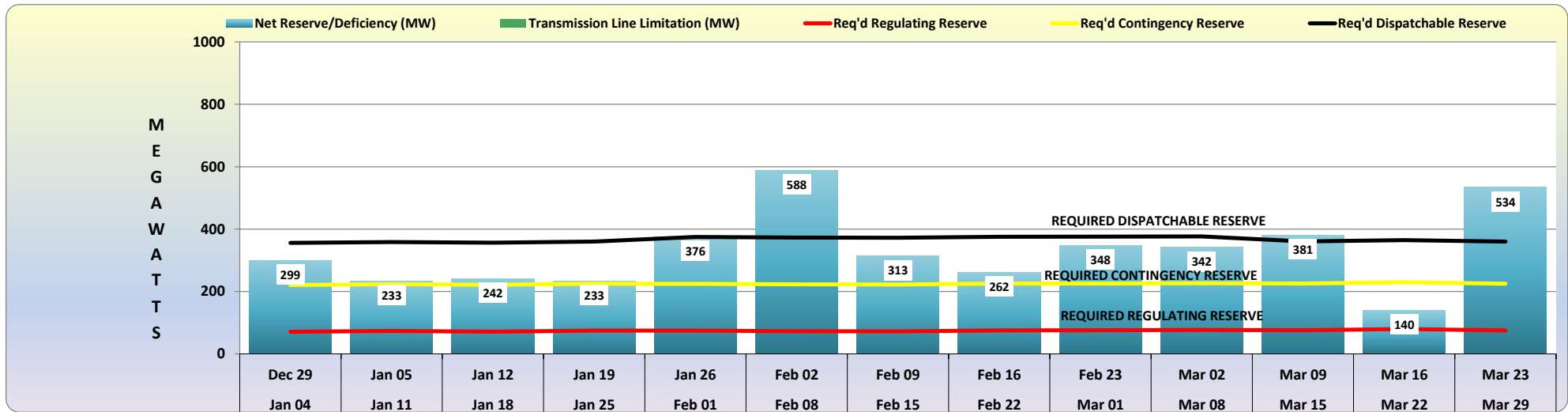


# VISAYAS GRID (Actual Data) 2018 1st Quarter Reserve Profile

REVISION 3

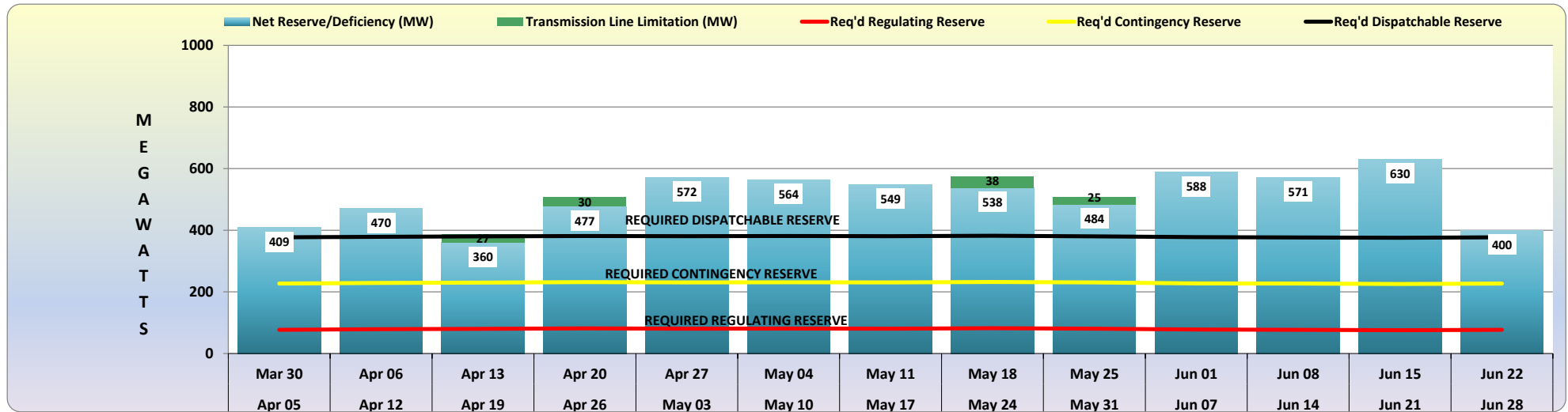


2018	1ST QUARTER													
	Dec 29	Jan 05	Jan 12	Jan 19	Jan 26	Feb 02	Feb 09	Feb 16	Feb 23	Mar 02	Mar 09	Mar 16	Mar 23	
	Jan 04	Jan 11	Jan 18	Jan 25	Feb 01	Feb 08	Feb 15	Feb 22	Mar 01	Mar 08	Mar 15	Mar 22	Mar 29	
<b>Available Capacity (MW)</b>	2,070	2,073	2,024	2,103	2,242	2,407	2,124	2,146	2,243	2,256	2,268	2,129	2,410	
Coal	895	864	895	893	896	963	933	888	942	1,005	1,015	964	963	
Geothermal	460	455	472	511	570	570	619	586	617	613	613	658	697	
Diesel	395	424	341	396	407	426	262	411	400	404	420	434	372	
Power Barges	221	204	200	172	36	98	51	158	(87)	(108)	(137)	(253)	-	
Hydro	17	15	17	11	9	9	10	8	12	6	7	8	7	
Biomass	22	63	68	70	65	70	63	72	71	72	72	72	70	
Solar	-	-	-	-	207	217	151	-	253	232	235	206	238	
Wind	61	49	32	51	52	55	35	23	35	33	44	40	63	
<b>System Load (MW)</b>	1,771	1,840	1,782	1,870	1,866	1,819	1,810	1,884	1,895	1,914	1,887	1,989	1,876	
<b>Gross Reserve/Deficiency (MW)</b>	299	233	242	233	376	588	313	262	348	342	381	140	534	
<b>Transmission Line Limitation (MW)</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Net Reserve/Deficiency (MW)</b>	299	233	242	233	376	588	313	262	348	342	381	140	534	
<b>Req'd Regulating Reserve</b>	71	74	71	75	75	73	72	75	76	77	75	80	75	
<b>Req'd Contingency Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	
<b>Req'd Dispatchable Reserve</b>	135	135	135	135	150	150	150	150	150	150	135	135	135	

1. Peak Demand Forecast at 2,143 MW to occur in December 2018 based from the approved DOE Forecast for the Power Development Plan 2016 – 2040.
2. Preventive Maintenance of Power Plants considered.
3. Embedded Generators considered.

# VISAYAS GRID (Actual Data) 2018 2nd Quarter Reserve Profile

REVISION 3

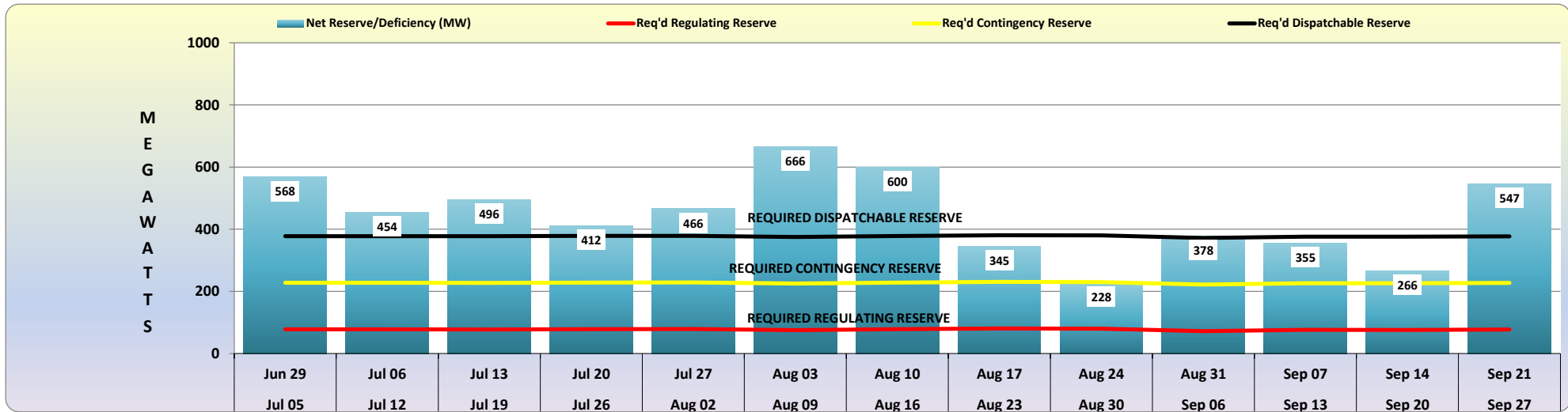


2018	2ND QUARTER													
	Mar 30	Apr 06	Apr 13	Apr 20	Apr 27	May 04	May 11	May 18	May 25	Jun 01	Jun 08	Jun 15	Jun 22	
	Apr 05	Apr 12	Apr 19	Apr 26	May 03	May 10	May 17	May 24	May 31	Jun 07	Jun 14	Jun 21	Jun 28	
<b>Available Capacity (MW)</b>	2,334	2,443	2,390	2,543	2,585	2,594	2,568	2,629	2,520	2,532	2,493	2,521	2,329	
Coal	963	860	834	965	962	1,046	1,045	985	983	1,015	1,042	994	830	
Geothermal	728	703	717	737	732	737	733	741	743	741	751	757	760	
Diesel	323	438	409	451	443	448	425	433	439	426	426	450	447	
Power Barges	(76)	75	-	-	-	-	-	-	-	-	-	-	-	
Hydro	7	7	7	5	8	9	7	7	6	9	9	12	14	
Biomass	70	67	66	61	72	71	71	60	59	53	5	3	-	
Solar	300	244	313	289	310	248	257	375	263	272	188	264	261	
Wind	20	49	44	35	58	35	30	28	27	16	72	41	17	
<b>System Load (MW)</b>	1,925	1,973	2,003	2,036	2,013	2,030	2,019	2,053	2,011	1,944	1,922	1,891	1,929	
<b>Gross Reserve/Deficiency (MW)</b>	409	470	387	507	572	564	549	576	509	588	571	630	400	
<b>Transmission Line Limitation (MW)</b>	0	0	27	30	0	0	0	38	25	0	0	0	0	
<b>Net Reserve/Deficiency (MW)</b>	409	470	360	477	572	564	549	538	484	588	571	630	400	
<b>Req'd Regulating Reserve</b>	77	79	80	81	81	81	81	82	80	78	77	76	77	
<b>Req'd Contingency Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	
<b>Req'd Dispatchable Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	

1. Peak Demand Forecast at 2,143 MW to occur in December 2018 based from the approved DOE Forecast for the Power Development Plan 2016 – 2040.
2. Preventive Maintenance of Power Plants considered.
3. Embedded Generators considered.

# VISAYAS GRID (Actual Data) 2018 3rd Quarter Reserve Profile

REVISION 3

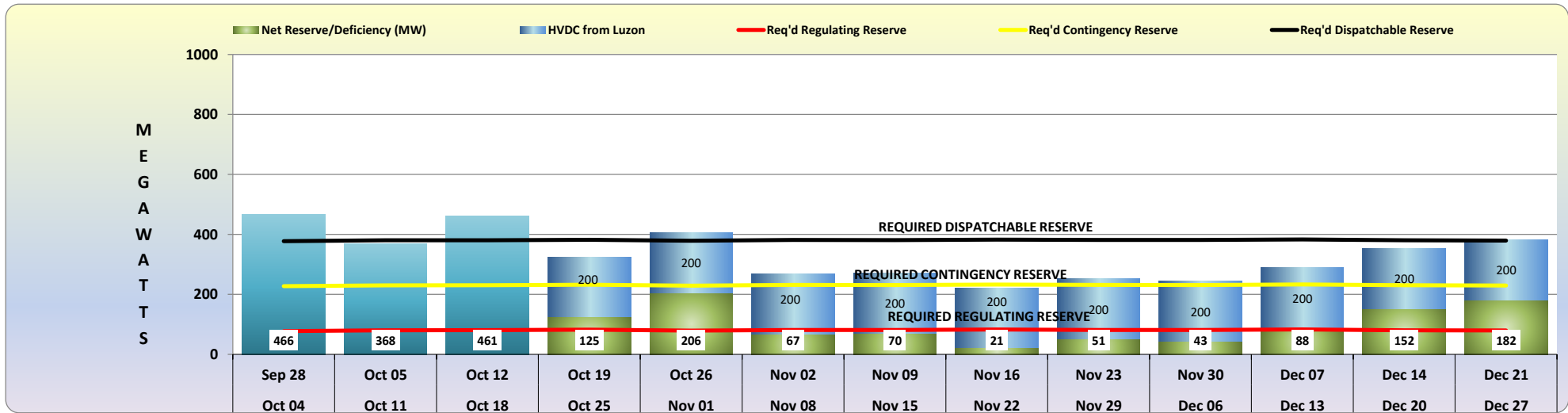


2018	3RD QUARTER													
	Jun 29	Jul 06	Jul 13	Jul 20	Jul 27	Aug 03	Aug 10	Aug 17	Aug 24	Aug 31	Sep 07	Sep 14	Sep 21	
	Jul 05	Jul 12	Jul 19	Jul 26	Aug 02	Aug 09	Aug 16	Aug 23	Aug 30	Sep 06	Sep 13	Sep 20	Sep 27	
<b>Available Capacity (MW)</b>	2,508	2,395	2,431	2,372	2,431	2,542	2,559	2,360	2,228	2,175	2,258	2,166	2,476	
Coal	1,045	880	961	1,045	1,015	1,046	1,045	910	807	1,063	880	1,045	1,045	
Geothermal	756	757	745	627	747	750	754	764	684	661	697	696	682	
Diesel	443	320	388	392	415	420	430	405	433	381	375	375	392	
Power Barges	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hydro	9	13	12	12	10	12	8	10	9	12	10	14	9	
Biomass	-	-	-	-	-	-	-	4	-	24	24	15	45	
Solar	229	376	273	256	203	238	279	228	254	-	246	-	268	
Wind	26	49	52	40	41	76	43	39	41	34	26	21	35	
<b>System Load (MW)</b>	1,940	1,941	1,935	1,960	1,965	1,876	1,959	2,015	2,000	1,797	1,903	1,900	1,929	
<b>Gross Reserve/Deficiency (MW)</b>	568	454	496	412	466	666	600	345	228	378	355	266	547	
<b>Transmission Line Limitation (MW)</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Net Reserve/Deficiency (MW)</b>	568	454	496	412	466	666	600	345	228	378	355	266	547	
<b>Req'd Regulating Reserve</b>	78	78	77	78	79	75	78	81	80	72	76	76	77	
<b>Req'd Contingency Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	
<b>Req'd Dispatchable Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	

1. Peak Demand Forecast at 2,143 MW to occur in December 2018 based from the approved DOE Forecast for the Power Development Plan 2016 – 2040.
2. Preventive Maintenance of Power Plants considered.
3. Embedded Generators considered.
4. Solar Plants Capacity (250MW) not considered. Expected peak demand to occur during the evening.
5. HVDC Capacity from Luzon at an average of 200MW considered.

# VISAYAS GRID 2018 4th Quarter Reserve Profile

REVISION 3



2018	4TH QUARTER													
	Sep 28	Oct 05	Oct 12	Oct 19	Oct 26	Nov 02	Nov 09	Nov 16	Nov 23	Nov 30	Dec 07	Dec 14	Dec 21	
	Oct 04	Oct 11	Oct 18	Oct 25	Nov 01	Nov 08	Nov 15	Nov 22	Nov 29	Dec 06	Dec 13	Dec 20	Dec 27	
<b>Available Capacity (MW)</b>	2,402	2,376	2,476	2,180	2,180	2,106	2,101	2,088	2,088	2,077	2,167	2,163	2,173	
Coal	1,015	1,045	1,045	1,043	1,043	940	940	940	940	940	1,043	1,043	1,043	
Geothermal	681	698	699	723	723	725	725	707	707	707	707	690	690	
Diesel	365	301	404	266	266	276	271	276	276	266	253	266	276	
Power Barges	-	-	-	60	60	60	60	60	60	60	60	60	60	
Hydro	10	8	7	16	16	16	16	16	16	16	16	16	16	
Biomass	34	48	45	51	51	60	60	60	60	60	60	60	60	
Solar	282	239	235	-	-	-	-	-	-	-	-	-	-	
Wind	15	37	41	21	21	29	29	29	29	28	28	28	28	
<b>System Load (MW)</b>	1,936	2,008	2,015	2,055	1,974	2,039	2,031	2,067	2,037	2,034	2,079	2,011	1,991	
<b>Gross Reserve/Deficiency (MW)</b>	466	368	461	125	206	67	70	21	51	43	88	152	182	
<b>Transmission Line Limitation (MW)</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Net Reserve/Deficiency (MW)</b>	466	368	461	125	206	67	70	21	51	43	88	152	182	
<b>Req'd Regulating Reserve</b>	77	80	81	82	79	82	81	83	81	81	83	80	80	
<b>Req'd Contingency Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	
<b>Req'd Dispatchable Reserve</b>	150	150	150	150	150	150	150	150	150	150	150	150	150	

1. Peak Demand Forecast at 2,143 MW to occur in December 2018 based from the approved DOE Forecast for the Power Development Plan 2016 – 2040.
2. Preventive Maintenance of Power Plants considered.
3. Embedded Generators considered.
4. Solar Plants Capacity (250MW) not considered. Expected peak demand to occur during the evening.
5. HVDC Capacity from Luzon at an average of 200MW considered.