

RENOVATION MODERNIZATION & UPGRADATION (RMU) OF HYDRO POWER STATIONS



PANKAJ KULSHRESHTH
Dy. General Manager, UJVN Limited

ABOUT UJVN LTD.

- After bifurcation of Uttar Pradesh, Uttarakhand came into existence in year 2000
- Due to above bifurcation Uttar Pradesh Jal Vidyut Nigam also got bifurcated in accordance with the 'Reorganization Act' and 'Uttarakhand Jal Vidyut Nigam' (now known as UJVN Ltd.) came into existence in Year 2001

CORE BUSINESS OF UJVN LTD.

- UJVN Ltd is mainly into the following areas:
 - Generation of energy from Hydro Power Plants
 - Construction of New HEPs
 - Operation & Maintenance
- UJVN Ltd. intends to diversify in the following areas also:
 - Solar
 - Gas
 - Thermal
- UJVNL is a wholly owned generating utility of Government of Uttarakhand set up for managing hydro power generation at existing power stations and development, promotions of new hydro projects with the purpose of harnessing, the identified and yet to be identified, hydro power resources of the State.
- UJVNL operates hydropower plants ranging in capacity from 0.2 MW to 304 MW, totaling up to 1306 MW

RENOVATION MODERNIZATION & UPGRADATION

- In the present scenario of resource constraint and to tide over the shortage of electricity, Renovation,

Modernization & Uprating (RM&U) of the existing/old hydro power projects is considered as one of the best options, as this is cost effective and quicker to achieve than setting up a new green field power project.

- In order to augment the hydropower generation and improve the availability of existing hydro power projects, Government of India placed special emphasis on RM&U of various existing old power stations in the country;
- Recognizing the benefits of the RM&U of hydro electric power projects, Govt. of India constituted a National Committee in 1987 and a Standing Committee in 1998 and identified the projects to be taken up for implementation under RM&U.
- The National Perspective Plan document for RM&U of hydro-electric power projects in the country was also prepared in CEA during the year 2000, incorporating the status of various projects already identified for implementation/completion till the end of the XI Plan, i.e. the year 2011-12;
- Under the hydro RM&U programme, 33 hydro electric projects (13 in the VIII Plan & 20 in the IX Plan) with installed capacity of 6174.10 MW at an expenditure of Rs.697.53 Crore have been completed by the end of the IX Plan.
- During the X Plan (2002-07), 47 hydro electric power projects having installed capacity of 7449.20 MW at an estimated cost of Rs.1613.48 Crore were programmed for completion of RM&U works.
- For the XI Plan (2007-12), a total of 59 hydro electric power projects having installed capacity of 10325.40 MW at an estimated cost of Rs.3116.40 Crore were programmed for completion of RM&U works.

