

CMA Rajendra Prasad Goyal Director (Finance) - NHPC Limited, Faridabad

INTERVIEW

MA Rajendra Prasad Goyal has taken NHPC Limited on October 1, 2020. the Company. Shri Goyal started his career in NHPC as Senior Accountant on 18th November J&K and thereafter worked at Chamera-I Project, Dulhasti Project, Regional Office, Jammu and Corporate Office, Faridabad in various capacities. Shri Goyal had been the Head of Finance at Services Division, Corporate Office and Regional as Director (Finance), he was working as Chief General Manager (Finance) and heading the Establishment and Investor Relations Sections. the Board of Loktak Downstream Hydroelectric of Public Enterprises (SCOPE), New Delhi. Training Institute (NPTI), Faridabad. Shri Goyal is an Associate Member of the Institute of Cost Degree in Commerce from the University of of more than 33 years in NHPC Ltd. in the core areas of Finance with in-depth understanding and vast knowledge of Financial, Contractual

as well as operations of Hydro Projects. His leadership qualities, ability to work hard with conceptual clarity and professionalism are outstanding. During his service in NHPC, Shri Goyal has risen the professional ladder by virtue of utmost sense of responsibility, ethics and dedication to the Company. He has proved himself as an outstanding Finance Professional and has made his mark in the sustained growth of NHPC.

Q1. With the surging power demand in India; what are the steps you are taking to fulfil the same?

Ans: India is the 3rd largest power producer and consumer in the world and it is growing at a rate of 10.5%. India's energy requirement is expected to increase manifold in the coming decade to attain the targeted Gross Domestic Product (GDP) growth rate. Our country is blessed with an estimated hydropower potential of 1,45,320 MW excluding small hydro and Pumped Storage Projects. Out of which, we have developed 46850 MW i.e. 32% of the potential has been harnessed so far. NHPC a Mini Ratna enterprise of Govt.

of India is a premier organization in the field of hydro development. In the interest of clean energy transition and to meet the surging power demand, wherein hydro power will play a pivotal role, NHPC is mainly focusing upon to add in the grid as much of clean & green hydro energy through untapped hydro potential. This would not only meet the peaking power demand of the country, but also facilitate large scale projected integration of Solar & Wind energy in the grid as technical inherent capabilities of hydropower such as quick start-stop, black-start, spinning reserve etc.

Q2. The government talks on reforms to achieve excellence in development of clean power at par with international standards. What are major challenges that need to be taken care of?

Ans: The reforms in energy sector in India is basically based on multiple objectives like deploying renewable energy to improve energy security, mitigate climate change, ensuring access to affordable, reliable, sustainable, modern energy for citizens of the country etc. The strong government support and the increasing power demand in the country due to robust economic condition have placed India as one of the leading attractive renewable energy markets. All the related issues and challenges have been amply countered through suitable government policies, programs, and a conducive environment to ramp up the renewable energy market.

Q3. What are your ambitious plans for Renewable Energy? How do you see NHPC's contribution in Nation's Renewable Energy journey?

Ans: Govt. of India has set up a target of 500 GW capacity from non-fossil fuels by 2030. To contribute in this ambitious plan of country, NHPC has diversified into Renewable Energy Sector apart from Hydro. At present, NHPC has one operational Solar Power Station and one Wind Power Station of 50 MW each. As the focus of Govt. has increased now on Renewable Energy, we have also expanded our solar Portfolio. We have 7 Solar Projects of 1201 MW under construction stage which are expected to be operational in FY 2024-25.

INTERVIEW

Further, NHPC has also been designated by Ministry of New and Renewable Energy (MNRE) as Implementing Agency for Renewable Energy Projects and as an intermediary procurer, NHPC has awarded 2000 MW Solar Power projects to five nos. of selected developers out of which 320 MW Solar Power Project has been commissioned at Bikaner, Rajasthan in Dec, 2022. Balance 1680 MW capacity is scheduled to be commissioned in F.Y. 2023-24 & 24-25 in phases.

NHPC is further exploring various Renewable Energy Projects in various modes across different States.

Q4. Please give us an overview of your current project-Subansiri Lower Hydroelectric Project. How important is success execution of this project?

Ans: The 2,000 MW Subansiri Lower hydroelectric power project is on Subansiri River, which is a tributary of Brahmaputra River. The project is located on the border of India's two north-eastern states; Arunachal Pradesh and Assam. The Subansiri Lower HE Project of 2000 MW (250 MW X 8) is the largest hydroelectric project of the country.

The successful execution of the project is very important. Besides contributing 7421 MU of much needed hydro energy annually, it will open a new era in the hydro development of North-Eastern region. The local people have been benefited directly or indirectly from Subansiri Lower Project in terms of employment/ livelihood, work / business opportunities during its construction and socio-economic condition of the local people have been improved. Further, after completion of project, due to availability of uninterrupted power, various industries including tourism etc. may develop in the vicinity of the project providing employment and business opportunities to local youths/people resulting in overall development of the area.

Q5. What are the expansion plans of NHPC in terms of capacity addition?

Ans: Presently, NHPC has an installed capacity of 7097 MW from 25 power stations including three projects in JV mode. NHPC is making all out efforts to reach installed capacity of 23000 MW by 2032 and to be a 50,000 MW company by 2047.

At present, we have 9 hydroelectric projects of 9314 MW and 7 Solar Projects of 1201 MW under construction stage. Further, NHPC has many hydro projects under clearance stage which shall come up for implementation in the near future. In addition, NHPC is also exploring opportunities in Pump Storage Projects. Q6. NHPC is going to provide consultancy services to KSEB for accelerating hydro potential of Kerala. Elucidate your views to what extent it would contribute to Kerala's clean energy goals.

Ans: NHPC shall provide consultancy services to KSEB Ltd. as its "Owner's Engineer" for vetting of design of ongoing KSEB's projects and also for the projects which are in pipeline based on their requirement. NHPC shall also provide consultancy services to KSEB for exploring Hydel projects in Kerala.

As NHPC has more than 47 years of experience and expertise in the hydro sector, this will benefit KSEB to obtain an optimal design with updated technology and cost efficiency. This will also help them find a solution to the cost and time overrun issues that KSEB has been facing in their projects which will eventually help Kerala to achieve its clean energy goals.

Q7. What is the major constraint for hydropower development around the world?

Ans: Hydropower projects are site specific and have large-scale socioeconomic and environmental implications and hence, they have to face various challenges like land acquisition which is a time consuming process, Resettlement and rehabilitation (R&R) issues, forest clearances, financial issues, large scale development requirement of infrastructure for accessing sites in remote areas etc.

In specific terms of India, water is a state subject. Further, most of the hydro potential is available in younger Himalayan region of North and North-Eastern region, where lot of geological uncertainties prevail. Underground works and tunnelling in these regions pose various hurdles and overruns in hydro project development. However, NHPC has successfully taken up execution of hydro projects in difficult environment and unpredictable & formidable geological conditions. Experience of execution in such conditions in over 47 years has enriched NHPC to anticipate and tackle these conditions successfully.

Q8. What single challenge would you like to see that would enhance the role of hydropower in the modern digi era.

Ans: In present scenario, the main and foremost goal is to achieve the Government of India's goals of 500 GW of renewable energy and net zero carbon emissions by 2070. Towards this, hydro power will play a pivotal role by way of 3-dimentional aid;

- one is hydro capacity addition being itself a renewable source of energy,
- second one is energy generation through clean, green and

environmental friendly source of energy with low carbon footprints and

• the third one & most importantly through compensating for the intermittent nature of solar and wind power and providing stability to the electric grid.

The benefits created by hydro power, which is one of the sources of non-polluting electricity generation, are numerous. Apart from reducing carbon emissions, they include capacity to bring electricity to new remote locations, thus improving living standards and opportunities to new communities, ability to increase security over energy generation and be less dependent on geopolitical issues.

In addition, Hydropower is clean, green source of energy and cheap in long run. Solar and wind power provide clean energy but are intermittent as they are dependent on sun and wind availability. Hydropower can compensate for the intermittent nature of solar and wind, providing stability to the electric grid.

In order to achieve the above, it is more essential that we focus on hydropower. A healthy mix of Hydro power with other RE sources like Solar, Wind, and Green hydrogen can definitely result in India achieving its clean energy targets.

Q9. What are the various ways your organization can integrate with our Institute for the diverse avenues in professional development matters?

Ans: NHPC is associated with our Institute since long and it has increased over the years as size of the company has been increasing. NHPC has been hiring qualified and semi qualified resources time to time.

Further, the company imparts industrial training to the students which provides them the opportunity to work with our experienced professional workforce and they get familiar with the corporate work culture as well.

We have been benefited with the various training programmes of the Institute and we always encourage such interactive programmes being organised by the Institute for the professional upgradation of our employees.

Q10. Parting advice for our CMA students.

Ans: They say that hard work always pays off. Therefore, students should focus on enhancement of their professional knowledge base and work on their soft skills as well. There are lot of opportunities ahead in every sector and they can contribute a lot in their respective area of specialisation for the development of the country. MA