

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.552
TO BE ANSWERED ON 22.07.2021**

POWER SYSTEM ISLANDING FOR MAJOR CITIES

**552. SHRI GIRISH BHALCHANDRA BAPAT:
SHRI RAHUL RAMESH SHEWALE:
DR. PRITAM GOPINATHRAO MUNDE:**

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Union Government has recommended every State to prepare a mechanism for power system islanding for major cities to avoid a situation like the grid collapse in Mumbai in October, 2020;**
- (b) if so, the details thereof and the response of the State Governments thereon;**
- (c) whether the Union Government has drawn out an appropriate plan for crisis management;**
- (d) if so, the details thereof;**
- (e) whether the Union Government has directed designing islanding schemes for all major cities and also asked them to submit proposals if there is a need for installation of power plants in or around the cities; and**
- (f) if so, the details thereof and the response of the State Governments thereon?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : In order to avoid the outage in the electricity grid, the Islanding scheme was reviewed in the Ministry of Power (MoP) and it was decided that islanding schemes may be designed for all major cities of the country covering the essential loads. All the five Regional Power Committees (RPCs) have coordinated with the States and have identified various new islanding schemes.

(c) & (d) : MoP, with assistance of Central Electricity Authority (CEA), has prepared a "Crisis Management Plan" for addressing the manmade crisis situations such as terrorist attacks, cyber-attacks, bomb threats, strikes etc. Apart from basic plan that encompasses the whole power sector, sector-specific generic documents on crisis management for thermal, hydro, renewable, transmission and distribution sectors have also been prepared. All such plans are revised on a regular basis to keep it abreast with the new challenges and issues coming up with changing times.

(e) & (f) : While designing the Islanding schemes, States have been advised that the generating stations, which are spatially nearby the strategic and essential loads, may be given priority. However, if there is a need to establish a power plant in/around such a city for the purpose, the proposal may be submitted for consideration of the concerned State/Utility. Possibility of installation of storage system at such location may also be explored.

The Region wise details submitted for Islanding Schemes by RPCs/States are given at Annexure.

ANNEXURE REFERRED TO IN REPLY TO PARTS (e) & (f) OF UNSTARRED QUESTION NO. 552 TO BE ANSWERED IN THE LOK SABHA ON 22.07.2021.

Region wise details submitted for Islanding Schemes by RPCs/States

Eastern Region:

(i) Review of Existing Islanding Schemes of ER (under Category-A): The existing Islanding Schemes of ER have been reviewed recently, the details of which are given below:

State	Name of Major Cities/ strategic towns/locations	Name of the Islanding scheme
Odisha	1) Budhipadar, Sundargarh	IB TPS IS [Under-implementation]
West Bengal	1) Kolkata	CESC IS [In-service]
	2) Bakreswar	Bakreswar TPS, WBPDCI IS [In-service]
	3) Haldia and Port	Tata Power, Haldia IS [In-Service]
	4) Bandel	Bandel WBPDCI IS [In-service]
	5) Godda & Lalmatia	Farakka STPS, NTPC IS [In-service]
	6) Biada, Patherdih & Nimiaghat	Chandrapura IS of DVC System [Under implementation]
	7) Gopalganj	KBUNL IS of Bihar [Under implementation]

Major Cities covered in the In-Service/ Under Implementation Islanding Schemes (Category-A) of ER is :
Kolkata

(ii) Formulation of new Islanding Schemes of ER for major cities (under Category-B): Following new IS have been identified in ER for implementation:

State	Name of Major Cities identified for islanding schemes	Name of the Islanding scheme
Bihar	1) Patna	Patna IS [Newly proposed scheme]
Jharkhand	1) Ranchi	Ranchi IS [Newly proposed scheme]

Major Cities/ Defence Installations proposed to be covered by devising new Islanding Schemes (Category-B) are as follows: Patna & Ranchi.

Western Region

(i) Review of Existing Islanding Schemes of WR (under Category-A):

In a series of meetings, the following existing Islanding Schemes of WR have been reviewed and shortcomings and gaps identified and action plan prepared for the same:

1. Mumbai Islanding Scheme (TPC & APL)
2. Uran Islanding Scheme
3. Surat Islanding Scheme
4. GIPCL Islanding Scheme
5. AECo Islanding Scheme
6. KAPS 1 & 2 Islanding Scheme

The major cities covered in the above Islanding schemes are Mumbai, Kharghar, Nerul, Sonkhar, Uran local load, Washi and Surat.

(ii) Formulation of new Islanding Schemes of WR for major cities (under Category-B):

Following new IS have been identified in WR for implementation:

Sr. No.	Name of Islanding Scheme	Name of Generating Station	State
1	Nagpur	Khaparkheda TPS	Maharashtra
2	Jamnagar	SikkaTPS	Gujarat
3	Bhuj (Anjar-Kukma)	APL TPS	Gujarat
4	Jabalpur	Amarkantak TPS	Madhya Pradesh
5	Raipur	Korba (W) TPS	Chhattisgarh

The above newly formulated Islanding Schemes have been formulated for five major Cities Nagpur, Jamnagar, Bhuj, Jaalpur and Raipur of Western Region and the same are yet to be implemented.

Northern Region

(i) Review of Existing Islanding Schemes of NR (under Category-A): In a series of meetings, the following existing Islanding Schemes of NR have been reviewed and shortcomings/gaps identified and action plan prepared:

State	Name of Major Cities/Strategic towns/locations identified for islanding schemes	Name of the Islanding scheme
NCT of Delhi		
i.	Island load of Delhi	Delhi IS [Implemented]
Uttar Pradesh		
ii.	Load connected to 220kV S/s of Khurja, Simbholi, Dibai and NAPS station load	NAPS IS [Implemented]
iii.	Lucknow, Raibareilly, and Fatehpur	Unchahar IS [Under Implementation]
Rajasthan		
iv.	Load connected to 220kV S/s of Banswara, Debari, Chittor, Sawa&Nibahera and RAPP-A & RAPP-B station load	RAPS IS [Implemented]
Punjab		
v.	Load connected to 220kV S/s of GHTP, Himmatpura, Bajakhana, Barnala (PSTCL), Mansa and Jhunir	GHTP Lehra Mohabat IS [Implemented]

Major Cities/locations covered: Delhi, Lucknow, Raibareilly Delhi Cant, Lucknow Cantt.

(ii) Formulation of new Islanding Schemes of NR for major cities/strategic locations (under Category-B):

Following new IS have been identified and prioritized in NR for implementation:

State	Name of Major Cities/Strategic towns/locations identified for islanding schemes	Name of the Islanding scheme
Uttar Pradesh		
i.	Island load of around 734 MW of Agra, Lalitpur and Jhansi	Agra IS [Newly proposed IS]
Rajasthan		
ii.	Barmer and Jodhpur	Rajwest IS [Newly proposed IS]
Punjab		
iii.	Loads of Patiala, Govindgarh, Mohali	Nabha Power Rajpura IS [Newly proposed IS]
iv.	Loads of Pathankot, Sarna, Mamoon, Gurdaspur and Dhariwal	RSD IS [Newly proposed IS]

Major cities/locations covered in Islanding scheme: Agra Cantt, Defence load of Barmer and Jodhpur, Pathankot (Air Base), Patiala Cant.

Southern Region

(i) **Review of Existing Islanding Schemes of SR (under Category-A):** In a series of meetings, the following existing Islanding Schemes of SR have been reviewed during March-July 2021 and shortcomings and gaps identified and action plan prepared for the same.

State	Major Cities covered in Islanding scheme	Name of the Islanding scheme
Telangana		
	Hyderabad	Hyderabad IS (Ramagundam IS) [In-Service]
Tamil Nadu		
	Chennai	Chennai IS [In-Service]
	Coimbatore, Palakkad (to be covered)	Neyveli IS [In-service]
	Madurai, Trivendrum, Kochi (to be covered)	Kudankulam IS [In-Service]

(ii) **Formulation of new Islanding Schemes of SR for major cities (under Category-B):** Following new IS have been identified and prioritized for implementation in SR:

State	Major Cities covered	Name of the Islanding scheme
Andhra Pradesh		
	Visakhapatnam Vizianagaram	Visakhapatnam IS (Simhadri IS) [Under Implementation]
	Vijayawada	Vijayawada IS [Newly proposed Scheme]
Karnataka		
	Bengaluru, Mysuru, Karwar	Bengaluru IS [Under Design]

Major Cities covered (Category-B): Bengaluru & Mysuru & Vijayawada & Kochi & Palakkad & Karwar

North Eastern Region

(i) **Review of Existing Islanding Schemes of NER (under Category-A):** The following existing Islanding Schemes of NER have been reviewed and shortcomings and gaps identified and action plan prepared for the same:

State	Name of Major Cities/Strategic towns/locations identified for islanding schemes	Name of the Islanding scheme
Tripura		
i.	This Islanding Scheme covers whole state of Tripura.	Tripura Islanding Scheme [Implemented]
Assam and Arunachal Pradesh		
ii.	This Island covers the loads of Upper Assam system & Deomali Area (Arunachal Pradesh)	Upper Assam (Assam-I) Islanding Scheme: [Implemented]

(ii) **Formulation of new Islanding Schemes of NER for major cities/strategic locations (under category-B):** Following new IS have been identified and prioritized in NER for implementation:

Guwahati (Assam-II) Islanding Scheme: This Island covers the loads of Guwahati, Azara, Agia, Boko, Sarusajai, Kahilipara, Narangi, Kamakhya, Dispur, Sisugram, Jawaharnagar

