

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

STARRED QUESTION NO:457
ANSWERED ON:23.12.2005
NATIONAL TRANSMISSION PLAN
Saradgi Shri Iqbal Ahmed

Will the Minister of POWER be pleased to state:

- (a) whether the Central Electricity Authority has formulated a National Transmission Plan with a specific target for achieving inter-regional power transmission capacity;
- (b) if so, the details of the capacity aimed to be achieved thereof; and
- (c) the period by which it is targeted to be achieved?

Answer

THE MINISTER OF INFORMATION & BROADCASTING AND MINISTER OF PARLIAMENTARY AFFAIRS(SHRI PRIYA RANJAN DASMUNSI)

(a) to (c) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO. 457 TO BE ANSWERED IN THE LOK SABHA ON 23.12.2005 REGARDING NATIONAL TRANSMISSION PLAN.

(a) : Towards the fulfillment of the requirement as mandated in Section 3 (4) of Electricity Act 2003, CEA has prepared the `Draft National Electricity Plan - Transmission` covering planning issues and Transmission Programme during the 10th and 11th Plan period. The draft Plan has set specific targets for inter-regional power transmission capacity and also the corresponding strengthening in the regional transmission systems, to achieve a strong National Grid. The draft Plan has been made available to all stakeholders for receiving their comments/views before its finalization. It has also been placed on the CEA website.

(b) & (c) : The growth plan of Inter-regional Transmission Capacity in the country, as envisaged in the draft National Transmission Plan prepared by the Central Electricity Authority is shown in Annexure-I. At present, the total inter-regional transmission capacity of 220kV and above level links is 9450 MW (details are given at Annexure-II). The program is to achieve inter-regional capacity of 16450 MW by the end of 10th Plan (details are at Annexure-III) and about 37150 MW by the end of 11th Plan (details are at Annexure-IV). The target date for completion of each of the works in Annexure-III and Annexure-IV is also given therein.

ANNEXURE-I ANNEXURE REFERRED TO IN PARTS (b) & (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 457 TO BE ANSWERED IN THE LOK SABHA ON 23.12.2005 REGARDING NATIONAL TRANSMISSION PLAN.

Growth Plan of Inter Regional Transmission Capacity

INTER REGIONAL TRANSMISSION CAPACITY All figures in MW

YEAR	2002	2005	2007	2010	2012
765kV	0	0	1100	2200	9200
400kV	1000	2400	7800	11400	16400
HVDC bi-pole	0	2000	2500	2500	6500
HVDC b-t-b	2000	3000	3000	3000	3000
HVDC mono-pole	200	200	200	200	200

220kV 1850 1850 1850 1850 1850

TOTAL 5050 9450 16450 21150 37150

ANNEXURE-II ANNEXURE REFERRED TO IN PARTS (b) & (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 457 TO BE ANSWERED IN THE LOK SABHA ON 23.12.2005 REGARDING NATIONAL TRANSMISSION PLAN.

Present Inter-Regional Transmission capacity of 220 kV and above

Existing Capacities Power Transfer Capacity (MW)

Name of System	At the end i.e. end of 2001-02	Addition Plan (upto Nov 05)	Existing (upto Nov 2005)	of IX Plan during X	Capacity
ER - SR :					
Gazuwaka HVDC back to back			500	500	1000
Balimela-Upper Sileru 220kV S/C			100	100	100
Talcher-Kolar HVDC Bipole			2000	2000	

600 2500 3100
ER-SR total

ER -NR :

Dehri-Sahupuri 220kV S/C	100	100
Sasaram HVDC back to back	500	500

ER-NR total 100 500 600

ER - WR :

Rourkela-Raipur 400kV D/C	1000	1000
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(without series compensation)

TCSC on Rourkela-Raipur 400kV D/C	400	400
Budhipara-Korba 220kV D/C+S/C	400	400

ER-WR total 400 1400 1800

ER - NER :

Birpara-Salakati 220kV D/C	250	250
Malda-Bongaigaon 400kV D/C	1000	1000

ER-NER total 1250 1250

NR - WR :

Vindhychal HVDC back to back	500	500
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Auria-Malanpur 220kV D/C	250	250
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Kota-Ujjain 220kV D/C	250	250
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NR-WR total 1000 1000

WR-SR :
Chandrapur HVDC back to back 1000 1000

Barsur-L.Sileru 200kV HVDC 200 200
mono pole
Kolhapur-Belgaum 220kV D/C 250 250

Ponda - Nagajhari 220kV D/C 250 250

WR-SR total 1700 1700

TOTAL ALL INDIA 5050 4400 9450

ANNEXURE-III

ANNEXURE REFERRED TO IN PARTS (b) & (c) OF THE STATEMENT
LAID IN REPLY TO STARRED QUESTION NO. 457 TO BE ANSWERED IN THELOKSABHA ON 23.12.2005 REGARDING NATIONAL
TRANSMISSION PLAN.

Programme for Inter-Regional Capacity by the end of 10th Plan

Additions During 2005-07

Power Name of System Capacity MW	Target Date Transfer
ER - SR : Upgradation of Talcher - Kolar HVDC Bipole ER-SR total 500	500 June 06
ER -NR : Muzaffarpur - Gorakhpur 400kV D/C(Quad Moose) with series compensation Biharshariff-Balia 400kV D/C	2000 June 06 1200 Mar 07
(Quad Moose) Patna-Balia 400kV D/C (Quad Moose) ER-NR total 4400	1200 Mar 07
ER - WR : Ranchi-Sipat 400kV D/C (40% Series Comp.) ER-WR total 1000	1000 Mar 07
NR - WR : Agra-Gwalior 765kV S/C line-1 400kV operation NR-WR total 1100	1100 Mar 07
TOTAL ALL INDIA (addition	7000

during 2005-07)
 Inter-regional capacity targeted 16450
 by end of 10th Plan (2006-07)

ANNEXURE-IV ANNEXURE REFERRED TO IN PARTS (b) & (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 457 TO
 BE ANSWERED IN THE LOK SABHA ON 23.12.2005 REGARDING NATIONAL

TRANSMISSION PLAN.

Programme for Inter-Regional Capacity by the end of 11th Plan

Additions During 11th Plan
 Power Target Date
 Name of System Transfer
 Capacity MW

NER - NR :
 BiswanathChariyali - Agra HVDC 4000 2009-10
 Bipole at + 600kV
 NER-NR total 4000

NER - ER :
 Bongaigaon - Silliguri 400kV D/C 1000 2009-10
 NER-ER total 1000

ER - NR :
 Barh - Balia 400kV D/C (Quad Moose) 1200 2008-09
 Sasaram - Fatehpur 765kV S/C (40% 2300 2010-11
 Series Comp.)
 ER-NR total 3500

ER - WR :
 Rourkela - Raipur 400kV D/C line-2 1400 2008-09

(with TCSC)
 North Karanpura - Sipat 765kV S/C 2300 2009-10
 Hirma - Sipat 400kV D/C 1000 2011-12
 Hirma - Raipur 400kV D/C 1000 2010-11

(- Tentative as Hirma generation
 project is yet to be finalization)
 ER-WR total 5700

NR - WR :
 Agra-Gwalior 765kV S/C line-1 1200 2009-10

(operation at 765kV)
 Agra-Gwalior 765kV S/C line-2 2300 2011-12
 Kankroli - Zerda 400kV D/C 1000 2010-11
 RAPP-Nagda 400kV D/C 1000 2011-12
 NR-WR total 5500

WR - SR :
 Parli - Raichur 400KV D/C 1000 2011-12
 ER-WR total 1000
 All India (addition during 11th 20700
 Plan)
 Inter-regional capacity targeted by 37150
 end of 11th Plan (2011-12)