

Government, how can we be an opposition party? Now, the hon member having had experience of a minority Government, should have known that he was supported by two parties which regarded themselves also as opposition parties (*Interruptions*)

MR SPEAKER Mr Acharia, you should give him a patient hearing

PROF MADHU DANDEVATE Shall I explain?

MR SPEAKER I will come to you

SHRI BASUDEB ACHARIA (Bankura)
He should speak the truth

MR SPEAKER I have permitted Shri Dinesh Singh

SHRI DINESH SINGH If they wish to bask in the glory of having been party of a government, I have no objection. But there is no provision in the Lok Sabha for a supporting party (*Interruptions*) There is no provision for a supporting party. There is a ruling party and the rest are opposition parties (*Interruptions*)

[*Translation*]

MR SPEAKER Mr Chandra, is it necessary to say yes or no? It is not necessary

[*English*]

MR SPEAKER Mr Soz, what has happened to you?

(*Interruptions*)

SHRI DINESH SINGH My difficulty is that the hon members have not read the rules. If they point out from the rules that there is a provision for a supporting party, I shall withdraw. But, the submission that I wish to make with your permission is that Prof Kurien had written a letter to you, in which he had explained that we, the Congress (I) remain an opposition party (*Interruptions*)

MR SPEAKER The Question Hour is over

12.37 hrs.

WRITTEN ANSWERS TO QUESTIONS

[*English*]

Visit of King of Bhutan

*1 SHRI R M BHÖYE Will the Minister of EXTERNAL AFFAIRS be pleased to state

(a) whether the King of Bhutan visited India during the month of November, 1990,

(b) if so, the details of the talks held by him with Indian leaders,

(c) whether any agreement has been signed between the two countries as a result of the talks, and

(d) if so, the details thereof?

THE MINISTER OF EXTERNAL AFFAIRS (SHRI VIDYACHARAN SHUKLA)

(a) Yes, Sir. The King of Bhutan paid a four day visit to India during November 23-26, 1990

(b) During his visit, the King of Bhutan called on the President Shri R Venkataraman. He also met the Prime Minister, the External Affairs Minister and the Finance Minister. The discussions centred round bilateral, regional and multilateral issues of mutual concern.

(c) A Memorandum of Understanding was signed between India and Bhutan on the 25th of November 1990, to prepare the Detailed Project Report on the Tala Hydroelectric

Project (Chukha II) and Wangchu Reservoir Scheme (Chukha III).

(d) The Tala Hydroelectric Project is a run of the river scheme and is expected to have an installed capacity of 1000 MW. The Wangchu Reservoir Scheme involves the construction of a rock filled dam and is estimated to have an installed capacity of 500-600 MW. The detailed Project Reports are expected to be ready by December, 1993. The Memorandum of Understanding is given below in the statement.

STATEMENT

Memorandum of Understanding Between the Government of India and the Royal Government of Bhutan Regarding the Preparation of Detailed Project Reports for the Tala Hydroelectric Project and the Wangchu Reservoir Scheme in the Wangchu Basin

The Government of India and the Royal Government of Bhutan,

BEARING IN MIND the friendly relations subsisting between the two Governments and their peoples and mutual trust, understanding and cooperation shown in completing the Chukha Hydroelectric Project,

NOTING THE successful completion of the Chukha Hydroelectric Project, a shining example of mutually beneficial cooperation,

NOTING FURTHER the desire of the Royal Government of Bhutan to develop additional hydro-power potential in the Kingdom, particularly in the Wangchu basin, and the Government of India's willingness to cooperate with and assist the Royal Government of Bhutan in attaining this objective,

HAVE, with respect to the development of hydro-power in the Wangchu basin in Bhutan, reached an understanding to carry

out detailed investigations and prepare Detailed Project Reports (DPRs) for TALA HYDROELECTRIC PROJECT and WANGCHU RESERVOIR SCHEME

I. SUMMARY OF THE PROJECTS

1. Tala Hydroelectric Project

This is a run of the river scheme utilising a drop of about 880 metres along the course of the Wangchu river downstream of the tailrace of the existing Chukha Hydroelectric Project. As per preliminary studies carried out by the Chukha Project Authority (CPA), the scheme would comprise a diversion dam, 20 km long headrace tunnel, an underground powerhouse and a 3 km long tailrace tunnel. An installed capacity of 1000 MW has been proposed in the CPA studies.

2. WANGCHU RESERVOIR SCHEME

This scheme will involve construction of a dam to provide storage on the Wangchu river and a power station. Two dam sites have been identified for this storage scheme, one below the confluence of Piping river with Wangchu (identified by CPA) and another site 6-7 km upstream (proposed by Tata Consulting Engi-

neers in their pre-feasibility report of July 1988). An installed capacity of 500 to 600 MW has been proposed in these preliminary studies.

II. INVESTIGATIONS AND STUDIES UNDERTAKEN TO DATE

1. At the instance of the Royal Government of Bhutan, reconnaissance investigations of the Wangchuriverweretaken up in 1961 by the then Central Water and Power Commission of India.
2. Based on the above mentioned investigations and the Detailed Project Report (DPR) prepared thereafter, the Chukha Hydroelectric Project was taken up and completed.
3. The Chukha Project Authority prepared pre-feasibility reports on Tala Hydroelectric Project and Wangchu Reservoir Scheme in April, 1983 and June, 1987 respectively and on Torse Reservoir Scheme in November, 1988.
4. M/s. Tata Consulting Engineers (TCE), Bombay prepared for the Royal Government a pre-feasibility report on Raidak Hydro Power Scheme (Wangchu Reservoir

Scheme) and Torsa Hydro Power Scheme in July, 1988.

5. After detailed evaluation of the CPA and TCE reports by the departments concerned in the Government of India as desired by the Royal Government of Bhutan it was decided jointly in February, 1990 that the projects in the Wangchu basin merit further investigations.
6. An expert team from the Central Electricity Authority (CEA), National Hydroelectric Power Corporation Ltd., (NHPC), Central Water Commission (CWC) and Geological Survey of India (GSI) inspected the Wangchu basinsites from 6th to 11th February 1990 and submitted a report.
7. In a meeting of the delegation of the two Governments held in New Delhi in April, 1990 both sides agreed that preparation of Detailed Project Reports for the two projects in the Wangchu basin should be taken up simultaneously, if necessary through two separate agencies.

III SCOPE OF INVESTIGATIONS

In order to prepare the DPRs, the following field

investigations are required:

1. Preliminary study of Alternatives:

Preliminary investigations should be undertaken for evaluation of various alternatives for location of dams and alignment of water conductor systems for selection of the schemes for detailed investigations.

2. Topographical Surveys:

This should cover the entire areas from the dam sites to the powerhouse sites of the two projects.

3. Geological/Geo-physical and Foundation Investigations:

This should be carried out at the dam sites and other locations of the two projects. It should include detailed sub-surface explorations at various locations, geo-mapping, drilling, drifting, water percolation tests and other mechanical tests.

4. Seismological Observations:

The historical data of seismic activity and regional geological set-up should be reviewed to arrive at the seismic parameters for the DPRs. The studies should in-

clude a plan for seismological observatories covering the projects' areas to enable the Royal Government of Bhutan to set up a seismological network for future reviews.

5. Hydrometeorological Observations:

Hydrometeorological observations for the two projects should be started immediately. Data to be collected should include rainfall, temperature, river gauge and discharge, suspended silt and water quality.

6. Construction Material Surveys:

Systematic sampling, testing and evaluation including petrographic examination and other special tests for assessment of susceptibility to alkali aggregate reactivity, if required, should be undertaken for both coarse and fine aggregates, clay for core material and other construction materials.

7. Property Surveys:

This should be conducted through the local Bhutanese authorities.

8. Communication Surveys:

In consultation with the Royal Government au-

thorities studies should be undertaken to check the adequacy of existing infrastructure, plan the routes to be adopted for transportation of project requirements, and assess the need for upgradation and widening of existing roads and bridges.

9. Environmental Studies:

Environmental Impact Assessment (EIA) studies should be undertaken as per the requirements of the Royal Government of Bhutan.

10. Optimisation Studies:

Detailed studies should be undertaken to optimize firm power, energy generation, installed capacity and unit size based on techno-economic considerations and the system requirements of India and Bhutan.

11. Equipment Market Studies:

Studies should be undertaken and basic data collected from different manufacturers of generating and other equipment for ensuring suitability to local conditions and dimensioning of units to decide the powerhouse and switchyard layouts.

12. Transmission Network:

Detailed studies should be undertaken to decide on the system voltage and the number of transmission lines to evacuate the power generated.

13. Construction Methods Studies:

In view of the shortage of labour in Bhutan the method of construction adopted will be of great significance. Studies should be carried out and necessary investigations undertaken to optimise mechanisation so as to minimise labour requirements and construction time. The possibilities for employing Tunnel Boring Machines should be explored.

IV. REQUIREMENTS OF INFRASTRUCTURAL FACILITIES

The camps for the workcharged staff and labourers will be located near the work sites. Various components of the projects will lie between Chukha and the confluence of the Wangchu and Piping rivers. The Royal Government of Bhutan shall provide the following infrastructural facilities:

(a) Tala Hydroelectric Project

Accommodation shall be provided for the office and staff to be located at Chukha. In case of difficulty in providing necessary accommodation at Chukha, adequate land for construction of temporary buildings at different places for regular staff plus workcharged staff and labourers, estimated at around 200 at the peak period, shall be provided by the Royal Government of Bhutan free of cost.

(b) Wangchu Reservoir Scheme

Land for construction of offices, stores and residential accommodation for regular and workcharged staff shall be provided free of cost by the Royal Government of Bhutan.

V. TIMEFRAME FOR COMPLETION

The investigating agencies will require three working seasons for the investigations connected with the DPRs from the date of award of work. This is subject to timely provision of infrastructural facilities by the Royal Government of Bhutan as detailed in Section IV. In addition, six months will be required for the

preparation of the DPRs. Subject to the above, the final report shall be completed by December 1993.

VI. OBLIGATION OF THE TWO GOVERNMENTS

The Government of India and the Royal Government of Bhutan agree to the preparation of the DPRs, on a high priority basis, through such agencies in India and Bhutan as may be determined by mutual consultations for each of the works detailed in Sections III and IV above.

The respective obligations of the two Governments shall be as follows:

1. The Royal Government of Bhutan shall make available the infrastructural facilities detailed in Section IV above and shall bear the expenditure thereon.
2. The Government of India shall bear the expenditure for the preparation of the DPRs of both the projects except as provided for in Section VI (1).
3. The selection and appointment of technical, administrative and personnel of all other categories by the investigating agencies shall be confined to the nationals of either country. The Royal Government of

Bhutan shall issue identity cards/permits without payment of security deposit to all the above mentioned personnel. Who are Indian nationals, and their families.

4. The agencies involved in the preparation of the DPRs will depute technicians and administrative personnel to Bhutan according to the requirement of works at site. The Royal Government of Bhutan shall issue/renew identity cards free of cost.
5. The Royal Government of Bhutan shall provide facilities to ensure free movement and transportation of machinery and equipment connected with the investigation work without levying and type of fee, taxes and duties.
6. The Royal Government of Bhutan shall make necessary arrangements for the acquisition of land, buildings, the right of way where needed, cutting of trees necessary for conducting the investigation, and field facilities as may be considered necessary for the preparation of the DPRs and shall resolve administrative and other difficulties, if any. The payment of compensation, if any, and settlement of claims or disputes arising in connection with any arrangements shall

be the so responsibility of the Royal Government of Bhutan.

7. The Royal Government of Bhutan shall issue, on the recommendation of the investigating agencies, licences to Indian contractors to participate in tenders related to the investigations.

[Translation]

MSTD or STD Facilities at Telephone Exchanges in Gujarat

*2. SHRI C.D. GAMIT: Will the Minister of COMMUNICATIONS be pleased to state:

(a) whether Government propose to provide MSTD or STD facility in the telephone exchanges at Mandavi, Songhad, Valod, Kathor and Madhi in Surat District of Gujarat;

(b) if so, the details thereof; and

(c) the time by which this facility is likely to be provided at these telephone exchanges and the steps being taken by Government in this regard?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (DR. SANJAY SINGH): (a) and (b). The telephone exchanges at Mandavi, Songhad, Valod, Kathor and Madhi in Surat District are proposed to be provided with STD facility during this plan period.

- (c) (i) The MSTD facility at Fort Songhad is proposed to be provided by March, 1991. The STD facility at all these places will be possible progressively by 1993.