

1	2	3
42.	R-80	Updation of Road User Cost Study. PLANNING :
43.		Review and revise procedures and guidelines in awarding contracts and finalising projects in order to ensure administrative efficiency and bring in transparency in procedure.

Statement-II

List of Research Schemes completed during last two years

Sl. No.	Scheme No.	Description
1	2	3
A : ROADS		
1.	R-18	Geometric design studies on horizontal friction factors, perception and brake reaction time of drivers and sight distance requirements.
2.	R-57	Case study and environmental impact of highway projects and its control.
3.	R-60	Development of portable electronic device for measuring field CBR.
B : BRIDGES		
1.	B-14 Ext.	Development of computer based standard designs & drawings for Highway Bridges.
2.	B-19	Study of seismic designs for Highway Bridges.
C : TRAFFIC & TRANSPORTATION		
1.	R-40	Development of paints & Road Marking Material.
2.	R-64	Establishment of system for identification and rectification of accident black spot and appropriate safety improvement schemes for National Highways and their privatisation.

Statement-III

New R&D Schemes Proposed to be sanctioned during 1998-99

	Description
ROADS	
1.	Structural evaluation of pavements in Eastern India using falling weight deflectometer.
2.	Study on effects of hard shoulders on performance of flexible pavements.

T&T

1. Updation of Road User Cost Study.
2. Development of Guidelines for traffic calming Techniques Indian conditions.

BRIDGES

1. Evaluation of live load characterisation for evolving partial safety factor for live load on bridges (Phase I).
2. Updation of standard Data Book of analysis.
3. Use of fibre reinforced concrete in repair of bridges.
4. Condition Survey of bridges.

[English]

Centres of Excellence

*217. SHRI SURESH WARPUDKAR : Will the Minister of ENVIRONMENT AND FORESTS be pleased to state :

(a) the details of Centres of Excellence for creating Awareness of Environment functioning in the country, state-wise;

(b) the details of expenditure made thereon during the last three years;

(c) the outcome thereof; and

(d) whether this expenditure commensurates with the results?

THE MINISTER OF ENVIRONMENT AND FORESTS (SHRI SURESH PRABHU) : (a) The Ministry of Environment & Forests has set up 2 Centres of Excellence for creation of environmental awareness. These two centres are; Centre for Environment Education located at Ahmedabad (Gujarat) with regional cells at Bangalore, Guwahati, Lucknow and Pune and; C.P. Ramaswamy Environmental Education Centre located at Chennai (Tamil Nadu) having a field office at Uthagamandalam.

(b) The details of financial assistance released by the Ministry to these two centres during the last three years are as below:

	(Rs. in lakhs)		
	Financial Assistance Released during		
	1995-96	1996-97	1997-98
1. Centre for Environment Education Ahmedabad.	180.00	205.50	231.13
2. C.P.R. Environmental Education Centre, Chennai.	75.00	76.00	87.43

(c) These two Centres have developed into advanced centres for training of trainers for imparting Environment Education through non-formal methods in the school system, and related preparation of resource material, conducting

awareness activities, development of innovative techniques for environment education. The resource material prepared by these centres is being used by a large number of NGOs, school teachers and students all over the country. The training programmes conducted by them have been acclaimed by not only the teaching community but also by NGOs, industry etc.

(d) Yes, Sir. These two centres are playing a major role in Ministry's efforts in creating environment awareness amongst different cross sections of the society.

Gas based Projects on Imported Liquefied Natural Gas

*218. DR. ULHAS VASUDEO PATIL Will the Minister of POWER be pleased to state :

(a) whether the Government have decided to run National Thermal Power Corporation's gas-based projects on the imported liquefied Natural Gas during the Ninth Five Year Plan;

(b) if so, the details thereof alongwith the reasons therefor;

(c) whether National Thermal Power Corporation's Projects for capacity addition are running behind schedule;

(d) If so, the reasons therefor; and

(e) the measure taken/proposed to be taken by the Government for early completion of the projects?

THE MINISTER OF POWER (SHRI P.R. KUMARA-MANGALAM) : (a) and (b) National Thermal Power Corporation (NTPC) is operating the power plants Anta (413 MW), Auraiya (652 MW), Kawas (645 MW), Gandhar (648 MW) and Dadri (817 MW), based on gas though there are provisions to utilise liquid fuel also to meet shortfall if any in gas availability.

NTPC's capacity addition programme during 9th Five Year Plan include second stage expansion of combined cycle power plants at Kawas, Jhanor-Gandhar, Anta and Auraiya by 650 MW each. Due to limited availability of domestic natural gas to begin with, NTPC will be using Naphtha as a bridge fuel for these projects. Liquefied Natural Gas (LNG) is envisaged as ultimate fuel for Kawas-II, Jhanor-Gandhar-II, Anta-II, Auraiya-II projects and as also to meet any shortfall in gas availability for existing gas based stations and ongoing Gas/Naphtha based projects.

(c) No, Sir. The details are furnished in the enclosed Statement.

(d) and (e) Do not arise in view of (c) above.

Statement

Status of on going Projects of NTPC

Sl.No.	Project	Unit-wise Commissioning schedule as per Investment Approval		Status
1.	Vindhaychal STPP Stage-II (2x500MW). Madhya Pradesh.	Unit I	Feb. 2000	Progress as per schedule.
		Unit II	Feb.2001	
2.	Feroze Gandhi Unchahar Thermal Power Station Stage II (2x210 MW), Uttar Pradesh.	Unit I	Jan. 2000	do
		Unit II	July 2000	
3.	Simhadri TPP (2x500 MW) Andhra Pradesh.	Unit I	March 2002	do
		Unit II	Dec. 2002	
4.	Kayamkulam CCPP 350 MW, Kerala	GT 1	March 1999	GT 1 commissioned about 4 months ahead of schedule. Other Units progress as per schedule.
		GT 2	May 1999	
		ST	March 2000	
5.	Faridabad GPP 400 MW, Haryana	GT 1	Jan. 2000	Progress as per schedule.
		GT 2	March 2000	
		ST	Jan. 2001	

Abbreviation:

STPP : Super Thermal Power Project

GT : Gas Turbine

ST : Steam Turbine

CCPP : Combined Cycle Power Project

GPP : Gas Power Project.