










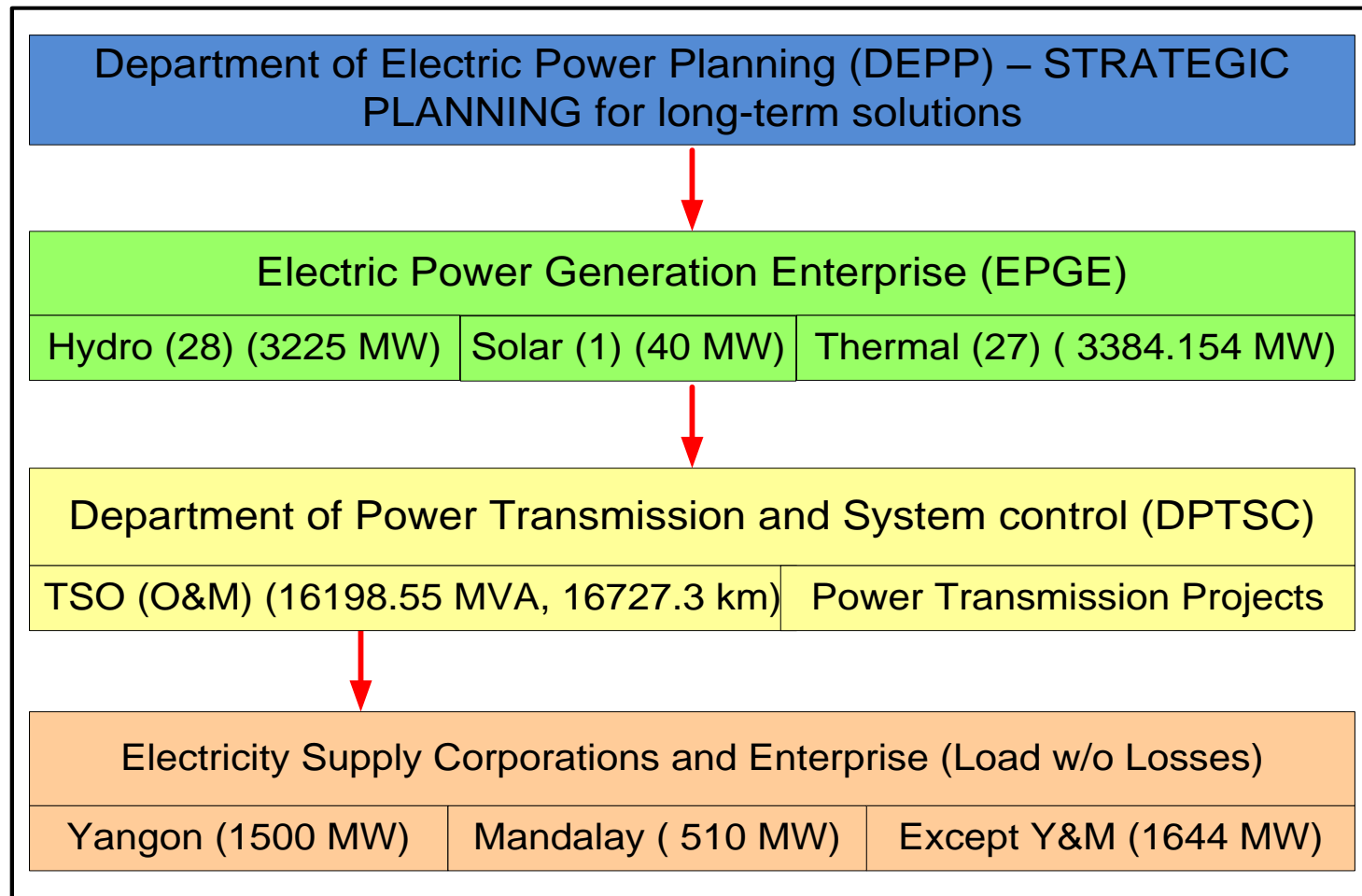
**Greater Mekong Sub-region (GMS)**  
**27th Meeting of the Regional Power Trade**  
**Coordination Committee (RPTCC-27)**

**Country Presentation: MYANMAR**

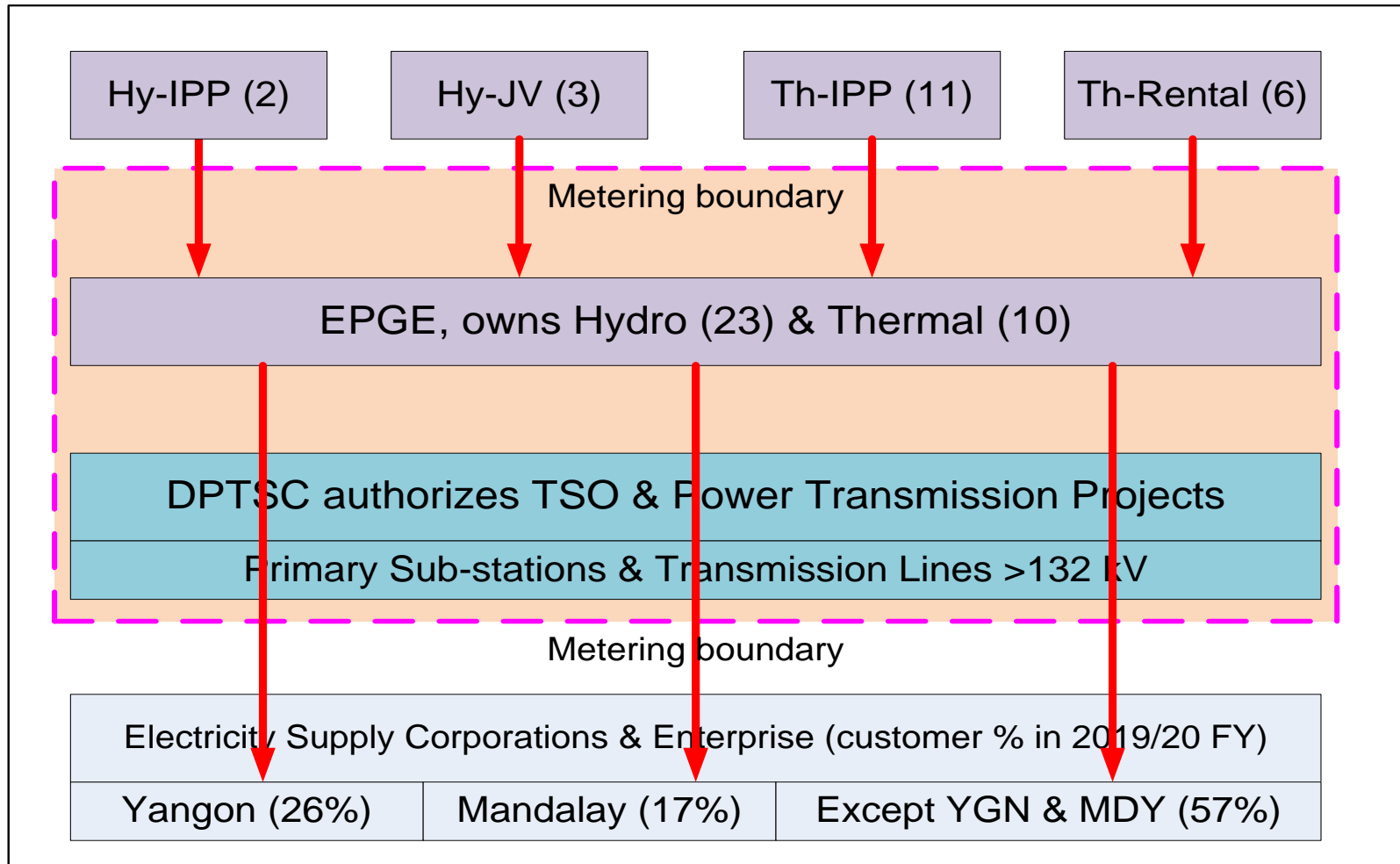
# Salient Data of Myanmar Power System

	Peak Load ( <b>Nov, 2019</b> )	-	<b>3798 MW</b>
	Total number of Households	-	10.8 Millions
	Electrification ratio	-	55.78 %
	Total number of Villages	-	63,729 Nos
	Electrified Villages	-	<b>36814 Nos (58.19%)</b> ,(Grid –29.2%)
	Per capita consumptions	-	<b>378 kWh (2018-2019)</b>
	Power Loss	-	<b>14.48 % (Total) (2018-2019)</b>

# Status of Power Sector



# Status of Power Market



# Installed Capacity and Electricity Generation ( As of 2020 August )



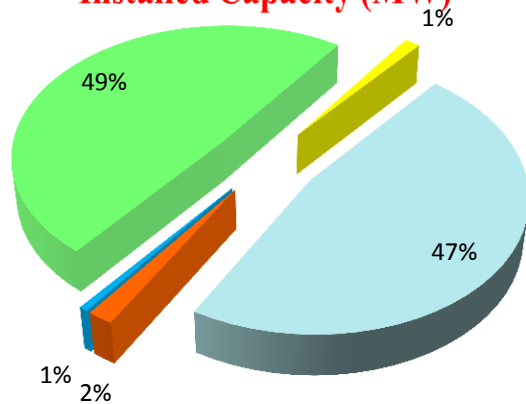
## Installed Capacity (MW)

	National Grid	Off Grid	Total
Hydro	3225	34.374	<b>3262.374</b>
Gas / CCGT	3384.154	8	<b>3392.154</b>
Coal	120		<b>120</b>
Solar	40		<b>40</b>
Diesel		91.22	<b>91.22</b>
<b>Total</b>	<b>6769.154</b>	<b>136.594</b>	<b>6905.74</b>

## Generation (GWh)

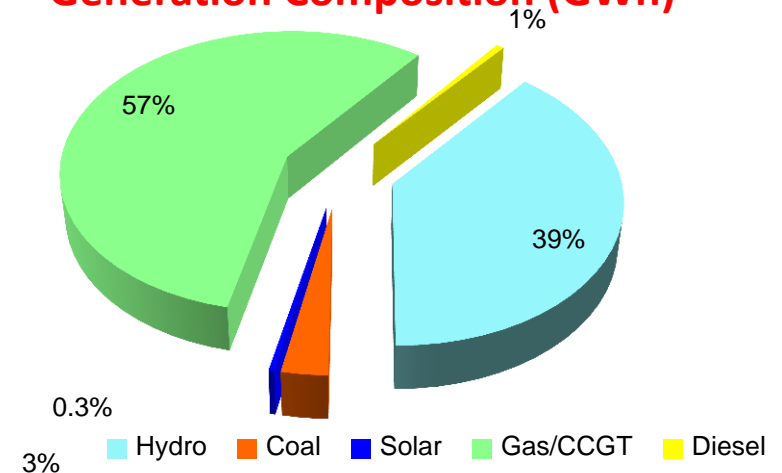
	Generation (GWh)
Hydro	<b>8490.524</b>
Gas	<b>12382.566</b>
Coal	<b>634.495</b>
Diesel	<b>140.122</b>
Solar	<b>74.442</b>
<b>Total</b>	<b>21722.149</b>

## Installed Capacity (MW)



■ Hydro ■ Coal ■ Solar ■ Gas / CCGT ■ Diesel

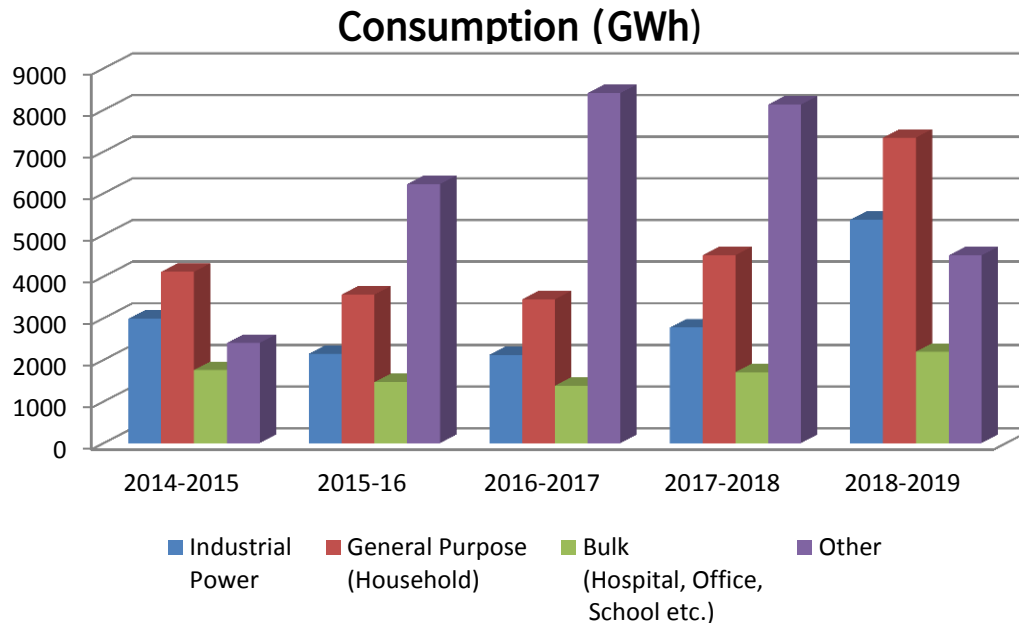
## Generation Composition (GWh)



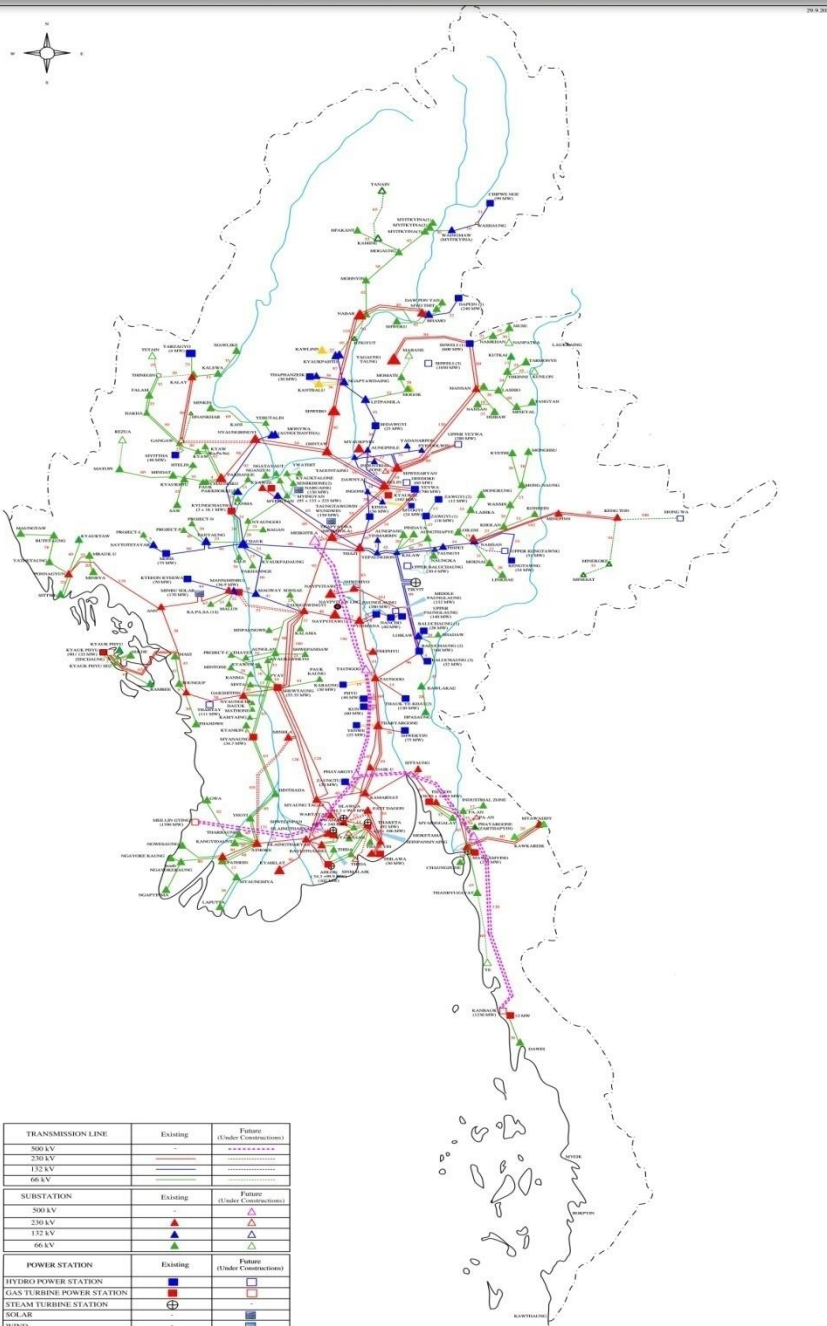
■ Hydro ■ Coal ■ Solar ■ Gas / CCGT ■ Diesel

# Power Consumption (2014-2015 to 2018-2019)

Type	2014-2015	2015-16	2016-2017	2017-2018	2018-2019
Industrial Power	2984.6	2144.85	2119.75	2772.9	5362.592
General Purpose (Household)	4112.8	3567.15	3451.07	4509.8	7333.155
Bulk (Hospital, Office, School etc.)	1754.6	1463.75	1377.92	1703	2193.658
Other	2402.9	6220.8	8406.35	8129.7	4506.342

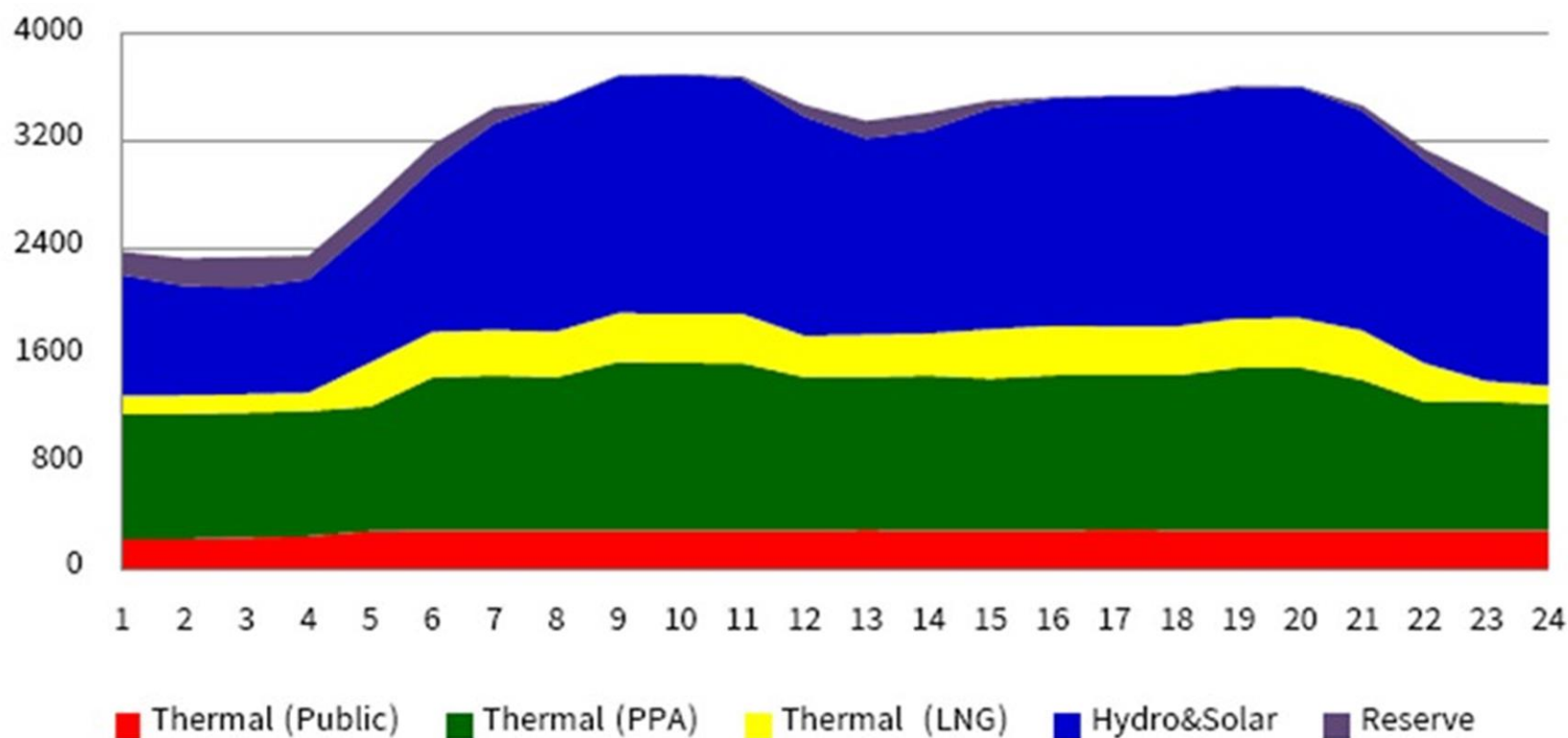


# Existing Transmission Lines and Substations



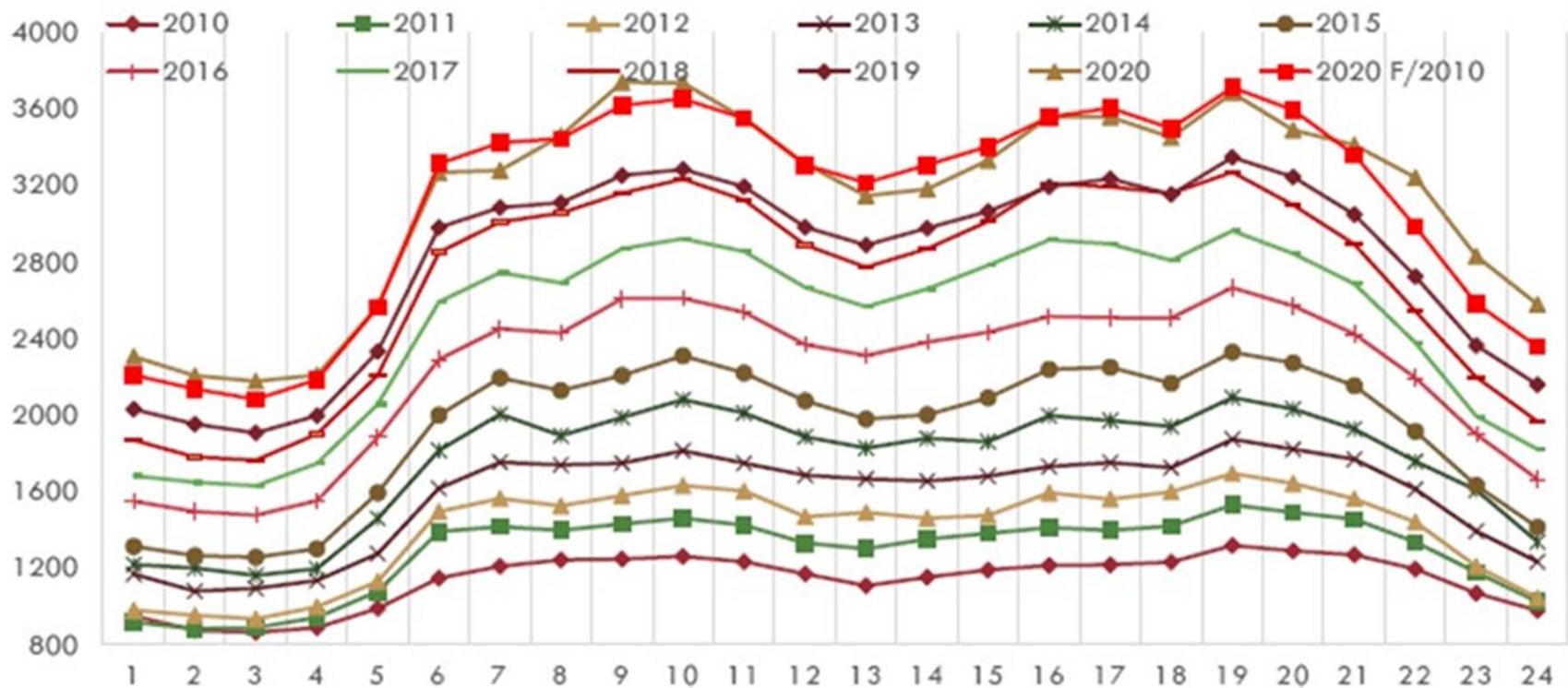
Voltage (kV)	Transmission Line		Substation	
	Nos. of Line	Line Length (km)	Nos. of Substation	Capacity (MVA)
230	71	5421.73	48	8036.5
132	42	2191.59	21	2048.0
66	327	9113.98	328	6114.05
<b>Total</b>	<b>440</b>	<b>16727.3</b>	<b>397</b>	<b>16198.55</b>

# GENERATION MIX & BALANCING RESERVE ON (4-9-2020)



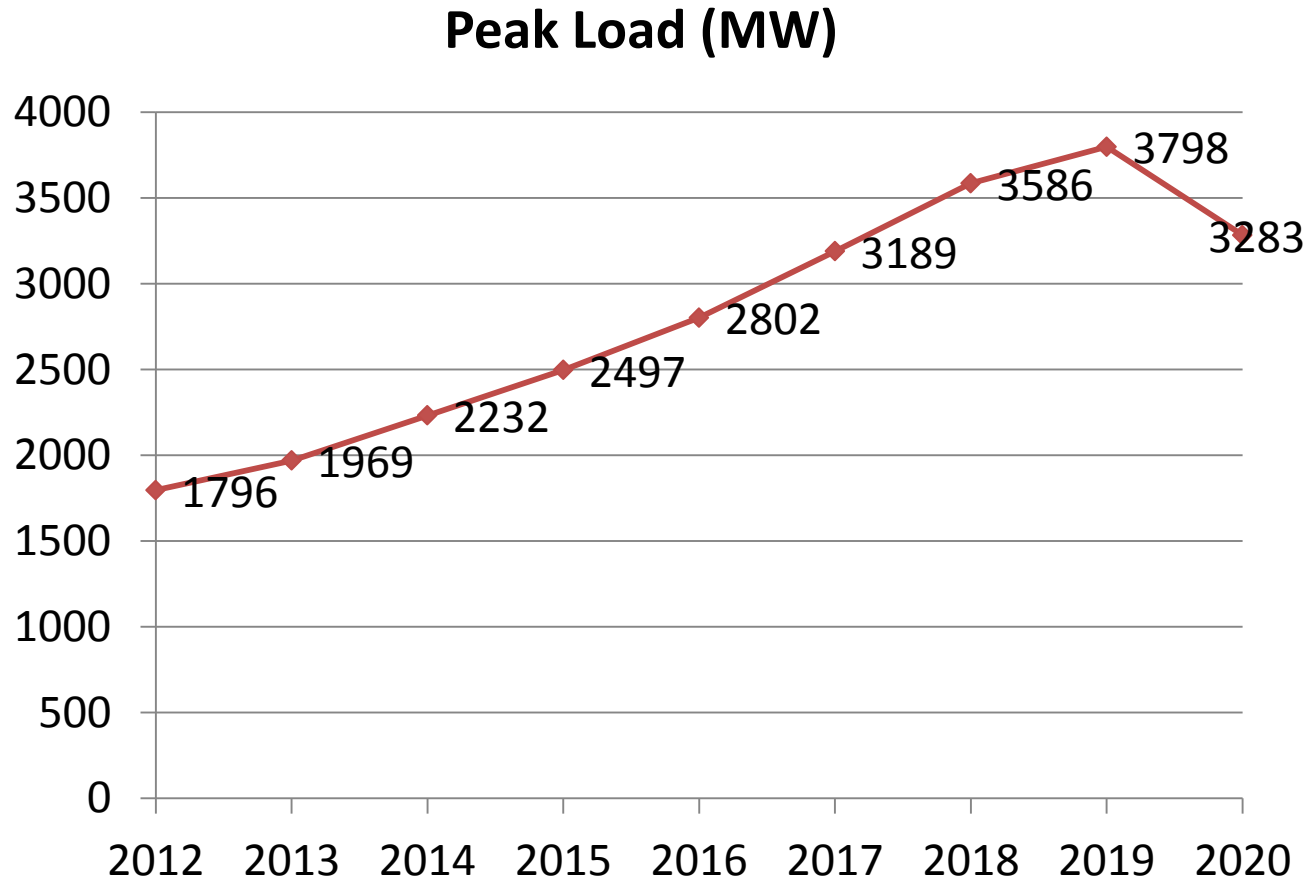


# OPERATIONAL DEMAND FORECAST – TRANSMISSION SYSTEM FORECAST (AUGUST)



# Peak Loads (2012-2020)

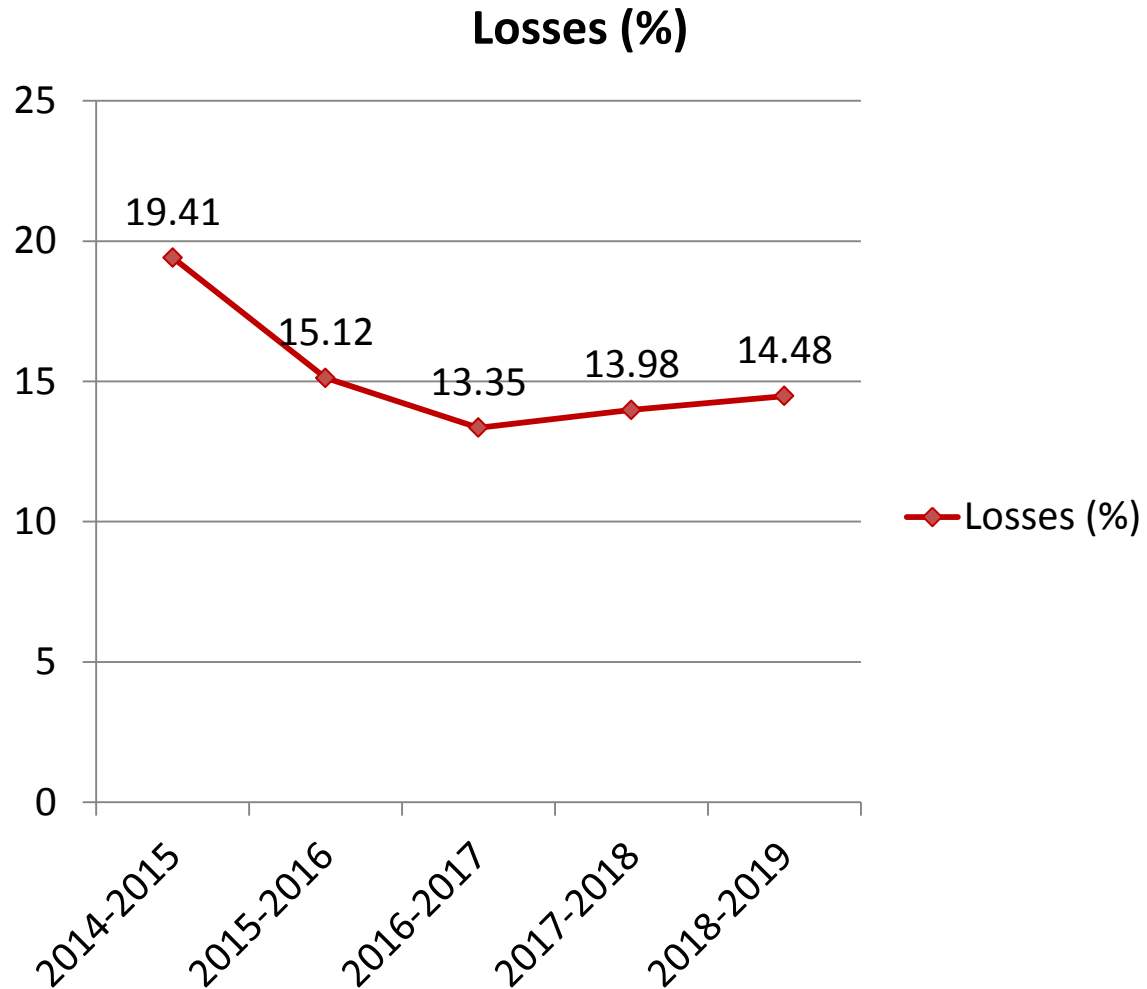
Year	Peak Load (MW)
2012	1796
2013	1969
2014	2232
2015	2497
2016	2802
2017	3189
2018	3586
2019	3798
2020	3283



March/2020

# Losses(2014-2015 to 2018-2019)

Year	Losses (%)
2014-2015	19.41
2015-2016	15.12
2016-2017	13.35
2017-2018	13.98
2018-2019	14.48



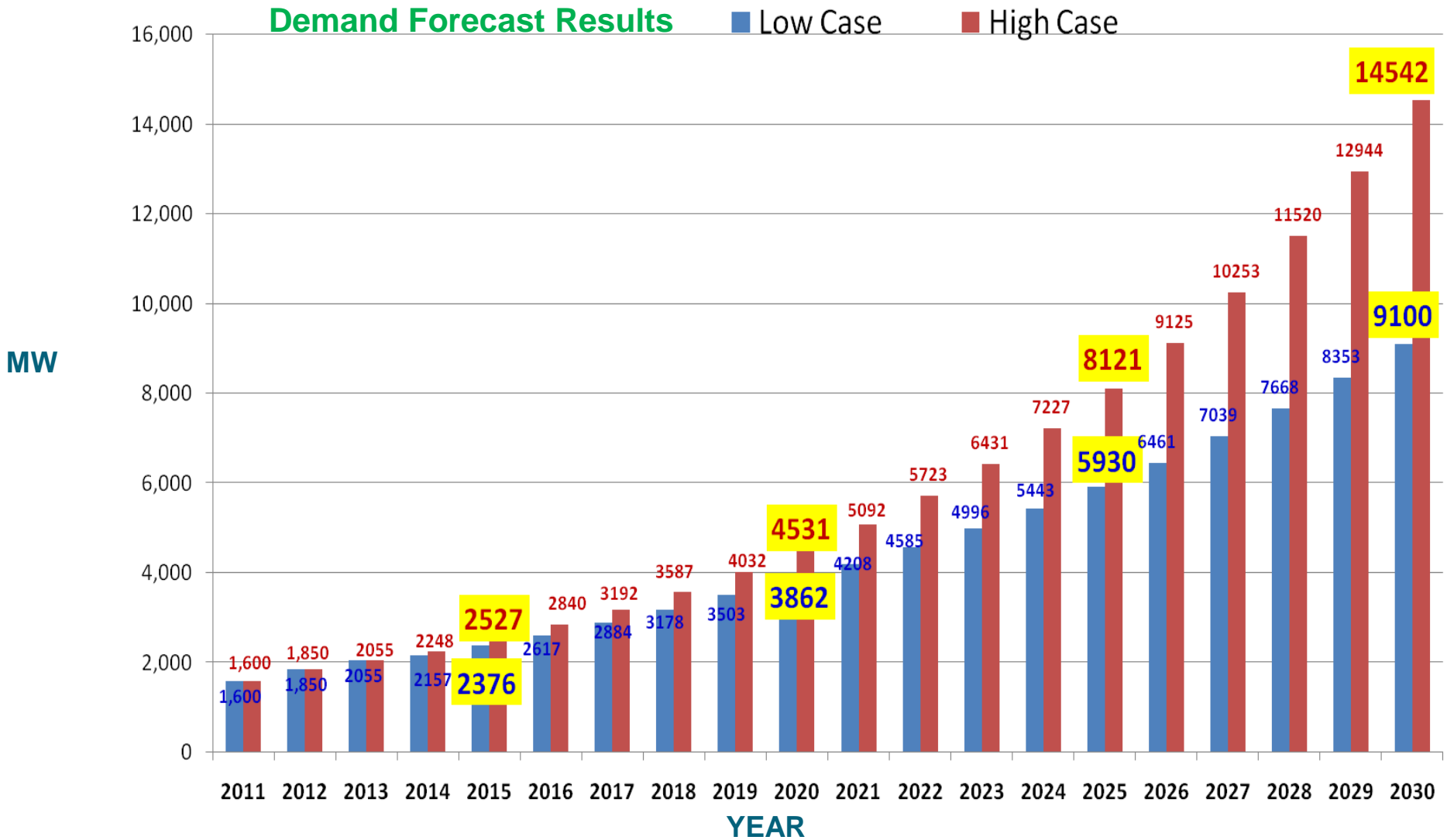
# Under Construction Power Projects

Sr. No.	Project	MW
<b>Hydro</b>		
1	Shweli(3)	672
2	Deedoke	60
3	Upper Yeywa	280
4	Middle Paunglaung	152
5	Upper Kyaingtaung	51
6	Upper Beluchaung	30.4
7	Thahtay	111
Sr. No.	Project	MW
<b>Gas/LNG</b>		
1	Kyauk Phyu	150
2	Shwe Taung	Ph I, 28 + Ph II, 70
<b>Solar</b>		
1	Minbu	170 (40 MW in operation)

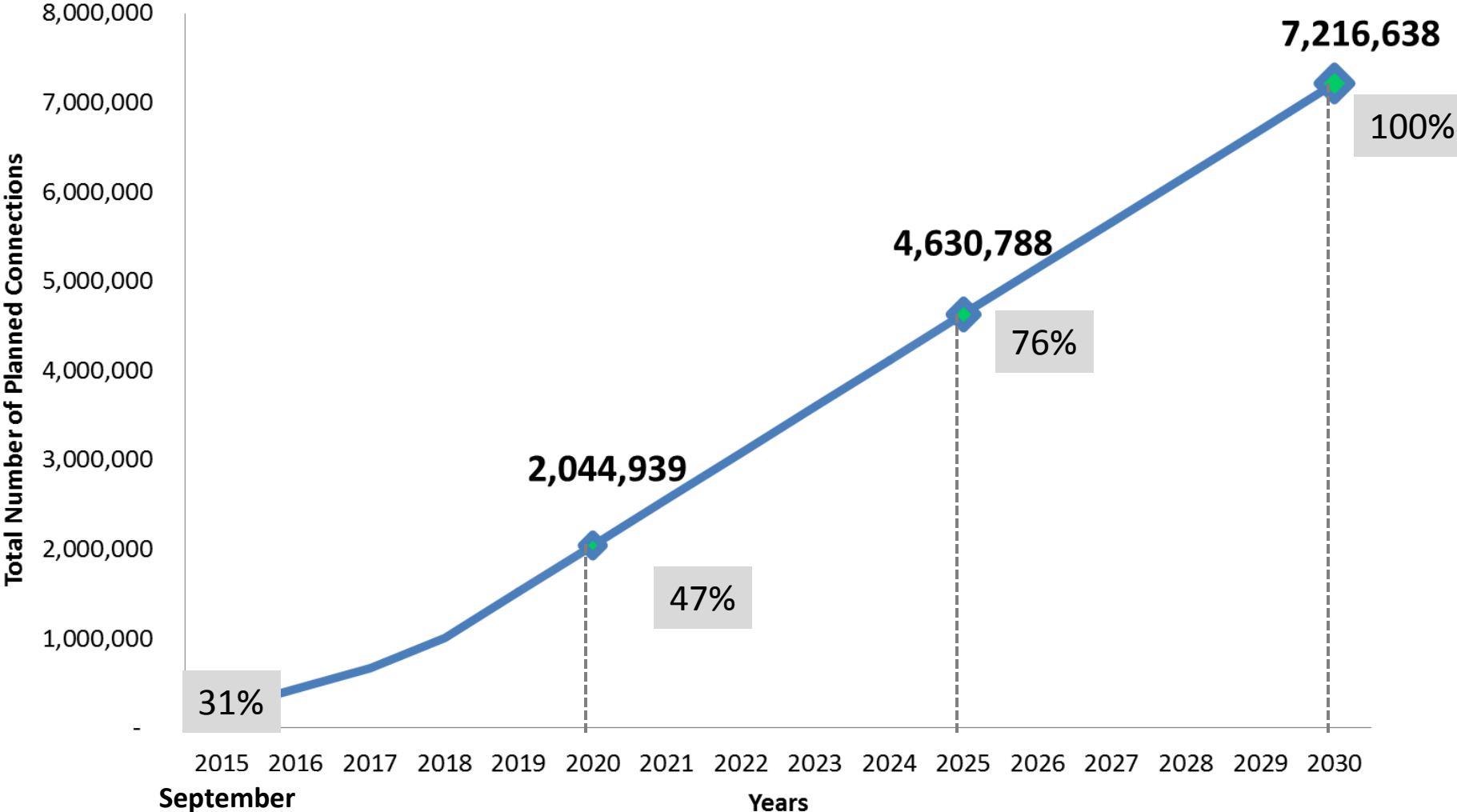
# Under Construction Transmission lines and Substations

kV	Line		Substation	
	No.	km	No.	MVA
500	3	505.9	4	4000
230	6	190.3	4	500
132	0	0	0	0
66	2	88.1	1	5
<b>Total</b>	<b>11</b>	<b>784.3</b>	<b>9</b>	<b>4505</b>

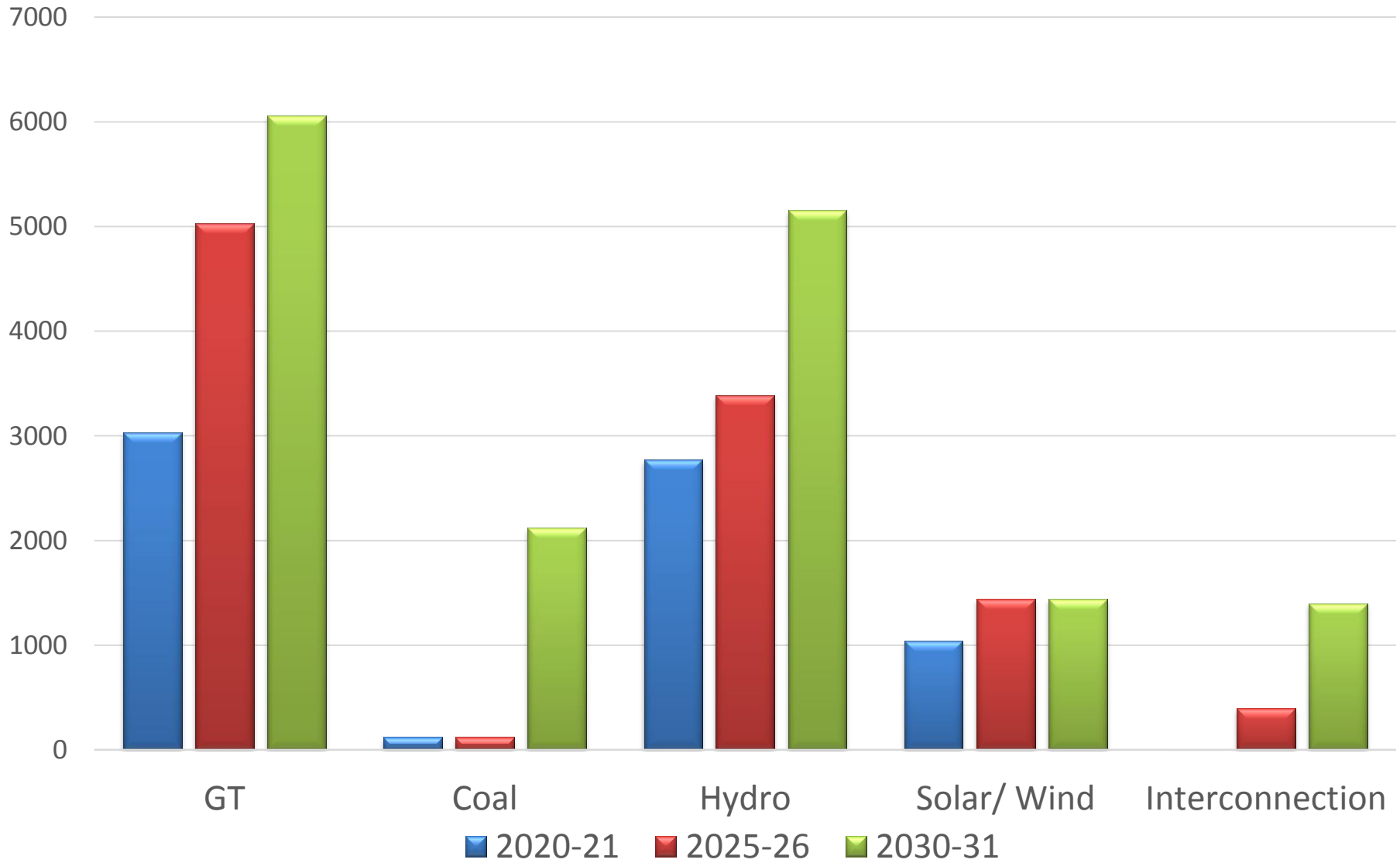
# Demand Forecast for 20 Years Period (2011-2030)



# National Electrification Plan Up to 2030

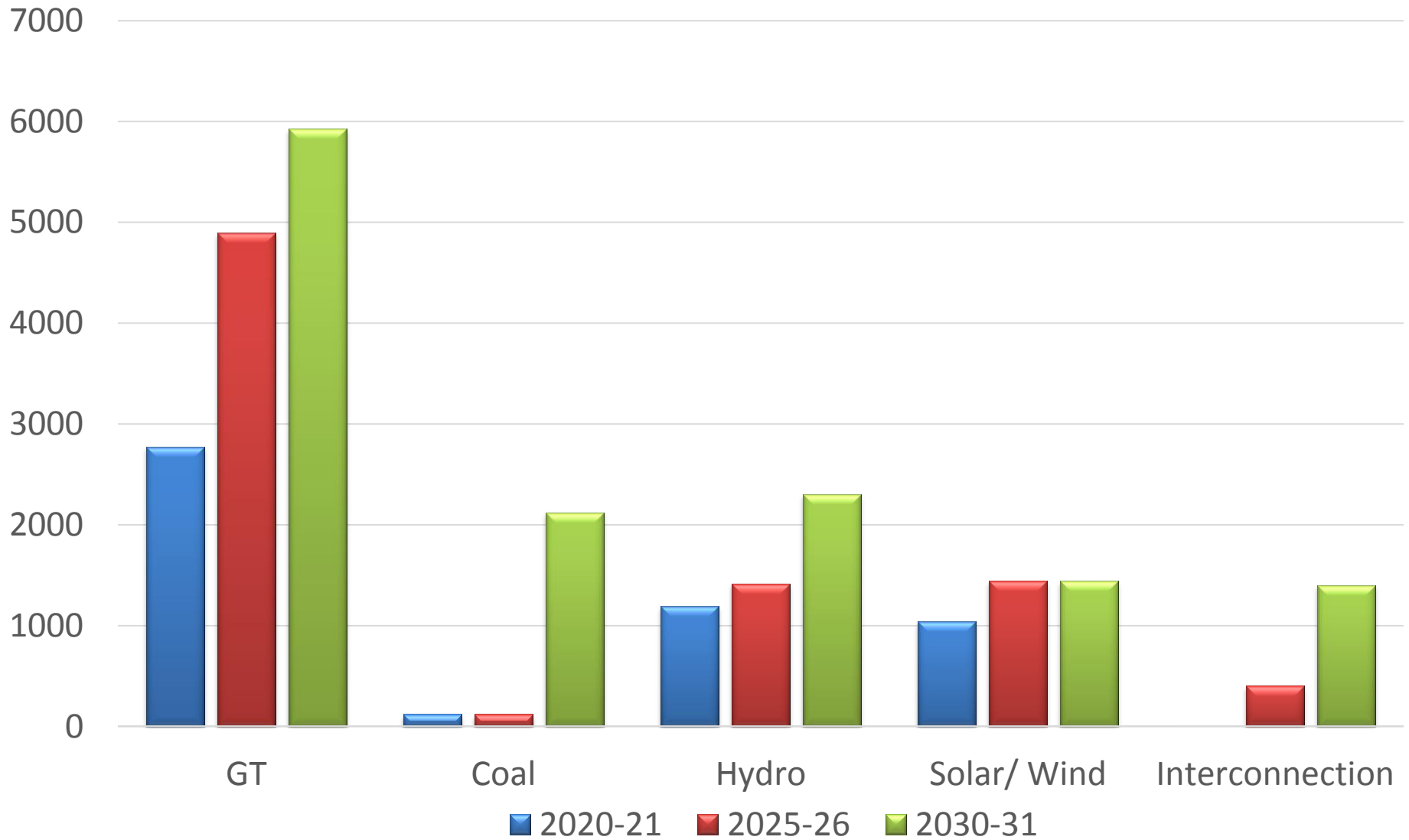


# Maximum Generation Plan





# Minimum Generation Plan



## Future Plan for Transmission lines

Project	500 kV		230 kV		132 kV		66 kV	
	Nos	km	No.	km	Nos	km	No.	km
Connect with 230 & 132 kV		128.7						
New Substation to National Grid	5	1343.5	19	2032.2	1	64.4	1	35.4
Upgrading of National Grid	2	868.9	17	1980.7	2	88.5		
Extension of National Grid			18	1563.9			1	37.0
For Industrial & Economic Zone and New Cities			3	83.7				
Interconnection	3	3633.1						
<b>Total</b>	<b>10</b>	<b>5974.2</b>	<b>57</b>	<b>5660.5</b>	<b>3</b>	<b>152.9</b>	<b>2</b>	<b>72.4</b>

# Situation under Covid-19

- Positive Impacts

- Reduction of power demand compare with the same period of past years
- Demand and supply balanced

- Negative Impacts

- Highly impact on project implementation
- Reduction of revenue
- Need to take care the operational and maintenance personnel
- Risk of sector-wise development

## To consider under and beyond Covid-19

- Resilient and flexible
- New normal
- Digitalization/ Security
- Perfect supply chain management
- Sustainability
- Policy, institutions, new technologies



**Thank you for your attention!**