Transcript of 18th Annual Analyst and Investor Meet of NTPC held on 1 August 2022

Management:

Good evening, ladies and gentlemen. A very warm welcome to the NTPC 18th Annual Analyst and Investor Meet. We are physically meeting after three years because the last two and a half years has been very difficult for almost everyone due to COVID pandemic. As you know, India is still one of the fastest growing economies in the world and power sector is a key enabler for India's economic growth. Indian's power sector is one of the most diversified in the world and is undergoing significant transformation. Further with the Government of India's focus on power for all, there has been accelerated demand in the country with every Indian now has access to electricity. Power sector is poised for a long-term growth. As we see power demand rose substantially, there is a sizable growth ahead for our Company.

Our Company under the visionary leadership of our CMD and Board of Directors has shown character, maturity, and resilience in dealing with the changing landscape in power sector. With all this happening what can we do to realize more value for our stakeholders. To discuss this today, we have with us our Chairman & Managing Director, Shri Gurdeep Singh, Director (Operations), Shri Ramesh Babu, Director (Commercial), Shri C. K. Mondol, Director (Projects), Shri Ujjwal Kanti Bhattacharya, and Director (Finance), Shri Jaikumar Srinivasan. All of them are esteemed personalities in their field and need no introduction, but still, it is my responsibility to briefly introduce them.

Shri Gurdeep Singh is the Chairman and Managing Director of the Company. He has an illustrious career of spanning over 35 years in the power sector. He is leading the energy transition in NTPC. He has launched a series of initiatives to sustain NTPC's growth and bring about cultural changes necessary to maintain NTPC's position as a leading global power company. His thrust is mainly on minimizing environmental footprint and maximizing sustainability efforts and focused approach on low cost, low emission in alignment with India's ambitious target of cleaner and affordable power for all.

On the right of Shri Gurdeep Singhji is our Director (Operations), Shri Ramesh Babu. He has 35 years of vast experience with outstanding contribution in management of large sized plants in the area of power plant operation and maintenance, Renovation and modernization of old units and in the area of efficiency improvement of thermal plants. As Director (Operations), he is responsible for overall planning for safe, reliable, and efficient operations of all power plants of NTPC, while ensuring fuel security and environmental compliances.

On the left of Shri Gurdeep Singh is our Director (Commercial), Shri Chandan Kumar Mondol. He has comprehensive knowledge of the power sector and has worked in both power plant and corporate functions. As a strategic planner, Shri Mondol has led several initiatives of NTPC. He has worked towards developing commercial and marketing strategies, execution of power purchase agreements, and policy advocacy with various authorities. Mondol Saab has also has the enviable task of ensuring realization from DISCOMs, which has been attained beyond 100% levels year after year.

On the left of Shri Mondol is, Shri Ujjwal Kanti Bhattacharya, our Director (Projects). He has rich experience in the fields of Greenfield power project construction, power plant operation and maintenance, renovation and modernization, and environment management. He along with his team steered the turning around of the Talcher station, which went on to become top performing power station year after year. He had illustrious career in business development function of NTPC, in both domestic as well as international arena. He has been at the forefront of JV formation and project and execution of 1,320 MW Maitree power project at Bangladesh. On, the right of Director (Operations), is Shri Jaikumar Srinivasan, he has recently joined our board as Director (Finance). He brings with him more than 30 years of experience in power and mining sector in state and central PSUs in the fields of finance, accounts, taxation, commercial, electricity regulation, IT and project development. Before, his appointment as Director (Finance) in NTPC, he has served as Director (Finance) of NLC. He also served as Director (Finance) of Maharashtra State Electricity Distribution Company prior to which he was Director of Maharashtra State Power Generation Company, MAHAGENCO. He also served as a part time Director in various subsidiary companies of MAHAGENCO.

The brief of the program is that we will start with opening remarks from our Chairman and Managing Director, followed by a brief presentation by our Director (Finance), then we will be open for question and answer, which will be followed by tea. So, thank you very much. Over to you, Chairman Sir.

Shri Gurdeep Singh - Chairman & Managing Director, NTPC Ltd.:

Good afternoon. Welcome to 18th Annual Analysts and Investors Meet. We are meeting almost after a gap of two years, which we could not and good that we could make it happen and thanks for coming. Although, we are meeting here after about three years, but nevertheless, we were connected online with some of you and in today's world events are more or less instantly conveyed to each and everyone. So, the good thing what is coming out is that hopefully we should be out of COVID, but we all have to be really careful, and we have to take precautions because it's still not fully out. The detailed presentation will be made by Director (Finance), but I would like to just highlight few of the things and then we would request Director (Finance) to make the presentation and then we will be happy to have the interaction with all of you.

So, as we know that, the recent past has been relentless and the pandemic, geopolitical tensions, high fuel prices, and the supply chain shortage, we have all witnessed that kind of scenario. Significant changes have happened in the energy sector globally for the past two years and the global energy landscape is currently facing severe challenges. The fuel prices have increased significantly, and this has made energy security the topmost priority for every nation, and this is quite important to highlight here that most of the international conferences, earlier the transition was coming prior to the security and these days the security is taking precedence to the transition. The country faced an unprecedented coal crisis last year, which continued this year as well. Domestic coal supply has not kept the pace with the required demand leading to the increased need for the imported coal. The abnormal increase in the LNG and the imported coal prices have led to decrease in the power generation from these sources, which has increased the gap between the demand and supply.

We have been carefully monitoring the fuel supply situation and have taken corrective actions on a continuous basis to ensure that the energy security of the country by ensuring reliable fuel

supplies. So, we have ensured the fuel supply and we have been able to meet the grid requirement. This has been done by arranging maximum possible coal supplies from the domestic sources, ramping up the coal production from captive mines, and sourcing imported coal to ensure that the no station is starved of fuel. On the growth in the energy demand side, I'm glad to inform all of you that the demand for the power is increasing rapidly. The period of the low dispatch of the power and the supply overhang in the country seems to be over. We had witnessed for a quite some time, in fact almost 6-7 years that there was a lot of supply overhang and for the last about a year or so, I think this overhang is more or less over and the efforts will have to be made to bring back some of the plants, which were stranded, or we will have to start the new construction, we will address that issue also very soon. with the installed capacity of 400 GW, the country registered a peak demand of 212 GW and energy met was 4,722 million units.

In Q1 FY23, the country has registered the generation growth of 16.8% and the growth of NTPC generation is 21.69%. Renewable capacity addition will continue to outperform in forthcoming years with the limited availability of the hydro and affordable storage options. The thermal power plants are expected to play a significant role in meeting the balancing power requirements. Let me explain here little bit that in most of the countries this is being termed as a balancing power, although this is the base load generation. So, the grid is maintained through some of the flexible units of the gas-based plants, but in our case, we have to rely on the coal-fired plants for even flexibility as well as meeting the grid requirement. Growing population along with the increasing electrification and per capita usage will further provide impetus to the rising demand for the electricity as was mentioned that we are fastest growing economy, and our per capita consumption also is getting reflected in the increase in the demand of the power supply. Due to strong demand PLF of the coal-based power stations have increased.

In Q1 of current year the PLF of the country's coal-based stations stood at close to 70% while the PLF of NTPC coal stations was over 80%, so we have seen this that after few years we are back to 80% PLF. It is expected that the PLF of coal-based stations may further increase. Before presenting the performance highlights, I would like to say thanks to each and every one of you for your continued support and investment in NTPC. Regarding NTPC performance and the way forward, our Director (Finance) is going to give a detailed presentation covering various aspects, however, few points from my side, generation crossed 350 billion units mark for the first time and recorded an all-time high generation of 360 billion units registering a growth of 15% as compared to country generation growth of 8% in the same period. In the current fiscal, we have achieved 100 billion unit's generation mark in 88 days, which is the best achieved till date rather the fastest till date. These numbers indicate that the growth is substantial and is likely to continue going forward.

Our coal stations are having sufficient coal stock. We are working continuously to increase the machine availabilities. It is worthy to mention here that all the top five units in the country in terms of the PLF in the Q1 of current year are NTPC units. This has been possible with the robust O&M practices and these units are namely Vindhyachal unit#5, Singrauli unit#4, Vindhyachal unit#6, Korba unit#3, and Korba unit#2. Achieving capacity addition of 3,372 MW in the last year and the commercial capacity addition of 4,032 MW including 502 MW capacity from the renewables. Further 172.52 MW renewable capacity has been added in the current financial year till date taking NTPC group installed capacity to 69,134 MW. Commissioned India's largest floating solar plant at Ramagundam in Telangana and the second

largest in Kayamkulam and all of you would be knowing that these were dedicated to the nation by Hon. Prime Minister on Saturday. We achieved over 106% of the CAPEX target. We have achieved the realization of 1,16,148 crore that is 100% of the billed amount. Our trade receivables are less than 45 days, which is prescribed by the regulations. NVVN, our trading arm traded over 24 billion units of power registering a growth of 29% vis a vis previous year and NVVN have started plying electric buses at Bengaluru in addition to Port Blair.

Our coal mining team has been doing fantastic job in ramping up the coal production and there has been increase of 27% by achieving 14 million metric ton of the coal production. NTPC Renewable Energy Limited obtained the highest domestic credit rating of AAA within one year of its incorporation and has been able to tie up its maiden domestic green loan at a very, very competitive rate. On our growth plan, even though our coal-based project pipeline under construction is becoming slim, all remaining projects are either pithead or situated on the mine and we are planning to take up the new construction projects, which we will be just explaining very soon. with the commissioning of these projects, our generation share shall further rise in the total power supply to the country. With the target of achieving 60 GW renewable energy capacity by 2032, apart from the 2 GW capacity which is already commissioned, over 4 GW capacity is under construction stage and 5 GW is under bidding stage. We are working on the multiple fronts and multiple models to realize the targeted capacity addition in renewables, further efforts are on for partnering with commercial and industrial consumers for supplying renewable and RTC power; RTC is round the clock.

Work at the largest renewable energy park at Khavda in Gujarat has started and it has 4,750 MW capacity. We signed the MOU with the government of Rajasthan for allocation of land parcel for setting up an aggregate renewable capacity of 10 GW. Considering the changes happening across the globe while giving utmost thrust for adding renewable capacity, needs have been felt for adding coal-based capacity as well as it will provide the resilience to the sector for meeting the increasing demand. Accordingly, we are considering a few expansion projects at existing pithead plants, and we are very close to award the new projects maybe in this month itself or the next month as we are going to complete one or two of the formalities. As we march ahead in our capacity addition program, we are planning for achieving 75 GW capacity by next year August. We are also progressing well in the green hydrogen space; work is in progress at Leh on an integrated project for mobility where 5 intracity bus would ply using green hydrogen. In addition to the green methanol pilot project at Vindhyachal, the work for blending green hydrogen with natural gas at Kawas is also in progress. Foundation stone of these two new initiatives was laid by the honorable Prime Minister recently. Captive coal mining target is set to be 26 million metric ton (MMT) for the current fiscal, as I just mentioned, last year it was 14 MMT, so there is quantum jump which is coming. We are targeting to reach 50 MMT by 2027, this will help in reliable fuel supply to our power stations.

We are working on the energy storage space and discussions are underway for adding nuclear capacity, this is a new thing which probably you will be hearing that we are bringing in this and we are seriously thinking on this nuclear, how to participate in the nuclear because the act is really enabling now rather than restricting. Any government company can enter into the nuclear space. We are committed towards providing reliable and affordable power for all striving for the clean energy leadership in India. Emphasis is on capability building for ensuring the leadership pipeline to maintain the sectoral leadership. On the ESG side, I think there have been many, many concerns in the talks, but efforts are on and we are doing everything possible. We are diligently following ESG principles. We are timely responding to

any of the ESG related queries by all investors and ESG rating analysts. We are providing ESG data disclosures on our NTPC website. In the recently released sustainalytics report ESG risk rating of NTPC has been upgraded by one band, incidentally it is from severe to the high risk. so at least it has moved one band. We have implemented strong ethics, fair corporate governance, effective risk management, extensive stakeholder engagement, and stringent safety measures to all our power stations. Making integrated annual report based on the GRI and IR framework since FY20 with sustainability disclosures of entire NTPC group companies.

NTPC is engaging with the NITI Aayog to develop its road map for the net zero GHG emission in alignment to India's targets. NTPC has co-founded the global alliance for sustainable energy along with 16 energy players to ensure that the renewables are wholly sustainable for the people and the planet and to lead just transition way forward for the cleaner fuel. We became the first PSU to implement the dedicated sustainable supply chain guideline with the focus on the ESG assessment of the suppliers and their capacity building. We have resumed the girl empowerment mission program, which was interrupted for the last two years due to COVID-19 imposed restrictions and trained over 22,500 school going girls. The program is expected to create long lasting positive impact on the young girls and on the society itself when they grow. NTPC received the CII ITC Sustainability Award 2021 as well like the last year. On the dividend side, we have paid dividend for 29th consecutive year and the dividend is slightly on the increasing trend.

Company is committed to deliver sustainable value to its all stakeholders. We have been consistently paying dividend as per DIPAM guidelines rather trying to exceed and this trend is expected to continue in future as well. So, before I request Director (Finance), let me reiterate here that, we are no more only power generator, we are generating power from almost all the sources and unlike when we met in 2019, where only renewable transition was being talked about, so there is a requirement and we will have to put the new coal based plants in addition to completing the present ones and we will make sure that we will go aggressively in all areas to ensure that the country’s every citizen is getting reliable and affordable power as per the energy commitment of the Government of India. With this, I would like to assure all of you that we will continue to put tireless efforts for maximizing profitability in a sustainable manner and bring value to the shareholders in addition to providing the reliable and affordable power to every citizen. Thank you and I would now request Director (Finance) to make the presentation.

Shri Jaikumar Srinivasan - Director (Finance), NTPC Ltd.:

Thank you, Sir. Once again, welcome all of you for this 18th Analyst and Investor Meet. I have taken over as Director (Finance) only last week, so I feel greatly privileged to stand up before you and getting an opportunity to present our operational and financial overview at the same time, I feel entitled also if some of you pose very grueling question, I can always deflect it. So, our CMD Saab has in his opening remarks has been both very comprehensive in his overview, at the same time very succinct. I on my part will make all efforts to keep it very brief, but nevertheless the sheer size of the company, the geographical diversity, the issues involved, all this cannot be encapsulated in less than half an hour, so you'll have to bear with me on that count. So, with that I begin the presentation.

Being the largest power generator and an important energy enabler, NTPC will be at the core of India's growth and energy transition. We would like to begin our discussion with sharing our vision for NTPC and how we expect to attain this vision. Our vision to become a global energy

company and to be the prime mover of India growth story is based on the realities of emerging energy scenario and opportunities. We are already the largest and the most efficient power company in India and moving towards becoming the world's leading energy player. We are an important element in the implementation of government's ambitious plan for building robust and modern infrastructure for power generation in India. Our vision will be actualized by our core values that we call I- COMIT, which is Integrity, Customer Focus, Organizational Pride, Mutual Trust and Respect, Innovation & Learning, and Total Quality and Safety. These values place us in a very distinctive position as we believe we have the capability to emerge as the world's leading power company providing reliable power and related solutions in economical, efficient and environmentally friendly manner, which would be driven by innovation and agility.

NTPC Group currently has operational projects across the length and breadth of the country. Our unparalleled presence across India mitigates the risk associated with operating from limited geographical territories, so our risks are all spread out. We have operational stations consisting of units of different sizes including stations under operations with our JV and subsidiary partners. Most of our coal-based plants are ideally located close to the fuel sources that's the hallmark of our Company.

In this presentation, I will start with giving an overview of NTPC followed by how we plan to spearhead energy transition. Various ESG initiatives taken by the company being a responsible corporate citizen to improve the lives of the people and environment, we aim not only for growth but sustainable growth with due care for people and environment, transforming power sector in India. Our key growth pointers, our operational and project execution excellence, and our financials.

As the largest power generator in India, we generate 24% of the nation's electricity, whereas our installed capacity is 17% of the nation's proportion. We have clearly laid down growth path in the form of our corporate plan to become 130 GW company by 2032, which is quite visible with more than 16 GW capacity under construction. We are progressing very well to achieve the same. In FY22, we have achieved commercial capacity addition of 4,032 MW and we are maintaining consistent operational excellence with double digit lead in percentage terms overall All India PLF.

NTPC would be leading India's energy transition. In line with the same, we are committed to have 60 GW RE capacity by 2032. We are also actively looking for business opportunities in green hydrogen, e-mobility, and other related fields in the entire energy value chain. We are progressing well on the ESG front on the back of our ESG strategy with clearly defined KPIs and targets. Recently, we have been upgraded in terms of ESG rating. On the back of these strengths, we have to say that we will be sustaining growth momentum while maintaining energy leadership.

We are moving the company into the next orbit of profit and growth. We have huge capacity addition lined up with clear visibility to add 15 GW capacity in the next three years and more than 60 GW capacity in the next 10 years. We aim to garner substantial share of GOI targets of 500 GW non-fossil fuel-based capacity and 5 million ton of green hydrogen production by 2030. As a result, we plan to change our energy mix significantly over the next decade as we lead energy transition.

We plan to complete FGD implementation in the entire operational and under construction capacity in next three years for which CAPEX has already been committed. Further the Company is also actively engaging tie up with commercial and industrial customers directly and allocate exclusive capacity on demand. We are considering to award 2x660 MW thermal project at Talcher. Our growth pathway will be widened further with growth in our captive mining capacity as well. On the back of these indicators, we can say that we will be fulfilling expectations and setting new benchmarks.

We now turn to the key performance highlights for FY22. Our standalone regulated equity has grown to Rs.70,890 crore as at FY22 end, a jump by 7%. We have achieved highest ever sales realization of more than Rs.1,16,000 crore in FY22 registering growth of 16%. We have posted highest ever stand alone as well as group profit in FY22. We have added 4,032 MW commercial capacity. We have also posted highest ever group generation of 360 BUs in FY22. We are geared up for creating many such records as we spearhead energy transition.

Now coming to how we plan to spearhead the energy transition. We plan to enhance our energy portfolio by 2032 from a predominantly power generation company at present. We want to become the supplier of choice by providing clean, green, and affordable power to our beneficiaries. We plan to aggressively add renewable capacity to our portfolio and in synergy with the RE capacity, we are also working towards becoming pioneer in development of green hydrogen technology and aim to have a significant share in the hydrogen economy. We are also looking to widen our presence in the sector through power distribution, waste to wealth, consultancy, and also increase global footprints. All of this shall act to broad base our company's revenue stream and truly lead NTPC into becoming an energy company with power generation as still the mainstream. As we aspire for a wider energy portfolio, we plan to attain the same by building up on our operational project management excellence attained over the past four decades by placing even more thrust on ESG by aggressively adding RE capacity through ultra-mega renewable energy parks and other organic inorganic modes by gainfully utilizing existing land banks and infrastructure for power and allied industry. We are confident that we would be able to achieve the same on the back of our robust financials and ability to raise funds as the most competitive rates.

In Sync with the Government of India’s push towards renewable energy, we plan to have 60 GW RE capacity by 2032. Company already has 2 GW of installed renewable capacity, while another 4 GW is under construction. We have won close to 4 GW tariff based competitive bidding contracts since FY22. We are setting up country’s largest solar park of 4.75 GW in Kutch district of Gujarat. Plan for development of another 19 GW ultra-mega renewable energy parks is in various stages. With all this, there is a clear visibility, project pipeline of RE capacity on our hand, and we are well on our way to attain our target of 60 GW RE capacity by 2032.

For consolidating of the entire RE portfolio into a new SPV, we have the idea of NTPC Green Energy Limited; this SPV was incorporated on 7th April, 2022. Business transfer agreements for existing RE assets, and share purchase agreement for transfer of stake of NTPC in NREL; that is the existing company, to NGEL has been executed on July 8th, 2022. Engagement of merchant bankers for monetization is done and monetization is expected to be completed in FY23, in the next one year.

NTPC has been at the forefront of green capacity development to realize the green energy and green hydrogen objective and the GOI's efforts towards carbon neutral economy. NTPC is building the country's first pilot project for synthesizing green methanol, setting up first green hydrogen filling station, first green hydrogen blending into piped natural gas, and first green energy storage project. As seen here, Company has also signed agreements and MOUs with leading companies for developing entire green ecosystem consisting of supplying low carbon RE RTC power, green ammonia, green methanol, the details of which are in front of you.

Now coming to our sustainability initiatives. Sustainability is a challenge being faced globally by energy companies today in the face of the rapidly rising consumer demand on one hand and environmental concerns on the other hand. This dichotomy is everybody's challenge. In this scenario, NTPC's sustainability strategy which we call as "The brighter plan" with clearly defined KPIs and targets have been brought out. We are the first energy company to declare our energy compact goals that is 60 GW RE capacity by 2032 and 10% reduction in net energy intensity by 2032 compared to 2012 levels. We are developing net zero road map in collaboration with NITI Aayog. We are in regular dialogue with ESG rating agencies to address contentious issues, concerns, and sharing of data for improvement of ESG rating. Sustainalytics has upgraded our ESG rating by one notch as was shared with you already and we are confident that we will consistently improve our ESG ratings with better engagement in a systematic manner. A search friendly ESG profile of NTPC has been launched on our website to enhance the visibility of our myriad efforts on various fronts on ESG to rating agencies and to public at large. I would welcome all of you to visit our website and peep into and drill down into various aspects of this. We are committed to progress on technology front with increased efficiency and greater environmental protection.

Our Sustainability strategy is, uniquely built on NTPCs vision. Our sustainability strategy that is the brighter plan which I mentioned aims to accelerate NTPCs efforts in leading the energy transition to a decentralized, decarbonized, and digitalized energy future on triple bottom line framework setting new benchmarks in sustainability along with entire energy value chain. It provides a broad framework for company's priorities to meet the challenges in 7 focus areas; that is decarbonization, air emission control, water and biodiversity conservation, circular economy, health and safety, community development, strong finance and ethics, and sustainable supply chain. The plan focuses on ensuring the sustainability of enterprise's business operations to co-creating, innovative, and sustainable solutions for better and greener energy future leading to profitable business growth, reduced costs, and mitigating risk of doing business in the VUCA world; VUCA for volatility, uncertainty, complexity, ambiguity besides of course the nightly uncertainty which was all pervading in terms of pandemic. This will enable NTPC in delivering a progressive business, greener environment, and enrich lives to create shared values for all.

We at NTPC have unwavering commitment towards environment in line with our environment management motto going higher on generation, lowering GHG intensity. Our Company is committed to comply with new environmental norms for control of SOx, first FGD has been commissioned at Vindhyachal, erection of FGD is under implementation at 60 GW capacity. It is noteworthy that you take a census of all the power plants in the country, NTPC is in the forefront, and in a very, very environmentally conscious and responsible manner has taken the lead and maximum FGDs are under implementation for NTPC alone. Year wise implementation schedule has also been chalked out to ensure smooth implementation well within the timelines set by CEA. Now we would be having the first mover advantage, this is

important as FGD is already under implementation and all our existing as well as upcoming plant as compared to other players, we are certain that once FGD is implemented at our plants, we will get advantage in merit order in comparison with other non-compliant plants. Further, as part of our commitment to environment, we are taking a number of Blue Sky initiatives such as farm to fuel, biomass co-firing, circular economy, waste to wealth.

We are committed to invest up to 1% of our distributable profit for R&D activities and climate change technology. We are amongst select utilities globally to have a dedicated technology development center which we call as NETRA. The focus area of NETRA are efficiency improvement, cost reduction, new and renewable energy, climate change, environmental protection, which includes water conservation, ash utilization, and waste management. NETRA also provides scientific support to NTPC stations. Research Advisory Council comprising of eminent scientists has been constituted to steer high end research for the Company.

As far as CSR initiatives are concerned, NTPC has been spending 2% of net profit every year towards CSR activities right since 2014-15. Company has spent Rs. 357 crore on CSR activities during last financial year. Company has led the fight against COVID pandemic from the front. Company has made a contribution of Rs. 410 crore since FY21 to PM Cares Fund to support Government of India in its efforts to fight pandemic. Further special thrust is being given to girl empowerment with an objective to make the girls in our country self-reliant and confident in all walks of life. NTPC has adopted 18 industrial training institutes, and is setting up 8 new ones. We are also providing support to Archery Association of India for promotion of archery as part of our endeavor to support sports in the country. NTPC CSR initiatives have touched the lives of around 18 lakh people in one way or the other at remote locations.

Now let us take a look at how power sector in the country is transforming and what all the various imperatives, although CMD Sir had very shortly mentioned about this. If you can see the graph here, Indian GDP is expected to grow at a fast pace in the coming years and the demand for energy is expected to rise in tandem with the growth of the economy. Going forward sustained growth of GDP will contribute tremendously to the growth of the power factor. Further there's a huge latent demand and our demographic strength is expected to contribute to annual incremental growth of the sector in a big way.

This growth is getting reflected in energy requirement as well as peak load projections by the CEA with every Indian now having access to electricity power sector in India is certainly poised for high trajectory growth in the future. As you can see the projections up to FY30 on various installed capacity generation, peak load demand, per capita consumption, renewable capacity, fuel requirement, power sector is certainly poised for significant transformation with focus on 24x7 power to all. We are witnessing changes in every sphere of power sector in terms of policies, implementation, all key indicators in power sector are expected to grow at CAGR of 7%-8% as can be seen here. With a wave of new reforms in the form of revised tariff policy, concept of smart prepaid metering at the consumer servicing, and stress on renewables, we expect that the sector will grow substantially in this decade.

Now let us take a look at what are all our key growth pointers. Key growth pointers are huge capacity addition lined up, leading Indian push towards green energy, captive coal production to fuel security, acquisitions and diversification, and new avenues.

Our ability to consistently improve our scalability backed with sound performance is one of our biggest strengths. With operational capacity of 69 GW presently and 16 GW capacity under different stages of construction, we are well on our way to achieve our goal of becoming a 130 GW company by 2032. We follow a disciplined and prudent approach in taking up new projects and establish the availability of 5 critical inputs of land, water, environmental clearance, fuel linkage, and off take before committing any major investment in any of the projects. We constantly endeavor to reduce our project execution time. Our projects under construction are at diverse locations which mitigates the overall execution risk to a large extent as I initially mentioned.

All these ingredients make NTPC a very good destination for investment. FY20 marked the beginning of a reversal in CWIP ratio. This reversal is expected to pick pace in the next three years, and we expect our capital work in progress ratio to fall steeply. Going forward, we expect growth to continue and believe that turnaround from CWIP to completed assets would be hastened up more due to greater renewable mix because the gestation period of a renewables will be far less. Our standalone regulated equity was Rs. 70,890 crores as on 31 March, 2022 and we expect our regulated equity to increase at a CAGR of more than 10% in the next three years considering the projects under implementation.

Coming to the coal side, NTPC coal mining portfolio consists of coal mines having estimated geological reserves of 5 billion ton and ultimate mining capacity of 71 million metric ton per annum. Our growth path has widened with commercialization of Pakri Barwadih mine with effect from 1 April 2019 and Dulanga mine with effect from 1 October 2020. Our Talaipalli mines has also started production while mining operations has also started at Chatti Bariatu mine in April 2022.

We have produced nearly 14 million metric ton of coal in FY22 registering growth of 27% over FY21. We have achieved highest ever first quarter production of 4.24 million metric ton in the first quarter registering growth of 61% over the Q1 of the corresponding last year, which was 2.61 million metric ton. Further, we expect to commence production from Kerandari and Badam mines in early FY24.

Coming to acquisition and various diversification endeavors. Acquisition, diversification, and adaptability would be the hallmark of success in the coming times, and we are actively looking for other business opportunities besides our core competence both domestically as well as globally. We are actively looking for acquisition of power generation as well as distribution assets, which fit into our overall business profile and having good intrinsic value. Our wholly owned subsidiary NEEPCO acquired recently has been allocated large hydro projects totaling to more than 6 GW. NTPC is exploring options to provide round the clock RE power to top commercial and industrial customers directly. We are also exploring options for partnering with battery manufacturing and with technology providers for CO_2 to Methanol projects. Construction activity of thermal power project in Bangladesh is also in an advanced stage of implementation and we have been appointed as Project Management Consultant for more than 6 GW solar projects in Latin America and Africa.

Now coming to our operational excellence. Our operational capabilities have been proven with an unmatched track record; as you can see here. We have been consistently maintaining 2 digits spread over the national PLF. Our coal stations clocked PLF of 80.4% against All India PLF of 69.5%. Now if you discount NTPC from that 69.5% difference will be furthermore.

So, I mean the true comparison would be more stocking. In Q1 FY23, our group generation posted growth of 22% showing an uptick in the demand. Our operational efficiency is driven by strong systems guided by technical compliance documents, best maintenance practices, real time monitoring systems, 100% analysis of boiler tube failures, daily and monthly review system, technical audits, fleetwide monitoring by experts etc.

Again, safety is integral to our working. We have laid emphasis on safety, and we have robust operational standard operating procedures in all places. We have upscaled safety standards at our power plants and have inculcated complete culture of safety first. We are consistently maintaining status of a low-cost power producer. Our low variable charges ensure high merit order and as a result better PLF and efficiency in operations. Around 60% of our plants can be regarded as a pithead plant where the transportation cost is negligible, so it helps us to reduce the energy charges and overall basket is also very low.

We have elaborate payment security mechanism in place in terms of LC, in terms of power regulations and in terms of tripartite agreement. We continuously take up policy issues with CERC and other authorities and we have witnessed favorable regulatory dispensation in the form of current regulations for the period 2019-24.

Coming to the long-term fuel security, we have proactively and successfully taken initiatives to pursue fuel security for our current as well as future capacity. We have signed long-term fuel supply agreements with CIL and Singareni Collieries Company Limited for supply of coal for a period of 20 years for total ACQ of 183 million metric ton per annum. NTPC through a sustained policy advocacy has signed a supplementary agreement with aggregation of ACQ at CIL subsidiary level leading to optimum utilization of coal, reduction in ECR, avoidance of loss of fixed charges due to cold shortage, more efficient usage and planning of stock management at power plants. 60% of our coal based capacity is linked to merry-go-round and belt conveyor system. To mitigate the shortage of domestic coal, we awarded contracts for more than 16 million metric ton for procurement of imported coal also, which we would be using sparingly depending on necessity and need. We had total coal supply of 196 MMT in FY22 and ACQ materialization of 93%. ACQ Coal supply for Q1 for current financial year stands at 45.8 million metric ton with ACQ materialization of 101%.

From HR perspective, HR visions, our Company has always followed people first approach towards the employees. We believe in continuous development of our employees through objective and open performance management system. We provide comprehensive training to familiarize our employees with technological advancement and up-to-date operational and management practices.

Our key employee performance metrics like sales per employee, value added per employee, profit per employee, Man MW ratio have consistently improved. NTPC continues to win all round laurels in various fields of operations, quality, HR, CSR, safety etc. NTPC is the only PSU to consistently feature in top 50 best companies to work for in India in annual survey carried out by Great Places to Work Institute and Economic Times. We are proud of building a high trust, high performance culture.

Now I turn with all this to the essence of the whole thing, which is the financials. I am happy to share some of the key parameters here. You can see the results on a year-on-year basis. NTPC has been able to maintain sustained revenue, growth, and robust profit as should be

evident from the slide here. In FY22, we have posted highest ever profit of Rs.16,111 crore and sales realization which crossed Rs.1,16,000 crore mark. We have begun FY23 on a very, very strong note. For Q1, the revenue from operation is Rs.38,350 crore as against Rs.26,039 crore in the Q1 of last year registering an increase of 47%, the results which we declared last week. PAT for Q1 is Rs. 3,676 crore against Rs. 3,146 crore in last year Q1 registering an increase of 17%. We are confident of sustaining this growth in our financials with all our growth metrics, projections, projects, which we explained. At the consolidated level, we are also witnessing continuous growth. This growth is led by acquisition of value accretive JVs and subsidiaries. Profits from JVs have registered a growth of 49% in FY22. At the same time, our consolidated EBITDA has registered double digit growth to reach Rs. 42,605 crore in FY22. As we move forward, we believe we will sustain this trajectory of growth. Our balance sheet size is also growing bigger and stronger. In FY22, our gross fixed assets has increased by Rs.26,834 crore while CWIP has decreased. Now, this is what I was talking about turnover of CWIP to fixed assets. The moment a capitalization happens, you get entitled for regulated equity, return on equity at 15.5%, and it adds to the profitability. This trend is expected to continue with around 5 GW addition to our commercial capacity every year now on. We are raising debt at most competitive rates from the market and our cost of debt has reduced progressively from 8.07% in FY15 to 5.94% in the FY 22 with various strategies of blending our basket of borrowings, being very nimble and opportunistic in the financial environment. On the back of these strong financials, NTPC has been consistently paying dividends over the last 29 years. We have clear dividend policy of balancing dividend payouts with deployment for growth and we are committed to deliver sustainable value to all our stakeholders. All the above, make NTPC compelling avenue for long term investments. With this, I conclude my presentation. Thank you one and all.

Management:

Thank you to you Sir. We can take the questions now. One question at a time.

Mohit Kumar, DAM Capital:

Congratulations, on a good set of numbers for the quarter. My first question is on the fact that the government has allowed the coal-based power plant to supply renewables in place of costly coal based capacity where the variable cost is pretty high. We believe that of course this is a very large opportunity as far as the government is concerned I think they have put their numbers as 17 GW, this is not a new policy, this policy was there. I think it was somewhere in 2017-18, they announced, does it make your renewable pipeline from 8 GW correctly to 25 GW than expected 17 GW that we can commission in the next 3-4 years, or do you think we should tone down this expectation and the number which we are looking maybe a slightly lower number?

Management:

So, first of all this policy, I think we are thankful to the ministry that the solution was from our side, and this was almost in 2018, that time itself the policy decision was taken, but somehow it has taken long time to get implemented and the policy what it says is, it's not that if it's only this costly power, so the idea was that how we can get rid of the new PPAs and still go for the more addition of renewables and reduce reliance on the coal even on the existing power stations. So, this was we had discussed in 2018, we presented to the ministry, and from there

on I think this is now the reality, so all of you know that there is a renewable prices are coming down, coal price is going up, so theoretically, you can see that most of the plants, most of the plants means pithead plants today are much cheaper the coal cost is much cheaper than the renewable, but otherwise those plants which are distantly located let's say around 500 kilometer and more, there the cost of the coal is higher than the renewable energy prices and this was primarily for solar, but it's called as renewable energy, so we will be looking at how we can really plan with the renewable energy also, wind also. This provides us a great opportunity to ramp up our renewable energy and where we don't require the new power purchase agreements. So, the way to look at is, we are finding a solution and we are trying to reduce for the new PPAs, at the same time we are reducing the cost of power to the consumers. So, it's a really win-win situation and now this is the reality, and we should be not only what you are saying, what you just elaborated, we will have the capacity of around 60 GW plus from the coal side in the next two years. So, ideally at some point of time, you can assume that at least 30,000 MW is going to be non-pithead and that much renewable energy we can blend with this, so that is incremental additional capacity we can bring. So, when we are seeing 60 gigawatts by 2032, this is not going to be a much of an issue for us. So, I think the policies are getting lined, so that we are in position to really ramp up our renewable also along with the coal based. I hope that whatever you are saying it can be much more than that.

Mohit Kumar, DAM Capital:

Sir, my question was particularly this policy, under this policy can we expect around 50-60 GW capacity value addition, under this policy.

Management:

Why you want to stay under this policy?

Mohit Kumar, DAM Capital:

We don’t require PPA, we don’t need to compete

Management:

That's what I said, even 30,000 MW, not even 15, so answer is yes and more than that what you are saying.

Apurva Bahadur, Investec:

Hi, Sir, this is Apurva Bahadur from Investec. Sir, you highlighted that we are also entering into this C&I market essentially the green open access and supplying round the clock renewable power, I wanted to understand what type of return profile we have over there and secondly also for round the clock renewable power what other types of storage solutions we intend to implement?

Management:

Yes. So, this is a general question which everybody is trying to find a solution, but the returns on the C&I consumers as of today also you can expect that will be either comparable or maybe

even higher than that and some of the C&I consumers are also requesting us that whether they can pick up 26% equity and then we can through that non-fossil or the renewable energy can be used, so we are trying to find some of the hydro capacity, which is untied, so there can be some kind of good blend with the solar or wind and going forward, you would have already seen that we have come out with the bids for 3 GW of storage capacity, whether it is pump hydro, whether it's going to be battery, whether it is going to be hydrogen, I think this is the work which is in progress. Battery storage was considered to be the most preferred about two to three years back. Today, I think it looks like the pumped hydro will make a much better sense and then we will see that how we can blend and it's not only renewable energy, but also storage itself, but also with the hydropower.

It can also be through some virtual PPA whereby it will be through procurement of renewable energy certificate and then considering that rule is going to be published very shortly. I think through that also we will be trying; we may not require that storage immediately.

Apurva Bahadur, Investec:

If I may ask one more question and this is on conventional business, you said that the demand has picked up and they're seeing a demand supply mismatch, I think on last call you highlighted that around 6 GW of new brownfield capacity expansion we can do, Sir what's the progress on that beyond that and also more than so beyond this 6 GW how much more can we add on a brownfield basis?

Management:

Yeah. I think let me try to take this question here itself there will be many more questions around this point. What we had said about three years or more than rather four years that we are not going to acquire fresh new land and we never said that we are not going to add any capacity, I think that's what let me clarify if there is somebody having some other impression on that. Talcher, we are very close, we have already opened the bids, we are ready to put the order, there is a power purchase agreement, which has to come from Odisha side, which is just a formality, which would happen very soon and as was explained by Director (Finance) that as a responsible corporate, we make sure that these 5 things are available before we really take the investment decision. So, that is about Talcher, it is going to be 2x660 MW, beyond that there is Lara and Singrauli and literally if you are just going through that, all of our power stations and specifically the older power stations, we have space in those power stations. So, easily we can add kind of 2x660 or 2x800 depending on the configuration what we decide in almost all the pithead power stations, almost may not be everyone, but most of them.

Over and above that we have a huge setup for the townships, so if there is a requirement, we can try to redesign our Township and create a space for that. So, you can just take it very easily that if there is a requirement of let us say, we have to go for 10,000 MW, we can go for that. If it is 20,000, we can still go for 20,000. I think there was a calculation which was saying that it can be somewhere between 20,000 to 30,000 MW and I think let me address that question also that, most of the private sector will find it extremely difficult to do the financial closure for the coal-based power stations. So, if there is a requirement and this looks like there is a requirement because as the power demand is going up, we will have to add sizable capacity in the coal-based power stations unless the nuclear power stations can be commissioned much faster, which we are also looking at, at present, our Director (Projects) will explain you that he

has the constituted team, he is discussing with the NPCIL and BARC, but the important part is that I'm not sure that how many state GENCOS will also be able to really mobilize funds to go for the new plants.

So, from all sides, we are trying to say that it is not only renewable, but also not only coal side, but it's also not only hydro, So you can just think of that as the power generation, I think we are there, and we are in the probably the best of the position to leverage on that. So, rest assured that whatever is required we will do. But at the same time, we will be very, very responsible the question, which was coming in the beginning, we will try to see that how we can minimize our emissions, how we can be really more compliant with the ESG side. But at the same time at the core of the discussion every time we are mindful that we are responsible for providing affordable and reliable power to each and every citizen, okay. And as we keep our market share or we really improve our market share and so will be the profitability and the overall profit and the dividend, etc.

Analyst/Investor:

Can you give more colour on your solar power ambition like many players have large capacity and we have only limited capacity so can you give more colour on what you are trying to achieve with solar power and many private players are going much deeper into value chain, so are we going to continue generation only or are we thinking of something more?

Management:

Very good. So, as I said some time back that you can have more and more discussions on this. We are just coming out also but let me I think go back a little bit. When there was falling prices, we were quite mindful that we were not very aggressive at that point of time to put the new capacities in the solar and the wind. Now when there is a kind of some certainty has started coming, we have become quite aggressive and you will be knowing that in the last two years we have started participating into the competitive bids and we are winning I think most of the bids where we are participating. As of today, what you are saying that we have limited capacity and there are some more players who have gone for high, you would have also been observing that there are some players who are getting out, and there are many players who are not really showing in the interest for putting because as per them whatever their calculation of the falling prices they were betting on probably they are moving out of these things. But we as a responsible generation company we will make sure that we implement that to the best of the quality timing of the commercial returns on that. Our aim is to put and go for the renewable energy parks. As I just mentioned Khavda we have started work on that. This is 4750 MW and we have already signed MOU with Rajasthan for 10 GW. So, these kinds of plants and then I just mentioned about our floating solar and now we have MOU with DVC for all their reservoirs where we will be having floating solar. In addition to that we are looking at the wind, there are some locations which we have identified along with that, not only the solar parks, there can be wind side also. And this is not something which the task of adding 60 GW what we have put up as of today for 2032, we should be in a position to exceed that rather that only striving to really touch that 60 GW. About the other related issues, I think you would have also gone through some of our press releases or some of the new items that we are very keenly working on the hydrogen side and the green ammonia side, Khavda is going to be utilized as multipurpose. And the other locations also, in Leh as I just mentioned this is the first project which we are just putting, there will be a solar plant then the green hydrogen and the mobility services through that. So, this is not going to be limited to only power purchase agreements and

fixed returns. So, we are quite mindful that in some cases we can make much higher returns going through these things rather tying up for 25 years with a returns of let us say very low double-digit level. So, it is not something which is only 1 item which we are looking at that we have to have the power purchase agreement for the renewables. These are the 5 things which what we just explained, this was mainly for the conventional sources whether it is hydro or whether it is going to be coal-based plants. For that the PPA is necessary but for renewable we are re-looking our strategy and we believe that we can make much higher returns by going for some time merchant, or we will be going for C&I consumers, going for storage solutions or going for other related solutions like mobility or the green ammonia, etc.

Analyst/Investor:

Sir, my next question is related to green hydrogen, what is the cost per kg you are targeting for green hydrogen.

Management:

Cost per kg I think there are many figures which are running around, I think people are targeting that we should have the dollar per kg in the next 3-4-5 years, we are not technology developers let me confess that. We are people who are going to implement and apply the technologies which are coming but in our NETRA this is the experiment which is going on which is somewhere between 2-3-4 dollars as of now it is coming, but as we go along I think more and more electrolysers and there is some breakthrough into those things, I think it should be much below that. So as of now I think if you want me to give me some exact figure, it will not possible. In fact, nobody knows how exactly it will go. And in our Indian context we should not be only talking about the dollar at the end we should be translating into rupees because that is what is going to decide for us more than anything else. Do you want to add, anything, Mr. Bhattacharya?

No, sir, you have generally added everything. As you have rightly said that it is a nascent technology, it is emerging. Even in USA the cost of generation of hydrogen is going 6+ $. They are trying to bring it below 3 $. If you ask our target, as CMD has already told, the dream target is below 2 and ultimately going to 1$. We in Netra are experimenting and he is rightly given you the numbers that it will be around 4$ as of now. The main issue is the electricity intensity and the electrolyser, so development of electrolyser as well as the electricity intensity reduction we are working in Netra and we are hopeful that we will come out with better solutions soon. Thank you.

Mr. Sumit Kishore, Axis Capital:

I am Sumit Kishore from Axis Capital, my compliments to team NTPC for starting this and you are one of the first ones to actually do that in the power sector. My first question is you mentioned in your opening remarks that energy security is taking precedence over energy transition right now. But could you speak about the longevity of thermal cash flows. Your target of 130 GW by 2032 entails that if your target for renewables is 60 you are still talking about thermal being somewhere around 70 odd GWs. So, we know that last 15 years India has seen about 5 to 5.5% CAGR of electricity supply growth. Let us assume that remains the same or we see a slightly better number. But the question is that at what point does the energy transition require NTPC and the country to step down the overall base of coal installed capacity. So, India has a target of 2070 in terms of you know Net Zero and so would you say that NTPC which has a fleet which started sometime in 1982-83, their 25-year PPAs, so

beyond the 25-year PPA does the PPA just get rolled over and when do we see NTPC's coal based capacity coming off. I want to make a curve for the next 40-50 years for NTPC's thermal capacity when do they start approaching zero.

Management:

Good, I think this is also many people are struggling to find a solution for this. But as of today I think you can take very kind of own facts and figures very comfortably, that even our Talcher plant which we are going to award, this month or next, that will complete at least 30 years if not more. My personal take and my suggestion to the Ministry always has been that we should not retire any of the 200 MW units and above. And we should try to make this flexible. By the way just for information of all of you a generator with less capacity utilization will be able to make more money than when he is making today with the higher utilization factor. I think this you have to keep in mind. Don't get surprised if there will be some plants which will be running only for 2-3 months, at the end the returns from those plants will be higher than today what they are making when they are operating round the year. And this is not only for us, I think this is already happening in the western part of the world anyway. So, in that case there is in every likelihood that our tariff structure what is today will not remain same. There may be opportunity cost for many, and as you rightly mentioned that our Singrauli and the other plants which have already completed now 40 years, and I mentioned to you that 100% PLF units so our O&M team has invested well in those plants and they are still in a position to operate at the best load capacity round the clock and otherwise. So, what we will have to take some kind of steps that we will have to make little more flexible, we may have to do further start and stop, and don't get surprised that we may have to resort to two-shifting in some of the plants. But then every tweaking, every change, there should be a commercial incentive to do that. So, what I am trying to convey to you very clearly that in a foreseeable future no plant is going to become redundant and this will in all probability will be earning higher returns than what they are doing today. The last year's power surge and the power kind of unavailability for some time in some parts of the country has really given this message and learning to most of the people who are managing this sector that what is required. These, we don't call the old assets, these are really kind of our very sturdy assets. And whatever it takes we as a company it is our responsibility as the leading power company that we will be able to operate this coal-based assets as per the requirement of the grid. The main emphasis from our side is how we can increase our renewable capacity without getting into a situation where for some part of the months or some part of the days the power is not available. So, there is a co-existence for the coal based, there is co-existence for renewables. If the utilization factor is less, I think this gentleman just asked about, the policy what we are working and we are thankful to the Ministry as I said. If during the day we can reduce to 55% it is fine, so the overall emission comes down, overall cost comes down, the transition also happens, the investment into renewable also comes and all things together.

Mr. Sumit Kishore, Axis Capital:

There is a second part to my question, which is related to what you just said. So, in terms of the flexibilization of the grid, right now share of renewables is 11-12% of the total power supply but you know if we get even close to 450 GW that the government is suggesting in 2030 the share of renewables in daily power generation will be more than 34-35%. So, at a point of time in a day it will be more than 60-65% so the technical minimum also laid down by CEA will not be enough.

Management:

What I told you just now some time back that we have to go for two-shifting so we may have to close down the coal-based plants in the morning and maybe restart in the evening.

Mr. Sumit Kishore, Axis Capital:

Is it technically possible?

Management:

Yes, it is possible.

Mr. Sumit Kishore – Axis Capital:

You can also comment on the ramp-up/ramp-down rates are in the, our understanding is about 1 to 1.5% per minute or so.

Management:

I just told you that these things will end up in making more money from these assets. See, even right now only NTPC is actually come to technical minimum that is 55%. Many of the state GENCOS they are not coming to 55% technical minimum. So even if all the GENCOS come down we will have another 20 to 30 GW that is there. Now CEA has already started a study, in fact we have done pilot at 6 of our plants with NTPC, where we can actually get down technical minimum from 55 to 40%, so that is the next step and as our CMD has said two-shifting is to a new concept, it is already done in west and it easily can be done. But I don't see any immediate possibility of that, the demand is very high we have generated more than 20% in the last 4 months compared to last year and on a daily basis we are generating more on a daily basis. So, the demand is very high. So, I don't think in the immediate future we will have to go to such extent.

Mr. Sumit Kishore, Axis Capital:

Thank you so much.

Management:

See it is not necessary to know that how the plane really works. Just you enjoy the benefit of the flight, and the rest you leave it to the kind of technical people and the commercial and in general the power companies. Don't worry on that side, there are people who have really devoted their lives towards these things and they will keep doing something which is needed.

Mr. Sumit Kishore, Axis Capital:

That is very reassuring, thank you.

Management:

Just to add you know the renewable power cannot, is it going to anti of conventional power, it is more going ahead it will be more of symbiotic relationship given the demand curve and other things there will be a lot of mix and match strategies to do that. So that will ensure that the growth curve, so of course, it will come with some amount of ramp-up/ramp-down, the

technicalities of that, some commercial aspects associated with that. But in an overall optimization some of the pluses and minuses will have to be absolved. Ultimately, we give a low value, value to the end term.

App logon ko pataa hai aeroplane also there is something called gas turbine and they take off, they land, they stop, they start, now somebody may be saying that is true for the gas turbine but not for coal based, this is what we have been telling till now. But maybe there is a time when we will have to start, we have already started looking at that, that how to really make kind of suitable towards that requirement. That may require some investment, that may require some kind of additional expenditure and that's the reason I said, if you are providing that kind of more than ancillary services, so there should be some incentive for it. And you people also should start looking at those companies which will be ready for those things.

Rohit Natarajan, Antique:

This is Rohit here. So, my first question is on the NTPC green energy, you were talking about the asset monetization part, so what stage are we in, is it going to be like a strategic partner in that or you will be a financial partner, what will be the role and how do you see that part, when do you expect that to materialize that asset monetization.

Management:

Yeah, this is as the part of the larger monetization strategy, and the process is already on. We have got some kind of expression of interest from 8-9 kind of companies and we have to complete this in this financial year anyway.

Rohit Natarajan, Antique:

Just to follow up on that, sir, the stake sale what percentage would it be.

Management:

I am not prescribing that anything, as of today this is not necessary that we have to go only for 5% or 10% or 15% or 20% anything. So, what we will have to evaluate that what brings more value to the Company and how we will be able to really grow. As we said we have growth plans for renewable so and this is the vehicle which is going to be utilized for growth plans. Even not only for today but we will have to see that what is going to strategic fit for the rapid expansion and the growth area. So, I think by the time we will be meeting next year there will many more and more developments should have happened. This financial year it has to happen.

Rohit Natarajan, Antique:

Sure Sir, my second question is more to do with the follow up of what you said in some comments on cost of storage for batteries which was probably 2-3 years before it was attractive but now seems to be much more attractive, that was a comment if I recollect. If you could touch on what is the RE generation cost plus for your battery storage in comparison to say let’s assume a pump hydro storage what is the peaking tariff that you see.

Management:

Again, I think this is what there is no definitive answer for that and that is the reason I refrain from making some numbers on this, okay. We all know that mostly the battery rates are in the

dollar per KW and dollar rupee exchange is fluctuating. As the demand is going up, like the solar modules, I think the prices whatever is coming down I am not sure whether they have really started moving upwards kind of things. There has been some kind of, all of you will be knowing that these critical minerals there is some kind of what I should say, some people have really grabbed those, how it will be turning out to be. And the pump hydro is something which is not for 10 years or 15 years I think the life hydro can be as high as 50-60-100 years, that kind of things, might be some renovation etc., will be required. So, you cannot really take the cost how you will evaluate it as 1 years, 2 years, 3 years. It is very, very long lasting for years and once it is constructed then it is very environment friendly, in the battery there will be disposal thing which will be required. Then the hydrogen there is a lot of work which is going on and if the hydrogen and the fuel sale, I think this is going to be really, I think if the cost comes down who knows that which will take off. But we should not be writing off the battery, no one can write off the battery that is quite clear. In fact, we will also be looking at, I was in Sydney and Melbourne about two weeks back along with Honourable Minister in the Ministers Conference, Sydney Gen Energy Forum. And there is a lot of emphasis on sourcing lithium and the other critical minerals. Maybe that we will also have to look at some kind of those smaller mines in future. So, I am not saying that battery is bad. The question is which one is going to win as of today. If I can give you another kind of analogy in 2008-2009-2010 everybody was trying to calculate that solar thermal is better or PV is better and PV also there was crystalline and thin film, I don't know how many of you people really know. And people were debating thin film is better, this crystalline, and I think in the next 3-4 years it was quite clear that crystalline is really overtook everybody else. Today nobody is talking about solar thermal and thin film.

Rohit Natarajan, Antique:

Thank you.

Management:

On the battery, sir, I would like to add one more thing that as CMD has rightly said that don't write off battery, battery will have different kind of application in any case. See in case of grid fluctuation you need instant supply to the grid. The best equipment to provide that is spinning the kinetic inertia, so that will come from some of the existing coal based power generators will be used as synchronized conductor like that. Next best will be the instant energy to the grid by battery. Before the hydro starts even, or another power gen comes, or somebody was talking of the ramping rate, those are the times when these will be coming. But the battery in terms of the MW hours may not be as big, right, and that will depend on, charging ratio etc.

As per CEA estimates I think there is a requirement of about 27 GW and 108 GW hours requirement of battery for this. So, 27 GW for 4 hours that's what by 2030 I think yeah.

Analyst/Investor:

Thank you for this elaborate presentation. Sir, I want to ask as a part of our power trading business, Indian energy exchanges and all which we are coming up, so how are we placed on this. What is the unit that we are, you know what rate are we trying to sell, are we planning something new in this field?

Management:

You are asking about the exchange?

Analyst/Investor:

We also have our power trading as a service, sir?

Management:

Yeah, we have the power trading company and they also trade on the exchange. So as far as the exchange is concerned this is governed by the regulations again from CERC. Incidentally let me add that we have picked up 5% equity into PXIL, we believe that one exchange is not sufficient, there should be competition in that also. And that maybe I think going forward there may be, okay, third exchange is also going to come. Important thing in that case is coupling is required for all the three exchanges which is not as of today. But this trading is bi-lateral also and through the exchange also, it is all kind of trading, there is a long-term contract, there is short term contract, there is exchange based and now I think there is even GDAM and TAM all kinds of, I think as we go forward there will be more and more market instruments will be available and our team is again gearing up to take care of those things. So, we will be I think the last what we are summarizing we will not only remain as a power generating company but we intend to become the integrated energy utility going forward. It all depends on when we will be able be achieve maybe in 4 years, 5 years, 6 years, but I think by 2030 that is what our target is that we should not be only in the power generation but there will be many more services which we should be having that. Those should go on increasing our margins and I think the bottom line otherwise there is no use of only getting for the sake of getting into those things.

Analyst/Investor:

Thank you.

Management:

Any other question?

Amit Bhinde, Morgan Stanley:

Sir, Amit here from Morgan Stanley. So, sir, I had a question on the release that Ministry of Power had put on overdue receivables. So, they had put out a release in the early June or last week of May that dues would not be escalated further and 48 EMIs would be allowed to repay that. We had over dues of around Rs.4,200 crore in March and now, I think it's around Rs.6,000 crore. So, what is the position for us? I mean, are we going to lose out much on the surcharge and how would it affect our cash flows going forward on those parts?

Management:

Ministry of Power has brought out that LPSC rules very recently, where some of the states, particularly J&K mainly, there were outstanding dues which basically will be paid in instalments, and you're right that there will be no further LPS on that amount. But only thing is that there is there is a clause in that also that if it defaults in making any payment in any month, then that LPSC will be applicable on the entire amount. Yes, theoretically it is right that we may not be earning LPSC on that amount. But practically, J&K we don't think that they will be able to ever make the payment unless otherwise, really there is some grant or something is available from the Government of India. So that way, right now that amount will be paid

instalment, but we are still waiting to see what happens to J&K. If they are able to make it is fine, otherwise LPSC will be applicable for even J&K also.

Amit Bhinde, Morgan Stanley:

Any broad breakup of which are the other larger states

Management:

As far as we are concerned, we just mentioned that we have been able to collect our hundred percent billed amount. But there is mainly this one consumer, which is J&K that is a huge state. The other one is a very-very small, I think, there are other two regions which are small, but if you consider our size and our overdue this is to a very small extent. Our billing is nowadays more than around Rs.12,000 crore per month and our overdue is, let us say what you said about Rs.4000-5000 crore. It changes every day, so let's not get into that. It changes on a day-to-day basis. So, which is almost 10 days equivalent. The loss in this case at most will be that we will be not getting the LPSC for this 48 months. This is the worst scenario.

Amit Bhinde, Morgan Stanley:

Sir, another think that I wanted to understand is you had earlier spoken about venturing into distribution business etc. So, any progress on that front; the distribution business?

Management:

Yeah, we are keenly observing that and as you all know that we had participated in Chandigarh and we had put a very serious bid, incidentally we came on 3rd number. The highest was CESC, the second was Torrent and then we, and it is not only that there were only three participants. So, there were I think, six or seven participants. So, we had put up a very serious bid. As soon as when the new things are coming, definitely we are gearing up for that.

Amit Bhinde, Morgan Stanley:

Right sir. Thank you, sir.

Analyst/Investor:

Sir, I have a follow-up question in general about the receivables. I believe the days receivable have been gradually rising. So, is there a change in policy or is there a possibility of bringing them down?

Management:

Is it?

Analyst/Investor:

Yeah. My understanding is that currently it's more than 60, the days receivables. Is it correct or not?

Management:

No, whose receivables? NTPC?

Analyst/Investor:

Yes.

Management:

I think we have to check it. As we told earlier that around Rs.5,000 crore roughly, that will be paid in instalment over a period. Primarily it is around Rs.4,000 of J&K. Otherwise there is no outstanding at all.

Analyst/Investor:

So, if you remove those Rs.5,000 crore, what will be the average days receivables? What is the credit?

Management:

Right now, it is only Rs. 1000 crores which is to be paid beyond due date.

Analyst/Investor:

So, what is the average credit period extended?

Management:

It is 45 days, that it has the regulation for which it is included that carrying cost is included in the tariffs. So, we get back that money.

See we must complement the Director (Commercial) and his team that despite of all this, whatever the pressures etc. which we are having, they have been able to collect 100% bills year after year. The only exception was 2020, because of the lockdown. We were trying for that year also, because in the last week of March we get substantial amount. Otherwise, I think it has been 15, 16 years. Every year there is 100% and now the people doesn't talk about competency of some other sector, not PSU's. You can guess then what is happening there.

Analyst/Investor:

Sir, thank you for that and it's very commendable if the figure is such a low figure in terms of defaults and all, and the receivable is within the norms. The second question I had was that my understanding is that most of these solar panel suppliers, there are more than 90%, are Chinese suppliers, and many of those companies are bankrupt or at least financially not stable. As we go forward and we want to expand our solar capacity, what is your sourcing strategy for solar panels?

Management:

I think this requires a lot of deliberations on that. But as a PSU, we have to comply with many of the guidelines which have been issued, but more or less, we will be relying on the domestically manufactured models going forward. But if you are saying that they have gone bankrupt, then there is every reason that a lot many manufacturers will come in India, and which is going on. The work in progress is huge. So, there is going to be a substantial capacity, which is being developed within India also. Again, if there is a huge demand and if there is a gap, then there is a perfect recipe for people to get into that and then try to really develop the capacity in those areas. But we are not going to get into manufacturing. As of today, we have taken that decision, if you are asking that question. Is this your last question?

Analyst/Investor:

Yes, sir.

Samay Swapnil, Sharekhan:

Sir, I am Samay Swapnil from Sharekhan. Just want a few numbers from your side. Firstly, what is the CAPEX in Q1 and the regulated equity base at the end of Q1?

Management:

Regulated I think, it was there in the presentation. Standalone NTPC regulatory equity is Rs.70,890 crore.

Mr. Samay Swapnil, Sharekhan:

Sir that was at the end of FY22, if I am not wrong. I want at the end of the Q1FY23.

Management:

We have not commissioned, actually.

Mr. Swapnil Samay, Sharekhan:

CAPEX incurred in Q1.

Management:

Our target is Rs.23,000 crore and we have done 33%.

Mr. Swapnil Samay, Sharekhan:

How much percent, sorry?

Management:

33%.

Mr. Swapnil Samay, Sharekhan:

So how much of commercial capacity addition will come in FY23 and out of that how much is our renewable energy capacity addition for FY23?

Management:

See this year NTPC as a whole, 5806 MW will be our capacity addition and out of this 1526 MW is solar, rest is coal.

Mr. Swapnil Samay, Sharekhan:

In Q1, what are the profits from the subsidiaries?

Management:

In Q1, the profits from subsidiaries is Rs.526.83 crore and share of profit of joint ventures is Rs.266.49 crore.

Mr. Swapnil Samay, Sharekhan:

What will be the last year's figure?

Management:

Last year's figure, it is Rs.395 crore and Rs.202 crore respectively.

Mr. Swapnil Samay, Sharekhan:

Could you give me the figure for the fuel cost under recoveries in Q1?

Management:

There is no fuel cost under recovery.

Mr. Swapnil Samay, Sharekhan:

Fixed cost under recovery?

Mr. Gurdeep Singh – Chairman and MD, NTPC:

Around Rs.500 crore. You will be knowing that how it works. The target availability is on annualized basis. So, if you have taken the outage in the first quarter, then there will be a under recovery in front and if you are able to make up in the rest of the year, then you are able to recover that. So, the under recovery, truly this figure should be on an annualized basis rather on a month-to-month basis. But we had one or two issues in the machines, in Sipat and Darlipalli. We had two major events where there has been some under recovery. Most of these under recovery had been due to those two past incidents in two units.

Mr. Swapnil Samay, Sharekhan:

Okay. So, you'll give these adjustments to come from the reported PAT figure to the adjusted PAT. So, could you give me those adjustments? In the previous con-call you gave the adjustments to come from the reported PAT figure to the adjusted PAT figure. So, what are those adjustments?

Management:

See, our reported profit is Rs.3,676 crore, our previous year sales figure is Rs. 384 crore, and after factoring the tax impact on the above adjustments, the adjusted profit is Rs. 3,359 crore.

Mr. Swapnil Samay, Sharekhan:

Thank you. That's it from my side.

Management:

I think we can close now. I thank all the investors and analysts who have been here and supporting NTPC for years together. I request you to join for the tea with us.

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