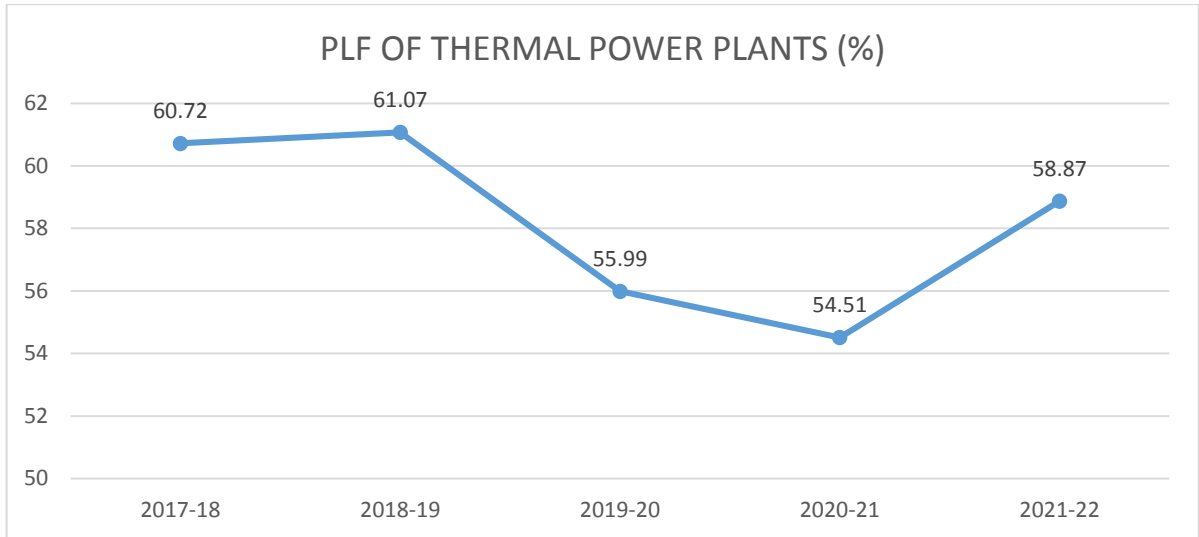
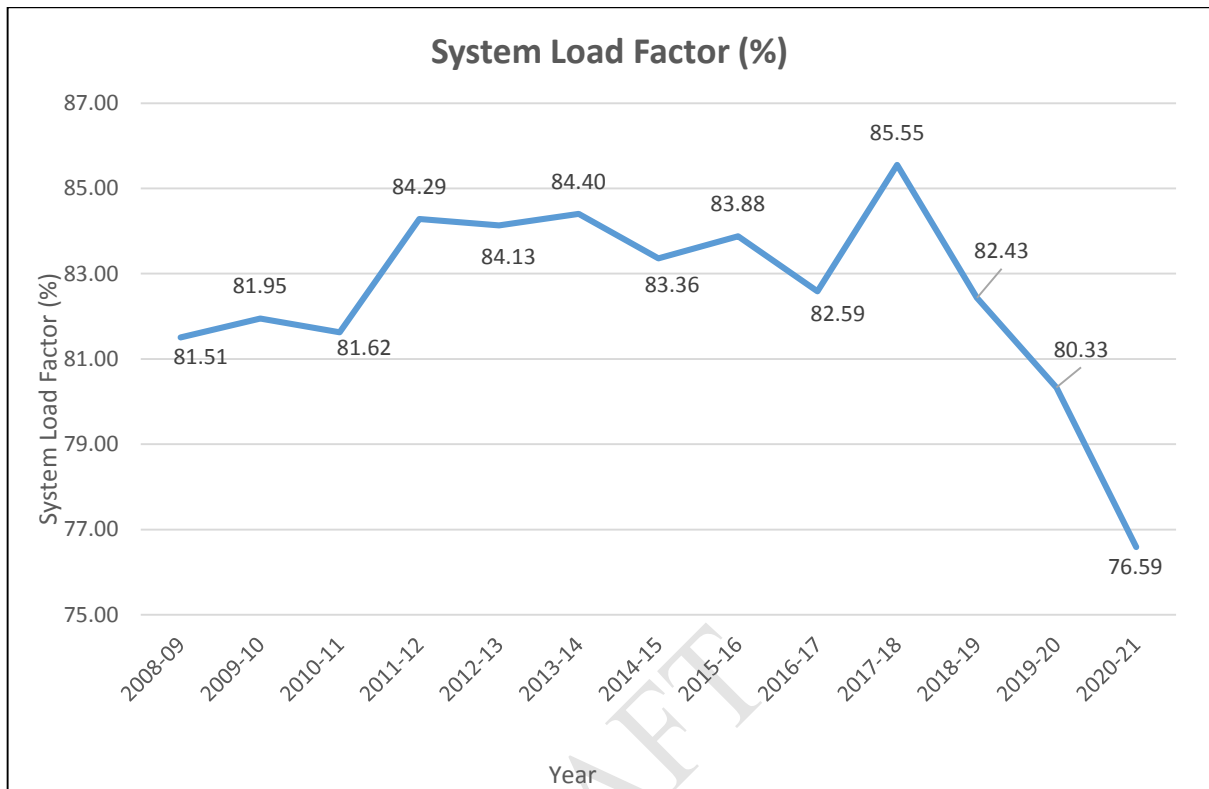


Exhibit 1.5

1.2.5 Annual System Load Factor

The Annual System Load Factor is the ratio of the energy availability in the system to the energy that would have been required during the year if the annual peak load met was incident on the system throughout the year. This factor depends on the pattern of utilization of different categories of load. The Annual System Load factor has remained in the range of 82% to 86% since 2011-12 till 2017-18, primarily because of prevailing energy shortages in the system and the load staggering measures adopted in the various states particularly in agriculture sector. However, it has witnessed a gradual decline from 85.5% in 2017-18 to 76.6% in 2020-21 predominantly due to higher growth in the peak load met as compared to the increase in energy terms. The year-wise Annual System Load Factor is graphically depicted in the **Exhibit 1.6**.

Exhibit 1.6



1.3 VARIOUS INITIATIVES OF THE GOVERNMENT

1.3.1 Tariff Policy 2016

The Central Government has notified the revised Tariff Policy vide Gazette notification dated 28.01.2016 in exercises of powers conferred under section 3(3) of Electricity Act, 2003. The Tariff Policy has been evolved in consultation with the State Governments, the Central Electricity Authority (CEA), the Central Electricity Regulatory Commission and various stakeholders.

The tariff policy , 2016 ensure availability of electricity to consumers at reasonable and competitive rates, ensure financial viability of the sector and attract investments, Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks. It will further facilitate competition, efficiency in operations and improvement in quality of supply. The tariff policy among other things also includes promotion of renewable generation (Renewable Generation Obligation, Long term growth trajectory of RPOs and increase in Solar RPO). Compulsory 100% procurement of power from waste to energy plants by DISCOMs, mandatory use of sewage treated water by thermal Plants, continuation of exemption of tariff based competitive bidding for hydro

projects up to 15th August 2022, smart meters recovery of regulated assets, revision of formula for calculation of cross subsidy etc.

1.3.2 Guidelines and Standard Bidding Documents (SBDs) for Procurement of Electricity by Distribution Licensees through Tariff based bidding process

In compliance with section 63 of the Electricity Act 2003, the Central Government has notified guidelines for procurement of power by Distribution Licensees through competitive bidding. Competitive procurement of Power requirement by the Distribution Licensees reduces the overall cost of procurement of power and in turn leads to significant benefits for consumers.

- i) Long Term procurement of power: Central Government had initially issued the Standard Bidding Documents (SBDs) containing Request for Qualification (RfQ), Request for Proposal (RfP) and Power Purchase Agreement (PPA) for long term procurement of power from Case-2 projects (having specified site and location) through tariff based competitive bidding in 2006 and amended it from time to time. The Standard Bidding Documents for long term procurement of power from Case-1 projects (where the location, technology or fuel is not specified) were issued in the year 2009 and amended it in 2010. In pursuance of the decision of the EGoM on Ultra Mega Power Projects (UMPPs) having specified site and location, the SBDs for Case-2 have been further reviewed and the Model Bidding Documents (MBDs) comprising the Model RFQ, Model RFP and the Model PPA for construction and operation of power generation projects/UMPPs on design, Build, Finance, Operate and Transfer (DBFOT) basis have been issued on 20 Sept, 2013. The Guidelines for procurement of electricity from Thermal Power Stations set up on DBFOT basis for Case-2/UMPPs have been published in the Gazette of India on 21st September, 2013. Model Bidding Documents (MBDs) for Thermal Power Stations set up on Design, Build, Finance, Own and Operate (DFBOO) basis for Case-1 issued on 8.11.2013. Further, amendments have been issued in the Documents on 5.5.2015. In order to facilitate use of linkage coal in the long term procurement of power by Distribution Licensees as per the provisions of SHAKT Policy, SBDs and Guidelines for long term Procurement of Electricity from Thermal Power Stations set up on Design, Build, Finance, Own and Operate (DFFOO) basis have been revised and issued in March, 2019.
- ii) Medium Term Procurement of power: Model Bidding Documents (MBDs) for procurement of electricity for medium term from power generating stations set up and/or operated on Finance, Own and Operate (FOO) basis was issued on 29.1.2014.

Further, amendments have been issued in the Documents of 20.8.2015. Model Bidding Documents (MBDs) for procurement of peaking power for medium term issued on 20.2.2014. In order to introduce e-bidding process along with reverse action, revised Guidelines and Model Bidding Documents for medium-term procurement of power by Distribution Licensees through tariff based competitive bidding process was notified on 17 January, 2017. Introduction of e-bidding process along with reverse auction will result in greater transparency and fairness in the procurement process for ultimate benefit of the consumers. Further, for enabling the use of linkage coal as per the new coal linkage policy (SHAKTI Policy) of Ministry of Coal, Revised MBDs and revised Guidelines for Procurement of Electricity for Medium Term were issued on 29.01.2019 and 30.01.2019 respectively.

- iii) Short Term procurement of power The Central Government has issued Guidelines for short-term procurement of electricity i.e. for a period of less than or equal to one year under section 63 of the Electricity Act, 2003 on 16 May, 2012. For introduction of e-reverse auction, the revised guidelines for short-term procurement of electricity were also issued on 30 March, 2016.

1.3.2.1 Pilot Scheme-II for procurement of 2500MW for three years under medium Term

In an attempt to revive the stressed power projects, a Pilot Scheme was introduced by Ministry of Power in April 2018. Capacity totalling to 1900 MW has been awarded under the scheme. Based on the experience gained from the Pilot Scheme, MOP has issued the Bidding Documents and Guidelines for Pilot Scheme-II to facilitate procurement of aggregated Power of 2500 MW for the period of 3 (three) years (covered under Medium Term) on 30.01.2019 and 01.02.2019 respectively.

1.3.3 Mega Power Policy 2017

Based on the CCEA decision dated 31.3.2017, time period for the provisional Mega projects (25 projects) for furnishing the final Mega Certificates to the Tax authorities has been extended to 120 months from the date of import. Further, guidelines for the release of Proportionate Bank/FDRs for the Provisional Mega Power Projects have been finalized and circulated on 21.9.2017. This is expected to ease out stress in the power sector to a great extent as the money realized by the developer, if any, as a result of release of proportionate Bank Guarantee would first be utilized towards the repayment of the Bank dues by the developer. So far, four projects have been granted proportional Mega Certificate

1.3.4 Promotion of Renewable Power

1.3.4.1 Competitive Bidding Guidelines for procurement of power from Solar and Wind Power projects:

To promote competitive procurement of electricity from solar PV power plants and Wind Power Plants, by distribution licensees and to protect consumer interests, Bidding Guidelines have been issued for long term procurement of electricity by the distribution licensees. Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects issued vide Resolution dated 3rd August, 2017. Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Wind Power Projects issued vide Resolution dated 8th December, 2017. Necessary Amendments to these guidelines were made considering the views of the Stakeholders, encouraging investment and timely commissioning of such projects.

1.3.4.2 Waiver of inter-state transmission charges and losses on transmission of the electricity generated from solar and wind sources of energy

In Order to promote the capacity addition of Solar and wind Power Projects, Central Government in compliance with the para 6.4(6) of tariff policy has issued Inter State Transmission system (ISTS) waiver charges. The first order was issued on 30.09.2016 in which ISTS transmission charges and losses was waived for transmission of electricity from solar projects commissioned till 30.06.2017 and wind projects commissioned till 31.03.2019. Further the date of waive of ISTS transmission charges and losses was extended for solar projects upto 31.12.2019 vide MoP order dated 14.06.2017. Thereafter, the waiver available for use of ISTS for transmission of electricity by Solar or Wind power projects commissioned till December 2022 vide MoP order dated 13.02.2018. The waiver of ISTS charges on transmission of electricity generated from Solar and Wind sources is further extended for projects to be commissioned up to 30th June 2025 vide MoP order dated 21.06.2021. The Waiver shall be applicable for the twentyfive years from the commissioning of such projects. The ISTS waiver will be available for solar and wind projects entering into PPAs with all entities, including Distribution Companies, for sale of power from solar and wind power projects for compliance of their renewable purchase obligation. As a condition the above waiver will be allowed only to those solar and wind projects that are awarded through competitive bidding process in accordance with the guidelines issued by Central Government.

1.3.4.3 Waiver of inter-state transmission charges on transmission of the electricity supplied by Pumped Storage Plants and Battery energy Storage Systems

In Order to promote commissioning and optimum utilization of Storage projects, Central Government in compliance with the para 6.4(6) of tariff policy has issued Inter State Transmission system (ISTS) waiver charges for PSP and BESS projects. As per MoP order no. 23/12/2016-R&R-Part(1)[239444] issued on 21.06.2021, Inter State transmission system charges (excluding losses) were waived for transmission of electricity supplied by Hydro PSP and BESS projects commissioned till 30.06.2025, if the following conditions are met:-

- i. At least 70% of the annual electricity generation requirement of pumping of water of the PSP plant is met by use of solar and wind based generation.
- ii. At least 70% of the annual electricity generation requirement of charging of the BESS system is met by use of solar and wind based generation.

The ISTS charges for power supplied from Hydro PSP or BESS projects shall be levied gradually as follows:-

- i. 25% of STOA charges for initial 5 years of operation.
- ii. After 5 years, the charges will be increased in steps of 25% every 3rd year to reach 100% of STOA charges from 12th year onwards.

These will also be aligned with the gradual reduction in tariff and payment of debt.

The aforementioned order also mandates the waiver of transmission charges for trading of electricity generated/supplied from Solar, Wind, PSP and BESS in Green Term Ahead Market (GTAM) and Green Day Ahead Market (GDAM) for till 30.06.2023.

This arrangement will be reviewed on annual basis depending upon the future developments in power market.

1.3.4.4 Renewable Purchase Obligations (RPOs)

In light of par 6.4(1) of tariff policy 2016 and with the objective of creating renewable power capacity of 175 GW by March 2022; the Ministry of power after consultation with Ministry of New and Renewable Energy, had notified the long term trajectory of RPOs for Solar and Non-Solar power vide its order dated 22.07.2016 and 14.06.2018. In super-session of the orders Ministry of Power has issued RPO trajectory vide order dated 29.01.2021 and specified Hydro Purchase Obligation (HPO) with non-solar renewable purchase obligation. This has been issued to promote the Large Hydro Projects commissioning after 03.03.2019 and to add 30,000 MW of Hydro power capacity by 2029-30.

1.3.4.5 Flexibility in Generation and scheduling to reduce emissions of Thermal Power Stations:

In order to reduce emissions and to encourage RE capacity addition, Central Government on 05.04.2018 has issued the mechanism for flexibility in generation & scheduling of thermal

power station. Thermal Power Plants can supply power from RE sources under existing contractual agreement.

1.3.4.6 National Mission on use of Biomass in coal based thermal power plants

In order to address the issue of air pollution due to farm stubble burning and to reduce carbon footprints of thermal power generation, Ministry of Power has decided to set up a National Mission on use of Biomass in coal based thermal power plants. This would further support the energy transition in the country and our targets to move towards cleaner energy sources.

The "National Mission on use of biomass in thermal power plants" will have the following objectives; (a) To increase the level of co-firing from present 5% to higher levels to have a larger share of carbon neutral power generation from the thermal power plants.

(b) To take up R&D activity in boiler design to handle the higher amount of silica, alkalis in the biomass pellets.

(c) To facilitate overcoming the constraints in supply chain of bio mass pellets and agro-residue and its transport upto to the power plants.

(d) To consider regulatory issues in biomass co-firing.

1.3.4.7 Guidelines for procurement of Round the Clock power (RTC Power) from Renewable Projects through Tariff Based Competitive Bidding

With the aim of promoting RE power and to provide RoundThe-Clock (RTC) power to the DISCOMs from renewable energy sources, Ministry of Power has issued RTC power Guidelines vide notification dated 22.07.2020. The amendments made in the said guidelines were notified in Gazette of India on 03.11.2020. Now the complemented power may be used from any fuel sources

1.3.5 Reduction of Power Cost

1.3.5.1 Flexibility in Generation and scheduling of thermal power stations to reduce the cost of power to the consumer

Ministry of Power (MoP), Government of India, notified the scheme on „Flexibility in Generation and scheduling of thermal power stations to reduce the cost of power to the consumer“ on 30th August, 2018 (MoP scheme of Flexibility). The objective of the scheme is to reduce the overall cost of power for the country by utilizing any un-despatched surplus in existing cheaper generating stations by way of flexibility in scheduling of generation. The scheme advocates flexibility to a generating company to supply power from any of its generating stations against schedule received for its stations. As per the scheme, the

cheaper generating stations could be dispatched up to its maximum capacity before scheduling the costlier stations till the power requisitioned by all its beneficiaries is met. The Scheme proposes Merit Order operation based on the Generation Bucket Filling (GBF) schedule to meet the entire schedule of all beneficiaries. The Scheme also advocates suitable provision of Gate Closure to take into account revision of schedule by beneficiaries from ISGS power stations. (ii) The Scheme also proposes sharing of gain between the beneficiaries and the generating company in the ratio of 50: 50 on monthly basis with quarterly reconciliation. The share in the surplus, if any, is to be passed on to the beneficiaries during the month in proportion to the total drawl by the beneficiaries from the generating company

1.3.5.2 Ensuring sustainability in the Power Sector:

An Order was issued by Ministry of Power on 28.06.2019 on "Opening and maintaining of adequate Letter of Credit (LC) as Payment Security Mechanism under Power Purchase Agreements by Distribution Licensees". As per Order for power purchases after 1st August 2019, an adequate payment security mechanism as per contracts is to be established for the Generators for power to be scheduled. This has been successfully implemented from 01.08.2019 and has helped in streamlining the payment to the generators from the distribution companies. This measure is expected to bring sustainability in the Power Sector. Considering the unprecedented and force majeure situation due to Covid-19 pandemic, it has been decided that power may be scheduled even if payment security mechanism is established for 50% of the amount for which payment security mechanism is to be otherwise established contractually. This relaxation was available during the period 24.03.2020 to 30.06.2020.

1.3.5.3 Reduction in cost of power due to pre-payment in entire value chain of power sector

Ministry of Power on 15.11.2019 had issued an order on "Reduction in cost of power due to pre-payment in entire value chain of power sector". Due to pre-payment by the consumer to Distribution licensee or advance payment by distribution company to Generating company, the working capital requirements of these companies would get reduced. This would therefore result in reduced generation tariff and the retail tariff to the consumer.

1.3.5.4 Security Constraint Economic Despatch (SCED)

In order to reduce the cost of power procured by the Distribution Licensees, a Pilot system of Security Constraint Economic Despatch (SCED) was introduced in the last year where for thermal Inter State Generating Stations (ISGS), the merit order dispatch at national level shall be followed. Hence the cheapest generation will be available at the maximum level.

This mechanism has resulted in savings of approximately Rs 3 Crores every day towards power procurement cost of Distribution licensees. Central Electricity Regulatory Commission has vide order dated 18.04.2020 has extended the time for pilot for a further period up to 31st March, 2021. The Commission has also expanded the ambit of SCED by including the generators other than the thermal ISGS whose tariff is determined by the Commission.

1.3.6 Distribution Reforms

1.3.6.1 Power for All

Government of India has taken a joint initiative with respective State Governments for preparation of State specific documents for providing 24x7 Power for All (PFA) to all households/homes, industrial & commercial consumers and adequate supply of power to agricultural consumer as per State Policy. This initiative aims at ensuring uninterrupted supply of quality power to existing consumers and providing electricity access to all unconnected consumers by 2019 in a phased manner. This joint initiative of Government of India and State Governments also aims to enhance the satisfaction levels of the consumers, improve the quality of life of people, and increase the economic activities resulting into inclusive development of the States.

State Specific Documents for the all the States/UTs have been approved by the respective State Governments and signed by State & Central Government for implementation. Following has been achieved so far.

- i) All inhabited villages of 5, 97,464 (Census 2011) stood electrified as on 28.04.2018 in the country.
- ii) All the willing households totaling to 2.82 crore have been electrified as on 31.03.2021 under Saubhagya scheme on launched in October 2017.
- iii) System strengthening and augmentation in Distribution infrastructure including metering of distribution transformers/ feeders/ consumers have been assisted by GOI through its ongoing Schemes launched in December 2014 namely -IPDS for Urban areas and DDUGJY for Rural areas (Details given in Subsequent paragraph)
- iv) Status of 24x7 Power Supply:

As per the status available in National Power Portal (NPP) the Power supply position in respect of States and UTs (under various Discoms) for the month of March, 2021 is as under:

- In case of Urban area, in 20 states comprising 24nos. of Discoms [Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Rajasthan, Telangana, Tripura, Uttarakhand, West Bengal) having more than 20 average Hours of Power supply in a day has been achieved.
- Similarly, in case of Rural areas 17 states and 1 UT comprising 35 nos. of Discoms [Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Punjab, Rajasthan, Tamilnadu, Telangana, Uttarakhand, Uttar Pradesh] having more than 20 average Hours of Power supply in a day has been achieved.

1.3.6.2 Integrated Power Development Scheme (IPDS)

To facilitate state utilities to ensure quality and reliable 24x7 power supply in the urban areas, Government approved the “Integrated Power Development Scheme” (IPDS) on 20.11.2014 with a total outlay of Rs. 32,612 Crore, which includes a budgetary support of Rs. 25,354 Crore from Government of India. Erstwhile R-APDRP has been subsumed in IPDS and CCEA-approved R-APDRP outlay of Rs. 44,011 crore including a budgetary support of Rs.22,727 crore for 12th & 13th Plan carried forward to the new scheme of IPDS.

1.3.6.3 Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

Government of India had launched **Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)** in December, 2014 for augmentation and strengthening of rural sub-transmission and distribution works, feeder segregation and rural electrifications in the rural areas in the country. As reported by the States, all the inhabited un-electrified villages as per Census 2011 stand electrified on 28th April, 2018 across the country under DDUGJY. The overall progress under the scheme is 94%.

1.3.6.4 Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya

Government of India has launched Saubhagya" on 11th October, 2017 with the objective to achieve universal household electrification by providing last mile connectivity and electricity connections to all households in rural and urban areas. The sunset timeline for the scheme is March 2022. REC is the nodal Agency for implementation of this Scheme. Government of

India had sanctioned an amount of Rs. 14,109 crore under Saubhagya scheme for various States. Based on the eligible demand submitted by the States under Saubhagya scheme, Grant Rs. 5,234 crore has been disbursed to the States during last three years and current year up to 28.02.2021.

As reported by the States, 2.81 crore households have been electrified since the launch of Saubhagya, up to 28.02.2021.

1.3.6.5 Ujwal DISCOM Assurance Yojana (UDAY),

The scheme was launched for financial and operation turnaround of State owned Distribution Utilities (DISCOMs) in 2015. UDAY aimed at easing out the supply side gaps impeding achievement of the goal of 24X7 reliable and quality power by catalysing the efforts of the states and DISCOMs through the spirit of competitive and cooperative federalism

UDAY had primarily two outcome parameters: (i) AT&C loss reduction to 15% and (ii) ACS-ARR gap reduction to zero by March 2019. Due to the large scale problems/ challenges in some States, as well as their late joining, some States were allowed to complete the turnaround process of their DISCOMs by one to two years. In all 32 States/UTs finally joined UDAY, with 16 States joining for comprehensive operational and financial turnaround measures and the remaining for operational measures only.

While UDAY has contributed towards improvements in the DISCOM's performances, the Government of India is formulating additional reform frameworks to complement the efforts under UDAY to achieve a complete financial and operational turnaround of State owned Utilities.

1.3.6.6 Atmanirbhar Package for State Power Distribution Companies

Amid COVID-19 crisis, Government of India has announced special economic package on 13.05.2020, which included liquidity injection for distribution companies. The liquidity injection package envisaged funding by PFC and REC to the tune of Rs. 1,35,497 crore to provide much needed support to power sector. The purpose of the liquidity scheme under Atmanirbhar Bharat Package was for clearance of outstanding dues of CPSU GENCOs & TRANSCO, IPPs and RE Generators as on 31st March 2020.

Further, MOP vide its letter dt 02.09.2020 granted a one-time permission to PFC & REC for extending loans to DISCOMs above working capital limits of 25% of last year's revenues under UDAY to discharge the liabilities of CPSU Gencos & Transcos, IPPs and RE Generators existing as on 30th June 2020.

Accordingly, PFC & REC have also formulated policy (ies) for offering Special Long-term Transition Loans to Power DISCOMs for clearance of dues of CPSU Gencos & Transcos, IPPs and RE Generators outstanding as on 31st March 2020 & 30th June 2020 .

As on 05.04.2021 PFC & REC has sanctioned Rs. 1,35,497 crore and disbursed Rs. 77,205 crore to various State Power Discoms under the liquidity package announced by Gol.

A reforms-based result-linked power distribution sector scheme is proposed with an outlay of Rs.3,05,984 crore over 5 years. The scheme will provide assistance to DISCOMs for infrastructure creation and up-gradation, prepaid smart metering, feeder separation, up-gradation of systems, etc. The release of funds will be tied to improvement in performance including reduction in AT&C losses. Once finalize this scheme will subsume UDAY also.

1.3.6.7 Electricity (Rights of Consumers) Rules, 2020

Government of India MoP has notified Electricity (Rights of Consumers) Rules, 2020 in December, 2020. These Rules specify the obligations of the licensee and sets the practices that must be adopted by the licensee to provide efficient, cost-effective, reliable and consumer friendly services so as to facilitate ease of use as well as ease of doing business by the consumers. These Rules would provide a pathway to the SERCs to further improve upon the Supply Code and SoPs already laid down by them so as to ensure 24*7 quality power and better services to consumers by Distribution Licensees.

1.3.7 DIGITAL INITIATIVES

1.3.7.1 Mob App 'Vidyut PRAVAH'

A Mobile App 'Vidyut PRAVAH' on Electricity Pricing and Availability Highlights was launched on 31st March, 2016. The application provides highlights of the power availability in the country on real time basis. This app will empower common people to demand 24x7 power from the states and will take transparency to the next level by making State governments more accountable.

1.3.7.2 DEEP (Discovery of Efficient Electricity Price) e-Bidding & e-Reverse Auction portal.

In order to bring uniformity and transparency in power procurement by the DISCOMs and also to promote competition in electricity sector, "DEEP (Discovery of Efficient Electricity Price) e-Bidding Portal" was been launched on 12th April, 2016. This Portal is being used for Short Term and Medium Term procurement of Power by Discoms. The e-Reverse Auction method has also been introduced in the short term and medium term power procurement.

1.3.7.3 MERIT (Merit Order Despatch of Electricity for Rejuvenation of income and Transparency) web portal

In pursuance to the recommendations of the Merit Order Dispatch Committee headed by Chairperson, CEA, a Web Portal 'MERIT' i.e. Merit Order Despatch of Electricity for Rejuvenation of Income and Transparency, was launched on 23rd June 2017. Subsequently, MERIT Mobile App was also launched on 5th July 2017. This Mobile App/Web Portal displays the details of power purchased by the states from various power Stations/Sources and the

rates thereof on day to day basis transparently and provides opportunity to states for improving their power purchase portfolio. (<http://www.meritindia.in>)

1.3.7.4 e-Bidding portal for utilization of domestic coal in IPP Power Stations for reducing the cost of power generation

An e-bidding portal was launched on 5th July 2017 for providing e-Bidding solution to States to select Independent Power Producers (IPPs) for procurement of power by transferring their domestic coal under the scheme of flexibility in utilization of domestic coal. The e-Bidding portal has been designed to facilitate States in inviting bids for procurement of power from the prospective IPPs in transparent and fair manner. The successful bidder shall be selected through e-Reverse Bidding process. The flexibility in utilization of domestic coal scheme envisages transferring coal to more efficient IPPs generating stations, leading to lower generation costs and ultimately lesser cost of electricity for the consumers

1.3.7.5 Monitoring of 24x7 power supply through Integration of Distribution Sector data with National Power Portal (NPP):

NPP, launched on 14th Nov, 2017, is a centralized system which facilitates online data capture/ input (daily, monthly, and annually) and to disseminate related information (operational, capacity, demand, supply, consumption etc.) through various analysed reports, graphs, statistics etc. for Indian Power Sector. National Power Portal is a common platform, where all data related to Power sector (Generation, Transmission, Distribution etc.) are available on single window.

In Distribution Sector, NPP captures both operational and commercial data at feeder-level for Rural and Urban areas. Operational data includes power supply position, outage data, reliability data etc. and commercial data includes Billing efficiency, collection efficiency for A&TC loss etc. CEA is upgrading the formats for data capturing and its presentation in NPP.

1.3.7.6 Power Rail Koyla Availability through Supply Harmony (PRAKASH)

Benefits of Portal to the Stake-holders: On a single platform, the following information is available:

- i. Coal company: Stocks and the coal requirement at power stations
- ii. Indian Railways: Actual coal available at siding.
- iii. Power stations can plan future schedule by knowing rakes in pipe line and expected time of receipt.
- iv. Ministry of Power /Ministry of Coal/ Ministry of Railways /CEA /POSOCO can review the overall availability of thermal power in different regions and coal available for the same.

1.3.8 PROMOTION OF HYDRO PROJECTS

For boosting the generation of Hydro Power, the Government of India on 8th March, 2019, approved a number of measures for promoting hydropower sector in the country which are as under:

- i. Declaring Large Hydro Power (LHPs) (> 25 MW projects) as Renewable Energy source.
- ii. Hydro Purchase Obligation (HPO) as a separate entity within Non-Solar Renewable Purchase Obligation (RPO).
- iii. Tariff rationalization measures for bringing down hydro power tariff.
- iv. Budgetary Support for Flood Moderation/Storage Hydro Electric Projects (HEPs).
- v. Budgetary Support to Cost of Enabling Infrastructure, i.e. roads/bridges. a) Rs. 1.5 crore per MW for projects upto 200 MW. b) Rs. 1.0 crore per MW for projects above 200 MW

1.3.8.1 HYDRO POLICY NOTIFICATION, 2019

Hydro Policy, 2019 was notified by Govt. of India on 08.03.2019. The salient features of the policy are given below:

- Declaring Large Hydro Power Projects (LHPs, i.e. >25 MW) AS Renewable Energy Source.
However, LHPs would not automatically be eligible for any differential treatment for statutory clearances such as Forest clearances, environmental clearance, National Board for Wildlife clearance, related impact Assessment and carrying capacity study, etc., available to Small Hydropower Projects (SHPS), i.e., projects capacity up to 25 MW.
- Hydro Purchase Obligation (HPO) as a separate entity within non-solar Renewable Purchase, The HPO shall cover all LHPs commissioned after this notification as well as untied capacity (i.e. without PPA) of the commissioned projects.
- Tariff rationalization measures to bring down hydropower tariff: Tariff rationalization measures including providing flexibility to the developers to determine tariff by back loading of tariff after increasing project life to 40 years, increasing debt repayment period to 18 years and introducing escalating tariff of 2%;
- Budgetary support for funding flood moderation component and funding cost of enabling infrastructure i.e. roads and bridges on case to case basis as per actual, limited to Rs. 1.5 crore per MW for up to 200 MW projects and Rs. 1.0 crore per MW for above 200 MW projects.

1.3.8.2 GUIDELINES FOR THE RELEASE OF BUDGETARY SUPPORT FOR ENABLING INFRASTRUCTURE I.E. ROADS/BRIDGES AND FLOOD MODERATION COMPONENT OF HYDROELECTRIC PROJECTS

"In line with Hydro Policy notified by Govt. of India (GoI) on 08.03.2019, Ministry of Power (MoP), GoI vide OMs dated 28.09.2021 issued the detailed guidelines for release of budgetary support towards cost of enabling infrastructure i.e. roads/bridges and flood moderation component of hydroelectric projects including PSP."

1.3.9 GO ELECTRIC

Ministry of Power, Government of India, launched "Go Electric" Campaign on 19th February, 2021 with the objective of creating awareness among masses on benefits of adopting Electric Vehicles and Electric Cooking appliances such as Induction cook hobs, Electric pressure cooker etc. This initiative is intended to encourage consumers to switch over to Electric Vehicles and Electric Cooking in place of currently used conventional modes and appliances, thereby, reducing dependency of the country on imported fuel. The "Go Electric" Campaign is aimed at promoting adoption of Energy Efficient Electric Vehicles and Electric Cooking appliances and is expected to help the country to achieve energy transition as well as low carbon economic growth in the future. These technologies being energy efficient, are expected to scale down mobility and cooking related emissions, securing cleaner and greener future. The share of renewables in the energy mix is expected to increase due to integration of more renewable based power generation. Benefits of adopting these electricity based technologies shall be completely realized by enhancing share of renewables in the Grid.

1.3.10 CHARGING INFRASTRUCTURE

Government of India has taken the following actions to create and increase the electric vehicle charging infrastructure to promote electric vehicles across the country:

- i) There is no requirement of license for setting up charging stations for Electric Vehicles: Ministry of Power on 13.04.2018, has issued clarification that no license is required for setting up Charging Infrastructure for Electric Vehicles (EVs) with reference to the provisions of the Electricity Act, 2003.
- ii) Charging Infrastructure for Electric Vehicles – Revised Guidelines and Standards: Ministry of Power, after extensive consultations with State Governments, different departments/agencies of Central Government and the stakeholders, issued "Charging Infrastructure for Electric Vehicles – Guidelines and Standards" dated 14.12.2018, which was revised on 01.10.2019 and further, an amendment to it was issued on 08.06.2020. After careful consideration of progress made and suggestion received