

"NHPC Limited Analyst Meet" June 1, 2018

Management: Mr. Balraj Joshi – Chairman and Managing Director,

NHPC Limited

Mr. M. K. Mittal – Director (Finance), NHPC Limited

Mr. Vijay Kumar – Executive Director (Finance),

NHPC Limited

Mr. H. S. Puri – General Manager (Finance), NHPC

Limited

Mr. R. P. Goyal – General Manager (Finance), NHPC

Limited

Moderator: Good evening Ladies & Gentlemen. I am privileged to introduce the dignitaries on the dais. Shri Balraj Joshi, Chairman and Managing Director, Shri M. K. Mittal, Director (Finance), Shri Vijay Kumar, Executive Director (Finance), Shri H. S. Puri, General Manager (Finance) and Shri. R. P. Goyal, General Manager (Finance).

At the outset I request, Chairman and Managing Director, NHPC to give his opening speech to the audience. Over to you sir.

Balraj Joshi: Thank you. Good evening ladies and gentlemen, it's once again a pleasure to see you all here in quite good numbers in this analyst meet which is an annual event for us. You would be glad to know that we have added 380 MW capacity during FY'18, out of which 330 MW comes from our project in J&K by the name of Kishanganga H.E. Project. You must have followed that this project was dedicated to nation by our Prime Minister on 19th of last month at Srinagar. And ever since it has started generating full 330 MW and in Tamil Nadu in the Dindigul/Theni district, we have commissioned 50 MW Solar Project. So, that makes it 380 MW which takes our total standalone capacity to 5,551 MW. Further,

we have two projects in Madhya Pradesh from a subsidiary company called NHDC, Narmada Hydroelectric Development Corporation, they are contributing 1,520 MW. Taking this, total installed capacity is now of 7,071 MW. Also you must have followed that NHPC is entering into the trading business and we already have a category 1 trading license from CERC and now we are evolving into this particular sphere and to my mind in coming times we are going to have good business in trading. As also, we are following the developmental models of the western countries where we know that a lot of interchange happens. It's not only from one supplier to another, who becomes a buyer at the same times for the cost effective arrangement and those days are not very far when in India we are going to have a similar scenario with number of additional exchanges. In hydro you know that, it's quick start and stop arrangement, which is a must for the grid stability whenever the frequency goes high or the voltage drops and this property is very well acclaimed by all the regulators and operators.

Well the Board has adopted the FY'18 Accounts Ending 31st of March in the meeting held on 28th of May and is already has been sent to the exchanges.

I'll just go through the brief highlights of the company's financial performance as well as the physical performance. During the last year we generated about 22,973 MU's of energy which is slightly lesser as compared to the previous year which was 23,275 MU's. As you know last year has been a rather dry year actually and we didn't get good rain as well as good snow also. But we are hopeful that the current monsoon is going to be good and we believe that whatever we have lost last year because of the monsoon and rain's deficiency, we are going to build up in coming times. Nevertheless, the generation has been lower to the extent of 1.3% and another reason for lower generation was shut down of two TLDP III & TLDP IV Project in West Bengal projects for two months. were shut down because of Gorkha Janmukti Morcha strike. This generally doesn't happen that the running power plant is supposed to be shut, but this unfortunately was the case in West Bengal and we made all efforts with the State Government and the Central Government, but finally nothing could be done. So, two months' generation lost cost us about 400 MU's. So, if you see, if you add 400 MU's, probably we'd get better than last year. Which is also shown in our Q4 results as our Mr. Puri would be then taking you through the entire presentation. And our plant efficiency has improved which is visible from the PAF which is 85.32% against the corresponding 83.41% last year. Now PAF as you know is the measure of how you upkeep your station; how you maintain your stations and also is dependent on the water also to some extent. But nevertheless we saw that the force outages are kept to a minimum and this has shown in our financial results also, where you'll find that the operating expenses have actually come down. So this was meticulously done by us in the sense that we chose a philosophy that rather than, you know, taking out a part and repairing and putting it in back, that leads to a larger shut down we have kept spare parts with us. We just remove the defected one and replace with a new one immediately. So there is no loss of generation during that particular period and in the meantime we have good time to repair those particular parts. A very strict regime has been put for the maintenance that's why this PAF has improved. As regards the sales, we have achieved Rs. 6,932 crores during FY'18 as against Rs. 7,192 crores during last year predominantly because of the TLDP III & TLDP IV Project which is about 3.61% lower and profit has been Rs. 2,765 crores viz-a-vi Rs. 2,803 crores of the corresponding period and is marginally down by 1.3% due to low generation I would say. So, these are the brief highlights and for detailed presentation, where you can get to know all the figures and rest of the figures and discuss them, I would now request Mr. Puri to take you through the presentation.

Moderator: Thank you sir for your valuable information. I now request Shri. H. S. Puri, General Manager (Finance) to give the Investor Presentation.

H. S. Puri: Good evening everybody. Respected Chairman of NHPC, Director (Finance), NHPC, and all esteemed analysts and investors in this program. Now I will take you all through the key features and our future expansion plan through this presentation. Now, first of all we are starting with the background of the company which was incorporated in 1975 with the authorized share capital of Rs. 200 crores. Present authorized capital is Rs. 15,000 crores and paid up capital as on 31st March is Rs. 10,259 crores. Regarding our contribution in the hydro sector, it is 15% of the installed hydro-electric capacity in India. We have 22 power stations under operation and 2 power stations with subsidiary (NHDC) and total operational projects is 24 having installed capacity of 7,071 MW. There are 3 Project under construction including joint venture and their

capacity is 3,800 MW. Project which are awaiting clearances are: Stand Alone basis- 5 numbers of 4995 MW. Joint Venture 3 numbers, 1,934 MW, Subsidiary 1 number, 66 MW. Project under pipeline are 3 numbers, 1,160 MW. Now our standalone generation, you can just see from the graphical presentation that it has 16,689 MU's in FY 2008-09 and rose up to 22,973 MU's in financial year 2017-18. It is on constant rising with the commissioning of new and new projects in the course of time. Regarding share of NHPC in generation, on consolidated basis, in Hydro it is 19.22% which is depicted in this slide. Coming to the financial highlights, our total income is Rs. 8,425 crores in this financial year as compared to Rs. 8,729 in the last financial year. Regarding total expenses, it is Rs. 5,619 crores in this financial year as compared to Rs. 5,968 crores in the previous financial year. PBT is Rs. 3,526 crores in this financial year as compared to Rs. 3,475 crores in the last financial year. So, profit after other comprehensive income is Rs. 2,764.53 crores in this financial year as compared to Rs. 2,803.26 crores in the previous financial year. Regarding expenditure, we have made a graphical presentation of our expenditure percentage. Employees cost is coming around 28%, other expenses 18%, financing charges 16%, generation expenses 13% & depreciation 25%. Now as you see the revenue versus profit versus dividend. You can see that in this current financial year we have declared a total dividend including interim dividend of 14% against our profit of Rs. 2,765 crores and sale of Rs. 8,425 crores. Now this is our shareholder fund that is our net worth of Rs. 28,328 crores. Loan Fund – Long Term Rs. 16,728 crores, Deferred Tax Liability Rs. 1,077 crores and coming to the asset side, our PPE is property, plant and equipment (incl. Investment Property) is Rs. 19,071 crores, CWIP, that is related to our construction projects Rs. 18,814 crores, Other Intangible Assets Rs. 923 crores, Non-Current Financial Assets Rs. 4,649 crores, Regulatory Assets is Rs. 3,600 crores, Trade Receivables is the debtors which are the amount due for supply of energy to our beneficiary states is Rs. 1,097 crores, and Total Assets comprises Rs. 53,475 crores. Now, in this slide we have analyzed the debtor position. Our debtors more than 60 days are Rs. 715.74 crores, and mainly it is from PDD, J&K. & BSES Yamuna which has already submitted the liquidation of their charges, liquidation of their dues plan to NHPC. And they're also clearing their dues promptly. Regarding the collection, collection during the financial year is Rs. 7,565 crores, and debtor turnover, there is quite improvement in this financial year, and that is 65 days. Coming to the incentives which we get in our tariff besides normal tariff that comprises of secondary energy, incentive

and deviation charges. This year it has been Rs. 642.76 crores against Rs. 597.41 crores in the previous year. Now there, we have indicated the power station which have achieved the highest PAF incentive which is UR-II. Power station with the highest deviation charges is Salal. Power station giving best generation is Loktak. Power station with highest PBT is Dulhasti. NHPC profit per MW is Rs. 53 lacs and it was Rs. 54 lacs last year. NHPC profit per employee is Rs. 38 lacs & in preceding year it was Rs. 35 lacs. Now, in P&L side, profit and loss side, total income is Rs. 8,424 crores. EBITDA Rs. 5,516 crores and EBITDA Margin is 66% and profit Rs. 2765 crores. Now on our balance sheet, critical figures. Main figures are share capital Rs. 10,259 crores, Net Worth Rs. 28,328 crores, Long Term Debt Rs. 16,728 crores, Cash and Bank Balance Rs. 1,472 crores, Gross Block Rs. 34,262 crores & CWIP Rs. 18,814 crores.

Now dividend payout, we are depicting here that is against profit of Rs. 2,765 crores, Rs. 1,436 crores will be the dividend payout & that shall be the 52% our Profit. As per the DIPAM Guidelines, we have to give minimum 30% of the PAT or 5% of the Net Worth, whichever is higher. So, we are meeting that criteria. Regarding Shareholding Pattern. Government of India shareholding in the company is 73.96%, individual/HUF have 5.6%, DII 15.91%, FII 4.30% and Others 0.23%. Regarding other key numbers of the NHPC, Profit as I already told in the preceding slides this is Rs. 2,764.53 crores, Net Worth Rs. 28,328 crores, Number of Equity Shares 1,025.93 crores, EPS Rs. 2.69, Earning Yield 10.09%, Dividend Per Share Rs. 1.40, Dividend Yield 5.25%, Book Value per share Rs. 27.61, PB ratio 0.97, PE ratio 9.91, Return on Net Worth 9.76%, Market Capitalization Rs. 27,341 crores, Debt Equity Ratio is 0.65. Now coming to our subsidiary company that is NHDC, share holding pattern is 51% with NHPC & 49% with government of Madhya Pradesh. Installed capacity of 2 power station in this subsidiary is 1,520 MW. Design energy is 2,120.17 MU's. Generation is 1,325.25 MU's in this financial year and in previous financial year it was 4,748.5 MU's.

PAF 90.64% in financial year 2017-18 & in financial year 2016-17 it was 93.64 %, Sale Revenue in FY'18 is Rs. 785 crores against Rs. 1,225 crores in the previous financial year. Profit is Rs. 554 crores against Rs. 929 crores in the previous financial year.

Now we are moving to slide on progressive physical and financial schedule. Our hydro installed capacity in 2017-18 is 5,451 MW & in 2020-21 we are expecting it to be 6,251 MW and there after 8,251 MW. Now our Regulated Equity, the equity which has been put into our O&M power station, as you are aware that in all the new projects & all the projects of hydro, we are deploying 30% equity & 70% Debt, so in financial 2017-18 we have put in Rs. 11,250 crores & in 2018-19 this will rise to Rs. 12,976 crores & in 2020-21 it should rise to Rs. 15,496 crores & after Subansiri it will rise up to Rs. 21,345 crores.

Now coming to our CAPEX slide, up to 2017-18 we have given the actual CAPEX & in 2018-19 we are proposing a CAPEX of Rs. 2,740 crores.

Now the major highlights, which have been referred by our CMD also, all units of Kishanganga project has been put under commercial operation with effect from 18/5/2018 & 24/5/2018. Successful commissioning of solar power project of 50 MW on 23rd March, 2018 in Tamil-Naidu, improvement in average collection of receivables from 78 days to 65 days & collection efficiency of 83% to 87% on year to year basis, decrease in finance cost from Rs. 1,073 crores during 2016-2017 to Rs. 922 crores during financial year 2017-2018. This has been made possible mainly due to NHPC Management took the initiative & swap their loans of more than Rs. 3,000 crores & interest saving is around Rs. 59 crores & another Rs. 92 crores is on account of repayment of loans.

Highest ever dividend of Rs. 629 crores received from NHDC during FY'18. MOU for the year 2017-2018 with MOP was signed on 20/6/2017. License for trading power granted by CERC on 23/4/2018.

The most important point is international rating of the company upgraded by M/s Moody to Baa2 stable from Baa 3 positive, that is very good achievement. Now coming to the other business achievement of the NHPC. Award of work & signing of PPA is under progress in r/o 32 MW Solar Power project in Jalaun, UP & 63.491 Ha land got transferred from UPNEDA & Mutation of the land in favour of BSUL finalized on 4/12/2017.

On Wind Power front, we are working on 8 MW wind power project in Palakkad district of Kerala. Order issued by KSEB on 10/11/2017 to purchase power from 8 MW wind project @ Rs. 4.53 per unit or tariff fix by KSERC, whichever is lower. Allotment of land for this particular

project by State Government is under process & signing of PPA with KSEB is awaited.

Now these are the projects which has been commissioned by NHPC in the past & we have indicated the tariff against each project. Our weighted average rate of tariff comes to Rs. 3.38 per unit. Wind power project of 50 MW installed by NHPC in Jaisalmer has a tariff of Rs. 3.69 per unit & Solar power in Tamil-Naidu has tariff of Rs. 4.41 per unit. Operational projects with our subsidiarity company are NHDC Indra Sagar 1000 MW, Design Energy 1,442.70 MU's, tariff of Rs. 4.26 per unit & Omkareshwar which has installed capacity of 520 MW, Design Energy 677.47 MU's & a tarrif of Rs. 6.03 per unit.

Now NHPC project which are under construction: Subansiri Lower Project of 2,000 MW with design energy of 7,421 MU's, anticipated project cost of Rs. 19,496 crores. The project, has incurred expenditure as on 31.03.2018 of Rs. 9,979 crores. Now Parbiti II which has an installed capacity of 800 MW which is run of river with small pondage project has anticipated cost of Rs. 8,398.75 crores.

Project under construction joint venture:

Pakal Dul Project which is being executed by NHPC as a Joint venture between NHPC, JKSPDC & PTC, has installed capacity of 1,000 MW & approved cost is Rs. 8,112 crores & bidding is under process & one package has been awarded.

Now NHPC standalone project under clearances:

Kotli Bhel 1A Project with installed capacity 195 MW & cost at october-17 level Rs. 2,625 crores & we are awaiting the decision of the honorable Supreme Court of India. Teesta - IV project with installed capacity 520 MW, Design Energy 2,373 MU's & cost of Rs. 5,694 crores. All statutory clearances have been received except forest clearance stage II. Draft PIB memo for implementation of project submitted on 17/11/2017.

Dibang Project, installed capacity 2,880 MW, Design Energy 11,223 MU's & cost Rs. 25,803 crores. Concurrence to project, Environment clearance & Forest clearance available. PIB submitted to MOP on 30/3/2018.

Tawang I 600 MW, Design Energy 2,963 MU's & cost Rs. 6,173 crores. All statutory clearances have been received except forest clearance & PIB for pre activities circulated by MOP on 16/3/2017.

Tawang II 800 MW, Design Energy 3,622 MU's & cost Rs. 7,588 crores. All statutory clearances have been received except forest clearance stage-II. Approval of pre investment activities by MOP accorded on 28/7/2016.

JV Projects under clearances:

Kiru Project which we are executing with our joint venture partner Chenab Valley Power Project Ltd that is 624 MW, Design Energy 2,272 MU's & cost Rs. 4,605 crores. Draft PIB notes seeking recommendation for implementation of Kiru project submitted to MOP on 10/08/2017. PIB memo circulated by MOP on 01.02.2018.

Kwar Project that is 540 MW, Design Energy 1,975 MU's & cost Rs. 4,231 crores. Here also draft PIB note seeking recommendation for implementation of Kwar project submitted to MOP on 21/12/2017 & PIB memo circulated by MOP on 7/3/2018.

Now foreign assignment under JV scheme:

Chamkharchu Project in Bhutan 770 MW, Design Energy 3,344 MU's & cost Rs. 6,187 crores. Here SHA & AOA shall be signed after finalization of concession agreement with RGOB & CCEA approval of Government of India.

Subsidiary Project under clearance:

Loktak D/S, Manipur 66 MW, Design Energy 333.76 MU's & cost Rs. 1,344 crores. Now JVC has been formed & board started functioning. Here draft PIB memos submitted to MOP on 9/4/2018

NHPC projects which are in the pipeline are: Bursar project, J&K 800 MW, Dhauliganga Intermediate, Uttarakhand 210 MW & Gauriganga - IIIA, Uttarakhand 150 MW. In r/o of Bursar Project, DPR submitted to CEA on 6/1/2017 & same is under examination at CEA & CWC. Regarding Gauriganga IIIA, DPR submitted to CEA on 30/3/2018.

Regarding our new business expansion for which our CMD sir has also told you that we have taken a trading license from CERC for Category 1 Trader granted on 23/4/2018. Trader membership of Indian Energy Exchange "IEX" obtain on 17/5/2018. Registration on Discovery of

efficient Electricity Price portal for short term & medium term trading of power activated from 16/5/2018. NHPC target around 9,000 MU's for trading in financial year 18-19 & 19-20. It is approximately if we take the margin of 4 paisa per unit, it should generate around Rs. 36 crores. So that's all I have to say Thank You.

Moderator: The house is now open for the question answer session. Would request you to put your questions to the management one by one.

Analyst:

On Kishanganga what is the final cost?

M K Mittal:

Kishanganga completion cost will be around Rs. 6,000 crores approx. & considering 30% equity it will be Rs. 1,800 crores roughly on full completion.

Analyst:

Sir, in last quarter we saw that the Parbati- II commissioning were targeting in FY 19 & now we are looking at FY 21, so can you help us to understand the reasons for that?

Balraj Joshi:

The commissioning of Parbati - II is going to happen only when the tunnel is going to get constructed completely. So probably last time also I said that the power house is complete & 2 units have been already synchronized also. For full capacity, plant of all these 4 units would require certain kind of discharge which is possible only through the tunnel. Now this tunnel has got stuck in between, a very bad state in which our tunnel boring machine got stuck. I think its a common knowledge as of now as so many years happening. We have tried almost all the tricks of the trade here to see that how fast we can get through this tunnel. So far we have met mix success, I should say its not that we are completely stuck, its moving but very slowly. Now we are moving over another idea. Whether we should continue with the machine or shall we

take it out & see that whether we can do with drill & blast & how fast we can do that & each time when we carry out this exercise we find that the length of the tunnel being so long we tend to stick to the TBM & in TBM we have this problem whenever this some loose data comes there is very less space around the machine. So the treatment takes lot of time, we are not able to complete the tunnel so far & around 3.2 kms still remaining, as you know that the total length of the tunnel is about 30 kms out of that 27kms is already over so only these 3 k.m. stretch is left but nevertheless unless this is completed the water will not be travelling from the dam to the power house. Fortunately, in this scheme we have got 3 nala's on the way which we have tapped to run the machine. I think 2 units that can be commissioned with this nala's only & regarding the full commissioning of the project, it is expected by 2021. It should be possible to do with the same pace with which we are moving, so that's about Parbati.

So in this current year we are hopeful that 2 units will be started.

Analyst: So then, sir, what would be the gross generation because then you know the water availability would be limited and hence, would we recover the entire fixed cost or what? Can you explain...

Balraj Joshi: Yes, that certainly is a point of concern. However, people are looking at a shortage of coal, so they want to have some kind of backup. So, I don't think for Parbati also, by the time Parbati comes up, it's a dynamic scenario. It is going to change. Maybe manufacturing sector starts picking up very fast. We don't know. But electricity is certainly going to remain the one. So, Kishanganga has given us a hope that it will not be difficult for us to sell Parbati Power also.

Analyst: Sir, but in Kishanganga we got a subordinate debt which helped us to reduce the cost of power. Do we expect anything similar on this project as well?

Balraj Joshi: No, we are not expecting any subordinate debt for Parbati. We will do it from our own resources only. The point which I am trying to make here is, if you see the exchange rate here, last month it has gone up to Rs. 9, means demand is there. So, we shall be able to sell the power of Parbati also. We are hopeful, I am sure of the time of the day tariff and

you know, that ancillary services are going to be valued for the quality. And we are going to get customers for Parbati power also.

M. K. Mittal: Just to supplement that, you see, when we are going to commission 2 units, so we will be capitalizing the cost for 2 units only. So tariff will be worked out for the 2 units which may be in the range of around 5 rupees per unit and we will be getting a return on equity in that case.

Analyst: Hi Sir, just wanted to check, NHPC have particularly weak operating and therefore NHDC, the subsidiary, rather particularly weak both in operational and reflecting in the financial front as well. Is it structural and you know, the loss in generation or was there specific instances, should we expect things to normalize? How should we think of that performance?

M. K. Mittal: You are talking about NHDC?

Analyst: Yes.

M. K. Mittal: The generation has come down from 4,700 MU's to 1,300 MU's because of the lower monsoon last year. The rainfall was very less in the state of MP and because of which the generation has come down drastically. It's a one of the exception 1% in 100 years. 1 year in 100 years' kind of thing. It's not a normal phenomenon and this year hopefully it should be back to normal.

Analyst: Sir, from the investor point of view many years ago IPO was for 36 rupees. Sir, then you had a buyback at 32 rupees. Sir, now it is 26 rupees. Sir, but after today and your presentations, I am going to buy shares because I have got great faith in the company. You have given dividend also. That's why I feel it's the right time to buy shares.

Balraj Joshi: Yeah. Thank you very much. It is a very good analysis, I would say. Very forward thinking analysis. And I constantly believe that

we are also, kind of what we call "Lambi race ke ghode hai humlog". So, we are certainly going to deliver in the future.

Analyst: Sir! I just wanted to check on your updates on Subansiri NGT hearings. Can you just elaborate? Because, April '18 there was an article that May 8th was a hearing on NGT on Subansiri. Can you update?

Balraj Joshi: So you want update on Subansiri NGT case? That's what I understand. On May 8 hearing was actually held and this hearing was basically to decide whether this project is to be appraised through a committee as per NGT's order itself or not. Whether the committee is going to continue or not? The NGT as you remember, earlier had given a verdict that this entire gamut be again seen by other committee comprising of people, 1 person from North East and 2 other domain expert and they should look at all the reports because judges felt that there are already so many reports generated and the project has been revised upraised over and over again. So they said ok we do understand that but let the committee of the experts do it and this committee will present its report to the EAC which is the Expert Appraisal Committee of MOEF. At that point in time, NHPC had suggested that why then go through a committee, let us put all the report to the EAC because ultimately this committee is going to put there finding to EAC, so why not put it straight away there because we have no. of expert's board in EAC, I think 15 are there from various fields but the judgement has already pronounced. Committee should have a look once more. So this was particular case which was heard on May 8th and now the Honorable court has reserved the judgment we are just waiting for that and whatever happens whether the committee is allowed to continue or a new committee is formed. One thing is certain that from NGT's point of view the project had been cleared in the sense that they have not stopped the project or put the operations constrains, it not like that. It is like let this issue be seen holistically once again and from my side it is disposed of. So we were quite hopeful that May 8 something might come up and since they have reserved the judgment so nothing more to say now.

Analyst: But have they announced the new hearing date or?

Balraj Joshi: They have not announced. They have reserved the judgement. We are trying to request them, not influence. Kindly do it fast as a huge public money is already blocked there. So I hope they will see into this.

Analyst: What is your Expectation? When should the Judgment come or anything of that sort.?

Balraj Joshi: We have presented all the facts for them, we have also said that whatever committee so far have been constituted and the measures they have suggested to issues and feeling of the locals and downstream people, we have carefully taken care of. Well from our side of view, everything is possible and I hope that the so much of public money is involved, so Government of India and you know people at large are also waiting that NGT must decide something.

Analyst: 2nd Question is regarding Lancos Project in North East. You have given an Expression of Interest but Have you any thoughts on further progress or?

Balraj Joshi: No. We have expressed our interest. let see how the things unfold.

Analyst: How long does the process take?

Balraj Joshi: I think the entire process will take 180 Days.

Analyst: Thanks a lot...

Analyst: Sir for Better PE Ratio. for Better Profit earnings ratio, two things we have to take care of, 1st is cost over wealth that you have very well mentioned and optimum efficiency of the plants there you are silent. So I hope that you have taken care to ensure the optimum efficiency of the plants to ensure the better PE ratio.

Balraj Joshi: See so far efficiency is concerned you can see from the figure in the presentation that we have actually generated about 5% more than the design energy and our PAF has also have increased to 85%. So as far the operational efficiency is concerned, I remind you that CERC norms says for 77% approx. and we are having 85%. So we are pretty good & actually did it efficiently and we have taken steps now to reduce the operational cost as well. Coming to the technical part of the increasing efficiency of this plants I would site example of Salal Project in J&K where we have changed all the runners of the turbine and to our surprise and to our happiness also we have been able to increase the productivity of that plant by about 10MW overall. So we are looking for values in another projects also so where ever some technological advances which are not many in Hydro Sector .SO it's only a question of streamlining your water conductor parts and getting better metallurgy on that but whatever new technology are coming we are adapting that and I hope that we should be able to improve it.

Analyst: You have mentioned renewable energy in Tamil Nadu and others. The target of Government of India is 175GW till 2022 so what's your outcome for NHPC this financial year?

Balraj Joshi: You see When this targets were given by Govt. of India, that time all the PSUs were called and there were meetings and who is to do what and in each of the meetings it came out that NHPC being a core Hydro company should continue to follow Hydro Power only. So we were doing that by now. That point of time. I think people were not sure whether this gigantic targets are certainly going to be of reality. But now I think they will surpass the target much ahead of schedule. We are also trying to enter into that sphere. In future you will see that we are entering the RE business in a big way.

Analyst: last question is about the Ind-AS accounting system? Is this applicable since finance year 2018-19? How do you foresee the credit losses out of this Ind-AS?

Balraj Joshi: M K Mittal Sir will explain that, but I will say that we are not very cash rich. So if you say that, Government going to catch us first.

M. K. Mittal: I will answer two things. Ist NHPC is a hydro company and we are generating power with water and if monsoon is good, if the snowfall is good, the generation is very high like in the last quarter of the fiscal year we had almost 1,100 Million units less generation because of the lower snowfall and lower rainfall in the winter. Had we a normal year as we are having earlier, our profits would have been higher than Rs. 3,000 crores. So it's depended on the natural factors also that our profitability will improve and as the CMD sir has mentioned on efficiency side we have done much better than we should have done otherwise. 2nd on Ind-AS, it is applicable to us from fiscal year 16-17. In Fy16-17, we prepared our Accounts based on INS-AS and whatever impact was to be there that was taken care of but I am happy to inform that there was no impact on the financial of the NHPC because of the adoption of the Ind-AS in the last fiscal year, Thank you.

Analyst: Hello sir, in presentation you said that the cost of generation is 13% of total expenses.

M. K. Mittal: Generation expense are the 13% of the total expenses.

Analyst: So 13% is equal to how much per unit that I want to know actually.

M. K. Mittal: You see 13 % Generation expenses are basically the water charges incurred in the state of J&K.

Analyst: per unit how much it cost?

M. K. Mittal: Per unit. Rs. 600 crores if we divide by 20,000 Million units so it may be roughly 30 paisa.

Analyst: But what I feel personally that generation cost is only 13% i.e. 30 paise per unit and rest of the things are increasing to the greater extent. so how you can control how you can reduce that?

M. K. Mittal: You said Generation expenses in normal in our case. In our case in Hydro power station the main expenses which are attributable in the generation of the power is the capital cost which is the equity capital-return on equity, the interest on loans, Depreciation, O&M expenses and interest on working capital. There are five elements to the cost. This water charges is levied in the state of J&K which is already challenged as we are already allowing them free power.

So, that way generation expenses are as such not there in NHPC, as we are not using any fuel we are only using water so generation expenses are only limited to water chargers.

Analyst: Other expenses are more?

M. K. Mittal: Other expenses are more because we have O&M expenses. O&M expenses consist of employees cost, repair and maintenance and office expenses, so these are the O&M expenses.

Analyst: Now you have your market share in hydro of 15% means others are also doing the same business. So it looks like that total hydro business of total requirement of India is only 10% is it correct? Your contribution to total generation is or even if you do trading it doesn't cross than more 3%?

Balraj Joshi: It doesn't. if you see the absolute figure in the installed capacity also, install capacity of the country is 3lakh 44 thousand MW and out of that Hydro shares only 45,000 MW approx. and out of that NHPC's share standalone is 5550MW.

Analyst: So do you compare with SJVNL?

M. K. Mittal: SJVNL there are almost 2000MW.

Balraj Joshi: They have 2 hydro plants only under operation, 1 is Nathpa Jhakri Dam 1,500MW and other is Rampur hydro project which is around 400 MW. Basically, geographical spread of NHPC is much more and this is one point I want to say here that you know when we talk about integration of country I personally believe that hydro projects are vehicle for integration of the country and some kind of financial leverage has to be given to this aspect of hydro power.

Analyst: So, importance is to be given to hydro, what is the status of hydro. When it will be called as renewable energy?

Balraj Joshi: Actually you know that Ministry is working very seriously for a new hydro policy and it will be out anytime soon. And in that one of the point is that Hydro should be positioned as renewable energy.

Analyst: My last question is what is full-form of PAF?

Balraj Joshi: its Plant Availability Factor.

Analyst: Hello sir, we are in 2018 and CERC has still not approved the 2014-19 Tariff right? So you are putting out the revenue number on estimate. is that my correct understanding?

M. K. Mittal: No it's not a correct understanding. You see in 5 power stations they have announced provisional tariff because our revised cost estimate is under approval of the Cabinet Committee of Economic Affairs. So CERC has asked us, get the approval first then they will consider that revised cost as the actual cost for calculation of the final tariff. So pending that approval, they have allowed the provisional tariff for 5 power stations and for 14 Power Stations tariff order have been received.

Analyst: So, related question. Is all your power projects get 15.5% return on the equity? Is that correct?

M. K. Mittal: For poundage Power stations we get 16.5% and for ROR Power Stations we get 15.5%.

Analyst: So there is another question I have. Is there any plan to implement peaking power tariff and can you benefit from it in future?

Balraj Joshi: I think we have said this; we have given an inputs also. The peaking power and the time of day tariff is going to become reality anytime soon and at that time the hydro is going to really show its worth. Its going to happen.

Analyst: How far the progress has been made?

Balraj Joshi: Necessity is the mother of invention. You know the moment RE come in a big way in the system this is going to become reality and if we assume and if we believe they are going to achieve the target of 175GW by 2022, by that time it must happen otherwise the system can't sustain.

Analyst: Another question I had that you mentioned that ministry has taken a decision that you should focus on hydro power so can we assume that you are focused on.

Balraj Joshi: No, let me clarify. I didn't said that Ministry had taken this decision. I said when this RE targets was announced, at that time we also participated and in the meeting said you are a hydro company, so do hydro because that time people were taking that this is a huge gigantic kind of target which is not achievable. So why mix all the companies here.

Now since it looks to be reality. Ministry has not stopped us, it said ok you can go ahead and we are trying to go ahead now.

Analyst: So that was my question that could you pursue solar project which can be complete much faster?

Balraj Joshi: Yes we are. We are going ahead with that.

Analyst: In order to expand capacity and the capital cost per MW has come down. The tariff has also come down drastically. So would you pursue them at much aggressive rate now?

Balraj Joshi: We are certainly pursuing it and let me also tell you one more thing that since we have reservoirs, large reservoirs with us we are also having the idea of floating solar and in floating solar NTPC has already put a plant in Kerala. So taking a clue from that, our honorable Minister of Power had also asked us why don't you study this particular aspect in your reservoirs. So we have actually carried out a study and one of our plants in Madhya Pradesh its NHDC plant Omkareshwar that has been decide for candidate for floating solar and the DPR is also ready now. All those material has been worked out and you will soon hear much larger solar floating solar actually on that reservoirs.

Analyst: And would you be interested in thermal power projects and that is on back burn now?

Balraj Joshi: In the 19th EPS, it has been decided no new thermal would be put up.

Analyst: Sorry didn't understand.

Balraj Joshi: 19th EPS Electricity Power Survey Report says that no new thermal power should be build, now. Which are being built, would be completed by 2020-22. So now, no new thermal capacity is to going be added. So there is no point in entering the thermal sphere. We were actually looking into a project called Pirpainti Project in Bihar but now, we have stopped. we are not going for thermal power.

Analyst: Sir last I want to give a suggestion, that world over you know the power utility and power generation companies are considered by investors as infrastructure sector. An infrastructure sector is supposed to give a creditable and inflation adjusted returns over the long term. So since you are a hydro power company my request is that you... always try to give steady and increasing dividends to your shareholders, the benefits to your company would be that you will attract long term pension funds, Insurance company, and pensioner's individual investor who will rely on your company for their pension income and I am one of them and I am hoping that you know that I want to earn my pensions from the dividend from the NHPC. So you know predicable the suitable dividends, you are cash rich company. When I look at your balance sheet, your capital work in progress is same as your debt which means that your operational progress are debt free since you don't have much expansions fuel etc. despite the weather condition earnings are pretty predictable than leverage your operational projects as well as per the balancing act in cash flow be done by your short term debt and you should try to offer predicable and increasing levels of dividends that will have the positive impact on the share price and will help everybody.

Analyst: Hi few questions, you said Parbati will be capitalized, so that will be total project cost that will be capitalized? What will be regulatory equity addition?

Balraj Joshi: You see, the total completion estimated cost of the entire power project is Rs. 8,400 crores and till now we have spent Rs. 6,700 crores and we will work out that what will be the cost of two units which we are going to commission. We don't know exactly right now but on pro data basis we will work it out and that will be added to our regulatory. 30% will be added to the regulatory equity.

Analyst: Will it be half of the total project?

M. K. Mittal: Not really, because Rs. 6,700 crores is the cost that we have spent so far out of estimated project cost of Rs. 8400 crores & if we complete two units then it should be around Rs. 4,000 crores. So roughly Rs. 4,000 crores you can take into account.

Analyst: Similar thing we had for Parbati III. Parbati III had to be closed because the water issue. So not the same thing apply in Parbati II case because the same water flowing was in Parbati III, I think because of which you had to stop revenue recovery later on.

Balraj Joshi: Parbati III was supposed to get water from Parbati II Project as parbati II was not complete. So water was not available but for Parbati II there is no issue.

Analyst: Parbati III unit will be commenced after the 2 units starts?

Balraj Joshi: But as far as commissioning is concerned Parbati III is already commissioned.

Analyst: Hope I am not wrong but unit IV of Parbati III you are not recognizing?

M. K. Mittal: From the 4th unit there was not additional revenue because there was no additional water available. So whatever water was available we were generating the same with the three units and along with 4th unit also the revenue generation remains the same because of the lower water available for the 4th unit. Once the two units of the Parbati II will be

commissioned, water will be added to Parbati III and the generation & revenue Parbati III will also increase.

Analyst: On the CAPEX front this year?

M. K. Mittal: CAPEX we have projected almost Rs. 500 crores for Parbati II and Rs. 200 crores for Kishanganga. Few works are left at Kishanganga. Rs. 325 crores we have provided for Chenab Vally Project and we have provided Rs. 400 crores for Dibang Project and Rs. 100 crores for Teesta IV. These are the main investment plan.

Analyst: Dibang and Teesta are the new projects?

M. K. Mittal: For Dibang, we are waiting for PIB clearance and for Teesta IV we are already in tendering stage and once the PIB is cleared for us, I think construction should start this year.

Analyst: Sir last question, we were about to take some repair works for plants after 35 years. I think repair work have to be taken. So what's the status there?

Balraj Joshi: 35 years is the economic life of the project. In Baira Siul in Himachal Pradesh of 180 MW, the tenders are already awarded, 1-2 packages are remaining & will be worked very soon. We are working on the idea that units keep running while we work on the other two units so it will not be complete loss but about 6 months' time the entire plant has to be shutdown. We are trying to do in such a manner that the during 6 months, the lean period, we don't lose much of generation.

Analyst: So the Loktak same thing will be applied about the 6-month?

Balraj Joshi: Approximately 6 months.

M. K. Mittal: Just to add that, approx. Rs. 140 crores is the CAPEX of Baira Siul renovation & modernization during FY'19.

Analyst: There are 5 projects which are pending for CAPEX cost approval. Can you identify which space when we could expect recovery because the revenue was being not recognized?

M. K. Mittal: Out of that 5 projects, 2 already cleared are also to be considered by the Cabinet Committee on the economic approvals and one more is also there in the PIB, so 3 are there and the remaining 2 are with Ministry under consideration and we hope in the next 6 months all the 5 should get cleared

Analyst: So the 3 are in PIB stage & 2 in MOP stage?

M. K. Mittal: 2 are at CCEA stage, one in PIB & two are in Ministry.

Analyst: In financial status you have mentioned other expenses Rs. 989 crores, so what the components for other expenses?

M. K. Mittal: You see other expenses consists of repair & maintenance Rs. 262 crores, advertisement — Rs. 14 crores, CSR- Rs. 38 Crores, Insurance Rs. 126 Crores, Security- Rs. 234 crores, Electricity-Rs. 47 Crores, Interest to beneficiary states —Rs. 18 crores & provision — Rs. 50 Crores. these are the main items of other expenses.

Analyst: 1 question to Mr. Joshi.

Balraj Joshi: Ji.

Analyst: You are the man of operations throughout your life. I understand... difficult plants of NHPC. There is a technology called the cascade of dams... China and Brazil you see such is there so could you identify any geographical region in India where we can also consider the technology of cascade of dams so the optimum efficiency of plants can be seen in future....

Balraj Joshi: Cascade of Dam you say. So you see we have already no. of cascade existing in Himachal, for example, Chamera I, II & III, they are cascade projects only and similarly in Teesta, we have Teesta I, II & III, IV & V and then in downstream, we have TLDP III & IV. So this cascade is already formulated and no. of projects are already come up but

I think what you are referring to it means that you have to have a larger mother reservoir at the top which can augment the, you know, the lower plants that is now not happened so far. But Bursar project which has been shown here... Bursar its 800 MW project but we are allowed to create some kind of storage on the tributary of Chenab. So if Bursar comes up then the downstream projects are going to get benefited in a very big way. Government of India is very serious about this issue & even Brahmaputra basin also they are taking very large reservoir. Thank you.

Analyst: What is the status of the interest subvention scheme which was considered by the Government to reduce the cost of projects.

Balraj Joshi: Interest, as mentioned, was a part of the draft hydro policy, the EFC note which was circulated by the Ministry of Power. However, we all are waiting for the policy in black & white to have clarity on all fronts including interest subvention.

Analyst: My 2nd question on purchase to land for Teesta, which starts working right now. How much time it will take to compete?

Balraj Joshi: It will take 4 years' time.

Analyst: They have PPA. am I right??

Balraj Joshi: They had PPA but that had already expired so we have to look for a new client for it.

Analyst: OK. Are there any projects under consideration to be acquired?

Balraj Joshi: There are no. of projects, & to be precise 42 projects are there spread over the entire Country. But we are not interested in those small and medium projects. We are looking out for larger one, for example, Teesta VI. which is one of them. Another candidate may be project called Jal Power project in Sikkim only of 120MW project. so prioritize we are looking at this 2 only.

Analyst: What there with Lanco project in Uttaranchal like?

Balraj Joshi: No... we are not. I think its 90MW project.

Analyst: Thank you, sir...

Analyst: For Kishanganga project, subordinate debt you have got. Have you got it directly from the Government of India or have you got from other party?

Balraj Joshi: No. From Government of India only.

Moderator: I thank you all on behalf of NHPC for joining the event and I request you all to have dinner on the Floor...Thank you.