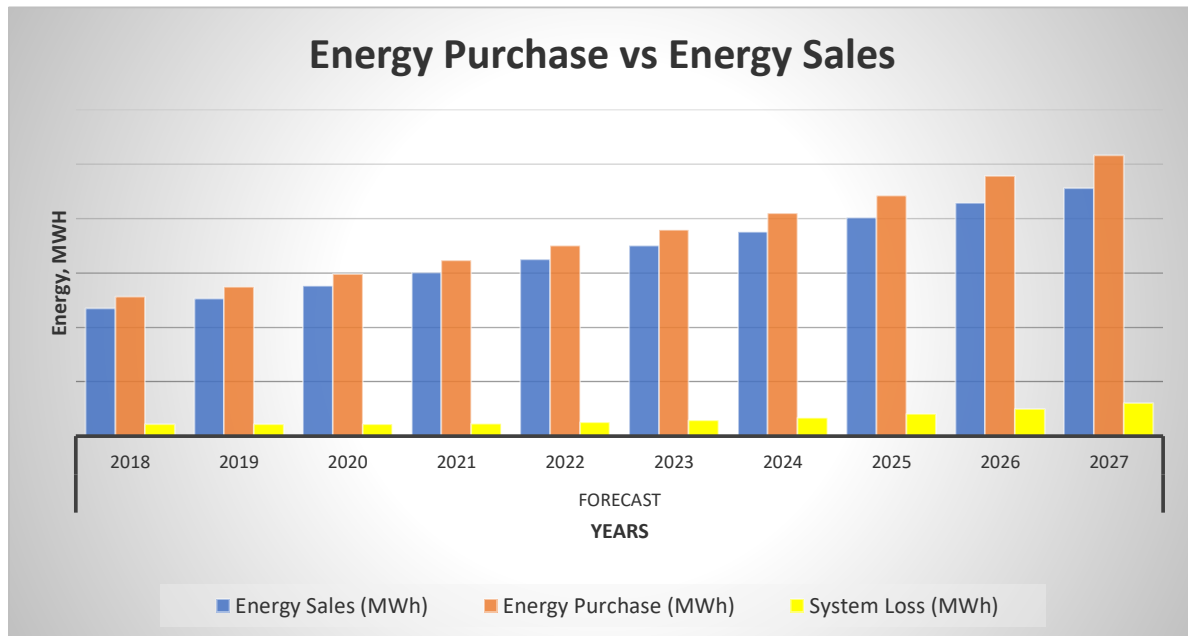


ENERGY SALES AND PURCHASE

ENERGY SALES AND PURCHASE	HISTORICAL									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Energy Sales (MWh)	10.66	14.31	12.54	12.9	13.28	14.28	14.92	17.15	20.14	21.36
Energy Purchase (MWh)	11.85	12.44	13.92	14.41	14.82	15.87	16.7	18.91	22.2	23.7
System Loss (MWh)	1.197	-1.87	1.372	1.509	1.545	1.595	1.775	1.757	2.057	2.34

ENERGY SALES AND PURCHASE	FORECAST									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Energy Sales (MWh)	23.46	25.32	27.65	30.04	32.5	35.00	37.56	40.18	42.84	45.57
Energy Purchase (MWh)	25.7	27.49	29.84	32.34	35.02	37.89	40.97	44.27	47.81	51.61
System Loss (MWh)	2.232	2.175	2.187	2.296	2.523	2.887	3.405	4.095	4.971	6.043

Note: Data are sample only for graph presentation



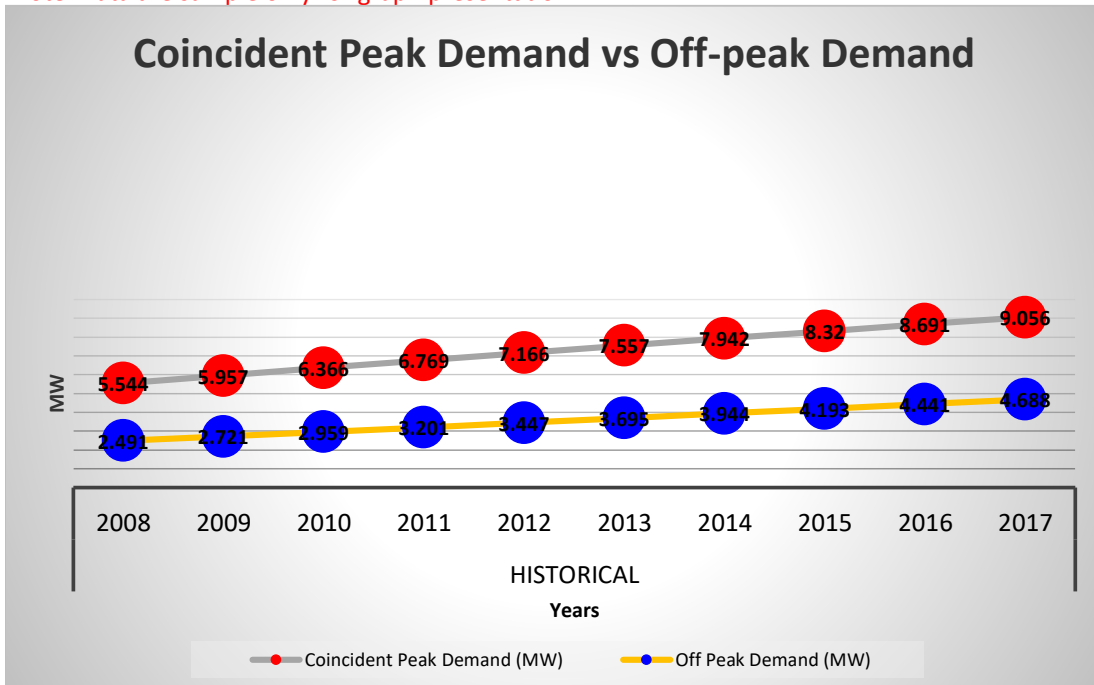
An average growth rate of 7.292 % for energy sales and 7.486 % for energy purchase for the 10 year forecasted data. The main reason for the increase is the on going development of Siquijor Island in terms of economy and tourism. System loss is properly monitored and maintained to single digit.

DEMAND

Demand	HISTORICAL									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Coincident Peak Demand (MW)	2.95	3.13	3.506	3.464	3.167	3.683	3.83	4.559	4.649	4.923
Off Peak Demand (MW)										2.287

Demand	HISTORICAL									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Coincident Peak Demand (MW)	5.544	5.957	6.366	6.769	7.166	7.557	7.942	8.32	8.691	9.056
Off Peak Demand (MW)	2.491	2.721	2.959	3.201	3.447	3.695	3.944	4.193	4.441	4.688

Note: Data are sample only for graph presentation

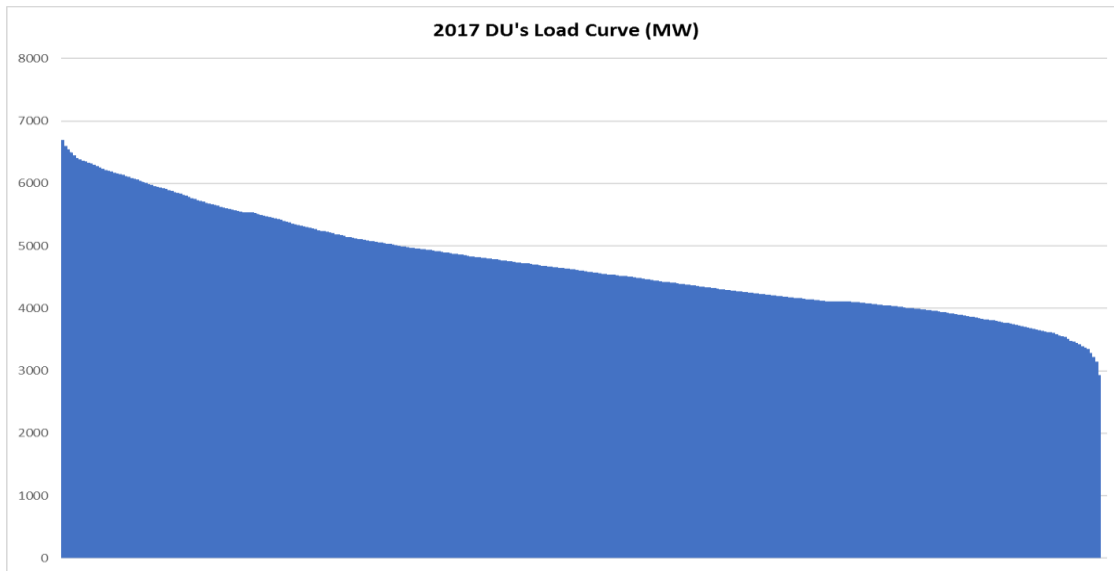
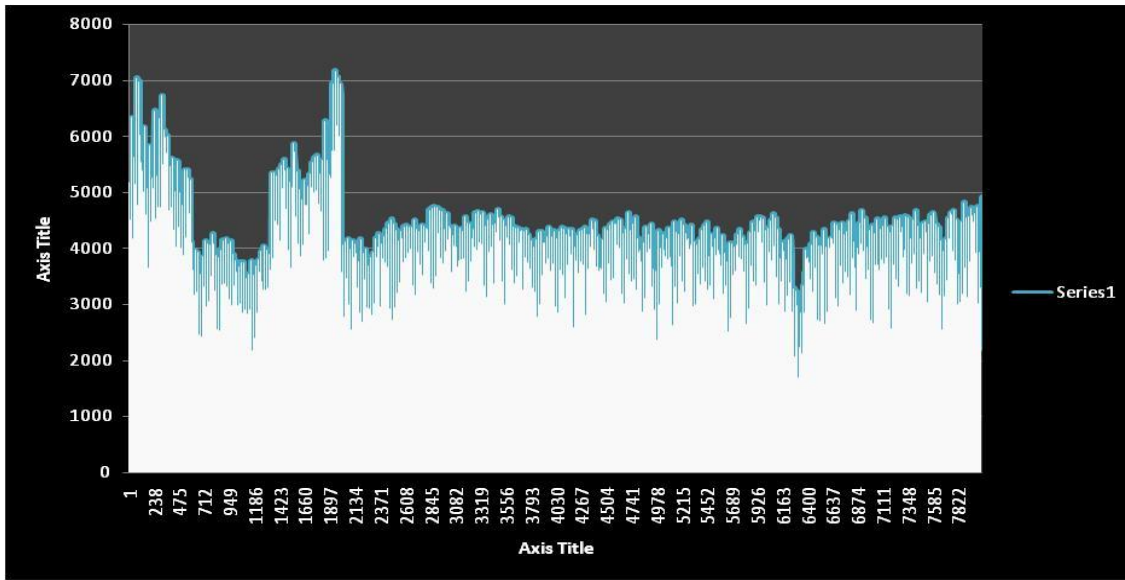


Scientific forecasting of purchase, sales, demand and customers were conducted using the methodology applied in the e-Integrated Computerized Planning Model (e-ICPM). The model being adopted by the National Electrification Administration was presumed reliable enough to technically evaluate our future load of the system. A total of fifty scientific models were applied to test the soundness of the forecasted value. Values that have passed the technical criteria based from the EC-DUP Manual were the one chosen as forecasted value.

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LOAD PROFILE AND LOAD DURATION CURVE



Brief highlight:
Base Load - 2.287 MW Mid Merit - 3.937 MW Peak - 4.923 MW

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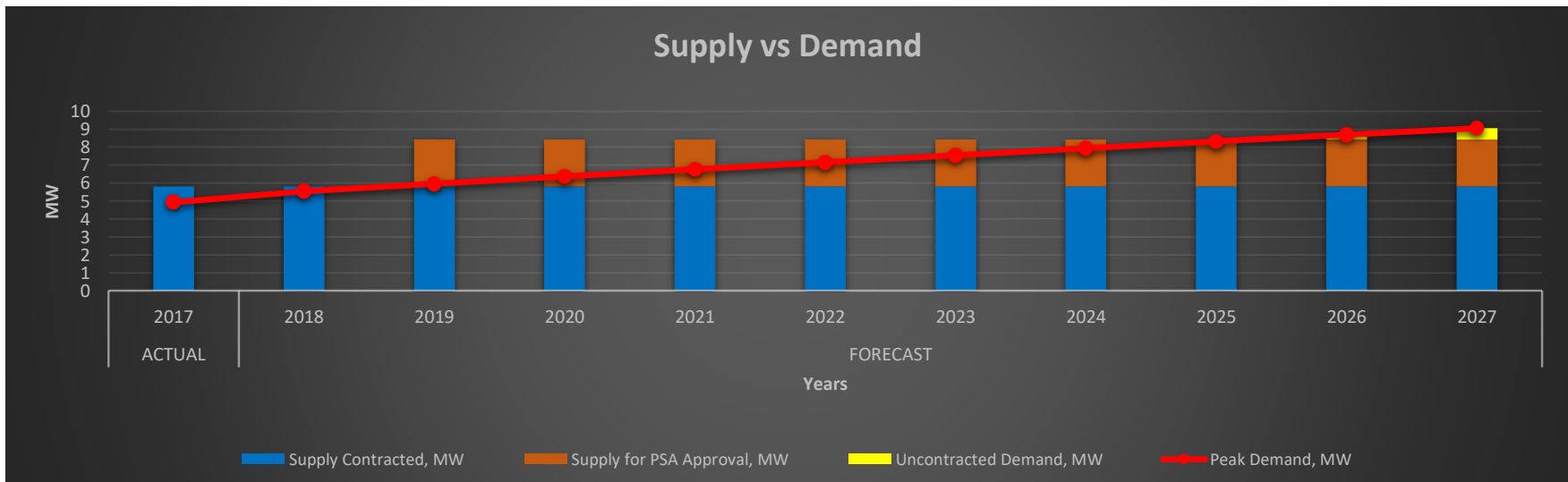
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MIXSUPPLY VS DEMAND AND THE OPTIMAL SUPPLY

Supply Demand	ACTUAL	FORECAST									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Peak Demand, MW	4.923	5.544	5.957	6.366	6.769	7.166	7.557	7.942	8.32	8.691	9.056
Supply Contracted, MW	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176
Generation Plant Name 1	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176	5.8176
Generation Plant Name 2											
Generation Plant Name 3											
Supply for PSA Approval, MW	0	0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Generation Plant Name 1			2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Generation Plant Name 2											
Generation Plant Name 3											
Uncontracted Demand, MW	0	0	0	0	0	0	0	0	0	0.2734	0.6384

Note: Data are sample only for graph presentation



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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)
GenCo 1	SIPCOR		Feb-15	Feb-35	5.818	Energy Bas	Base	Embedded			Bunker	6.416	5.818
GenCo 2													
GenCo 3													
GenCo 4													
GenCo 5													

The Siquijor Island Power Corporation (SIPCOR) is the sole power supplier of PROSIELCO. Two power plants with two units 1.6 MW bunker fuel driven generating machines are installed in each power plant located in Tignao, Iai and Candanay Sur, Siquijor. The 6.416 MW 20 year contract of the cooperative with SIPCOR started in February 2015 having 6.2553 pesos SAGR. A year after the operation of SIPCOR, there was a sudden change of administration in the island which made the creation of a lot of establishment and projects and led the shoot out of our power demand. The more when Boracay was closed and the inflow of tourists in the island increased at a rapid rate. Since 4 gensets of SIPCOR are already running, load shedding is experienced in Siquijor when it conducts PMS even to only one of the gensets. The PROSIELCO Board and Management, through its BAC is currently conducting a CSP to solve this problem the soonest possible time.

DISTRIBUTION IMPACT STUDY

Capacity problem on substation of PROSIELCO is not the direct concern of the cooperative considering that we are connected to NPP which is SIPCOR that owns and maintain the generating and substation system. Based on our assessment and thorough evaluation our existing system such as lines for primary and secondary is capable to carry the future loads for the next five years.

10 Year Monthly Data

Year	Forecast			Contracted and For PSA Approval Demand and Energy		Contracted 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)
2018									
Jan	4.999							4.999	
Feb	4.864							4.864	
Mar	4.360							4.360	
Apr	4.985							4.985	
May	5.478							5.478	
Jun	5.010							5.010	
Jul	4.930							4.930	
Aug	4.960							4.960	
Sep	4.890			3.00				4.890	
Oct	5.120							5.120	
Nov	5.030							5.030	
Dec	5.544							5.544	
2019									
Jan	5.010							5.010	
Feb	5.150							5.150	
Mar	5.240							5.240	
Apr	5.215							5.215	
May	5.704							5.704	
Jun	4.900							4.900	
Jul	4.640							4.640	
Aug	4.680							4.680	
Sep	4.735							4.735	
Oct	4.910							4.910	
Nov	5.318							5.318	
Dec	5.957							5.957	
2020									
Jan	5.500							5.500	
Feb	5.210							5.210	
Mar	5.320							5.320	
Apr	5.565							5.565	
May	5.865							5.865	
Jun	5.231							5.231	
Jul	5.300							5.300	
Aug	5.350							5.350	
Sep	5.011							5.011	
Oct	5.160							5.160	
Nov	5.480							5.480	
Dec	6.366							6.366	
2021									
Jan	5.030							5.030	

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2025									
Jan	7.458							7.458	
Feb	7.285							7.285	
Mar	7.150							7.150	
Apr	7.250							7.250	
May	7.560							7.560	
Jun	7.330							7.330	
Jul	7.190							7.190	
Aug	7.570							7.570	
Sep	7.700							7.700	
Oct	7.810							7.810	
Nov	7.900							7.900	
Dec	8.320							8.320	
2026									
Jan	8.041							8.041	
Feb	7.945							7.945	
Mar	7.890							7.890	
Apr	8.160							8.160	
May	8.270							8.270	
Jun	8.140							8.140	
Jul	8.005							8.005	
Aug	8.020							8.020	
Sep	7.930							7.930	
Oct	8.250							8.250	
Nov	8.110							8.110	
Dec	8.691							8.691	
2027									
Jan	8.655							8.655	
Feb	8.395							8.395	
Mar	8.340							8.340	
Apr	8.750							8.750	
May	8.870							8.870	
Jun	8.520							8.520	
Jul	8.340							8.340	
Aug	8.005							8.005	
Sep	8.110							8.110	
Oct	8.550							8.550	
Nov	8.850							8.850	
Dec	9.056							9.056	