GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.2807 ANSWERED ON 08.08.2024

CYBERSECURITY OF POWER GRIDS

2807 SHRI G M HARISH BALAYOGI:

Will the Minister of POWER be pleased to state:

- (a) whether the Government has conducted any study into cybersecurity provisions to protect power grids of the country;
- (b) if so, the details regarding the infrastructure and security upgradation workings undertaken during the last five years in power grids across the country, State-wise especially those in Andhra Pradesh;
- (c) the details regarding the cybersecurity audits of power grids of the country that have been undertaken during the last five years, year-wise;
- (d) whether there have been any incidents wherein the cybersecurity of the power grids in the country have been compromised due to cyber security attacks and if so, the details thereof including the action taken in this regard; and
- (e) whether the Government has undertaken any awareness campaign regarding the cybersecurity threat to power grids in the country and if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Central Government has taken several steps to ensure Cyber Security of the Power grid. Under the Information Technology Act, 2000, Indian Computer Emergency Response Team (CERT-In) has been designated as the national agency for responding to cyber security incidents. Further, National Critical Information Infrastructure Protection Centre (NCIIPC) has been established to

ensure protection of critical information infrastructure in the country including power sector. Computer Security Incident Response Team Power (CSIRT - Power) has been established in April, 2023 exclusively for the Power Sector. Additionally, Sectoral Computer Emergency Response Teams (CERTs) have been setup for Thermal, Hydro, Transmission, Distribution, Grid Operation and Renewable Energy sectors.

- (b): The following key steps have been taken to improve cyber security infrastructure relating to the power grid:
 - (i) GRID-INDIA has established a Security Operation Centre (SOC) to monitor security events and incidents across Regional Load Despatch Centres (RLDCs) and National Load Despatch Centres (NLDC). Information Technology (IT) infrastructure of NLDC has been improved with advanced security features.
 - (ii) A Security Operation Centre (SOC) has been set up in POWERGRID for 24X7 monitoring of critical assets.
 - (iii) Several IT infrastructure upgrades have been performed to improve cyber security across multiple states in the past five years viz.,
 - Manipur SLDC Two new firewalls and web servers commissioned.
 - Chhattisgarh SLDC Network Management System (NMS) and next generation firewall implemented.
 - Kerala SLDC Centralized End Point Protection implemented.
 - Bihar SLDC –Security Operation Centre (SOC) set up.
 - Madhya Pradesh, Punjab, Delhi SLDCs Next generation firewall implemented and
 - 11 SLDCs (Madhya Pradesh, Assam, Meghalaya, Odisha, Nagaland, Arunachal Pradesh, Damodar Valley Corporation, Tripura, Bihar, Uttar Pradesh and Bhakra Beas Management Board) have acquired ISO27001 (Information Security Management System) certification.
 - (iv) Upgradation to the existing Supervisory Control And Data Acquisition (SCADA) system in Andhra Pradesh SLDC is in progress. Firewalls for the IT infrastructure have been procured and commissioned.

- (c): As of March, 2024, 30 out of 35 State Load Despatch Centres managing the grid operations have conducted Vulnerability Assessment & Penetration Testing (*VAPT*) cyber security audits in the past five years (Annexure).
- (d): No such cyber security incident has been reported which affected the operations of Indian Power Grid.
- (e): Workshops, trainings, awareness sessions, conferences and cyber security exercises are being organized regularly by various agencies including NCIIPC, CERT-IN and CSIRT-Power for utilities, industry and academia to spread awareness among the stakeholders. Cyber Jaagrukta Diwas is organized on first Wednesday of every month to *create cybersecurity awareness among all employees*. Power sector employees are also encouraged to obtain certifications and attend courses offered by agencies such as National Power Training Institute (NPTI) and Rashtriya Raksha University.

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 2807 ANSWERED IN THE LOK SABHA ON 08.08.2024

Grid Utilities – Status of VAPT Cyber Security Audit

SI.	State/UT	SLDCs	Status (VAPT-Cyber
No.	State/O1	SLDCS	Security Audit Done-Year)
1	Punjab	Punjab SLDC, Patiala	2021, 2022, 2023
2	-		·
3	Haryana	Haryana SLDC, Panipat	2021,2022, 2023
	Himachal Pradesh	Himachal Pradesh SLDC, Shimla,	2021,2022, 2023
4	J&K	J&K SLDC – Jammu	2021,2022, 2023, 2024
5	Rajasthan	Rajasthan SLDC, Jaipur	2021,2022, 2023,2024
6	Uttar Pradesh	Uttar Pradesh SLDC, Lucknow	2021, 2022, 2023, 2024
7	Uttarakhand	Uttarakhand SLDC, Dehradun	2021, 2022, 2023, 2024
8	Delhi	Delhi, SLDC New Delhi	2021, 2022, 2023, 2024
9	Chandigarh	Bhakra Beas Management Board SLDC Chandigarh	2021, 2022, 2023
10	Gujarat	Gujarat Energy Transmission Corporation Limited SLDC	2022, 2023, 2024
11	Chhattisgarh	Chhattisgarh SLDC, Raipur	2021, 2022, 2023, 2024
12	Madhya Pradesh	Madhya Pradesh SLDC, Jabalpur	2021, 2022, 2023, 2024
13	Maharashtra	Maharashtra SLDC, Navi Mumbai	2021, 2022, 2023, 2024
14	Goa	Goa SLDC, Panaji	2021, 2022, 2023
	U.T. of Dadra & Nagar	Electricity Department, Daman &	2024 2022 2022
15	Haveli.	Diu	2021, 2022, 2023
16	Andhra Pradesh	Andhra Pradesh SLDC, Vijayawada	2021, 2022, 2023, 2024
17	Karnataka	Karnataka SLDC, Bangalore	2021, 2022, 2023, 2024
18	Kerala	Kerala SLDC, Kalamassery, Cochin	2021, 2022, 2023, 2024
19	Tamilnadu	Tamilnadu SLDC, Chennai	2021, 2022, 2023, 2024
20	Telangana	Telangana SLDC, Hyderabad	2021, 2022, 2024
21	Puducherry	Puducherry SLDC, Puducherry	2022, 2024
22	Arunachal Pradesh	Arunachal Pradesh SLDC	2022, 2023, 2024
23	Assam	Assam,SLDC, Guwahati	2022, 2023, 2024
24	Manipur	Manipur SLDC, Imphal	2022, 2023, 2024
25	Meghalaya	Meghalaya SLDC, Shillong	2021, 2022, 2023, 2024
26	Mizoram	Mizoram SLDC, Mizoram	2022, 2023, 2024
27	Nagaland	Nagaland SLDC, Dimapur	
28	Tripura	Tripura SLDC, Agartala	
29	Bihar	Bihar SLDC , Patna	
30	Jharkhand	Jharkhand SLDC, Ranchi	2020, 2022, 2023
31	West Bengal	West Bengal SLDC, Howrah	
32	Orissa	Orissa SLDC, Bhubaneshwar	2021, 2022, 2024
33	DVC	DVC, SLDC, Howrah & Kolkata	2021, 2022, 2023
34	Sikkim	Sikkim SLDC, Gangtok	
	Grid Controller of		
	India Limited (GRID-		2020, 2021, 2022, 2023,
	INDIA) 6 control	NLDC, NRLDC, SRLDC,	2024
35	centers	WRLDC,ERLDC, NERLDC	
