

2.1 Scope of Audit

Forty-eight (48) projects with a total planned generation capacity of 2,423.10 MW have been taken up by the IPPs in the State during 1993-2006. These have been classified in the following categories:

- ◆ 37 Mini hydro projects in 'up to 25 MW' category with a total capacity of 369.10 MW
- ◆ 5 Small hydro projects in 'above 25 MW to 100 MW' category with a total capacity of 374 MW
- ◆ 6 medium hydro projects in 'above 100 MW' category with a total capacity of 1680 MW

Out of these, allotment for 34 projects was done under the erstwhile combined State of Uttar Pradesh in the year 1993. However, after the creation of the State of Uttarakhand and the announcement of the State's own power policy in October 2002, the developers of these projects entered into a fresh Implementation Agreement (IA) with the GoU.

As of March 2009, five out of 48 projects were operational; the remaining were in various stages of completion. For the purpose of performance audit, especially with regard to compliance with stipulations contained in the policy and the IA with regard to project implementation and environmental safeguards, the following audit sample was randomly selected after stratifying the entire population into three categories, as below:

Stratum-I: 4 projects out of total 5 operational projects located in Bageshwar, Chamoli & Uttarkashi districts were selected. The 5th operational project i.e. the Vishnuprayag project

which is the largest being undertaken with private investment had to be excluded from the scope of the review because the audit was denied physical access to the project.

Stratum-II: 29 projects awarded under the composite State and are under progress. 6 projects located in Chamoli, Tehri & Uttarkashi were selected. However, the aspect of allotment of projects to different developers was not examined as this was done under the composite State of Uttar Pradesh.

Stratum-III: 14 projects awarded by GoU, under initial stages. 3 projects located in Chamoli & Tehri were selected.

2.2 Audit Objectives

The audit objectives were to ascertain whether:

- ◆ Identification of project sites and estimation of potential capacity was carried out with due diligence. The procedure for allotment of projects ensured selection of IPPs, technically competent in the area of hydro-power development. The regulatory process guiding project approval was sound and fool proof.
- ◆ The terms and conditions regarding timely completion and compliance with prudent utility practices, as mentioned in the Implementation Agreement (IA) were enforced during execution. Optimal utilization of generated energy was ensured through proper management and reliable infrastructure.
- ◆ Effective mechanism was in place to enforce environmental stipulations and associated directions. Impact on environment was

assessed beforehand; due preventive and protective measures to alleviate the adverse effects were implemented.

- ◆ Appropriate mechanisms were put in place to provide support for achieving the policy deliverables within the agreed time frame.

2.3 Audit Criteria

The audit findings were benchmarked against the following criteria:

- ◆ Guidelines issued by the Union Ministry of Power, Central Electricity Authority and the Central Water Commission from time to time relating to development of hydro power projects;
- ◆ Agreements entered into with the IPPs;
- ◆ Central Electricity Act 2003;
- ◆ National Electricity Policy and Plan;
- ◆ Guidelines issued by the Union Ministry of Environment and Forest; and
- ◆ State Power Policy.

2.4 Audit Methodology

The performance audit commenced with an entry conference with the Secretary, Energy in April 2009. Information with regard to the hydro power projects was obtained from UJVNL and UEPPCB and concerned Divisional Forest Offices. Records relevant to identification, allotment, approvals, statutory clearances, execution and environmental impact were scrutinized. The audit also conducted physical verification of 13 out of 48 hydropower projects, under various stages of development. **The audit team however faced constraints in accessing files relating to the Srinagar project being implemented by GVK, as these were not produced to audit despite several written requests.**

Audit findings were discussed with Principal Secretary, Energy in an exit conference on 30th November 2009 and the replies have been incorporated in the report at appropriate places.

2.5 Audit Findings

Audit findings are discussed in Chapters 3 to 6.

