उत्तर प्रदेश पावर कारपोरेशन लिमिटेड



(उ०प्र० सरकार का उपक्रम)

U.P. POWER CORPORATION LIMITED

(Govt. of Uttar Pradesh Undertaking) शक्ति भवन, 14 अशोक मार्ग, लखनऊ CIN: U32201UP1999SGC024928

संख्या—35—ज0श0 प्रवसु0 एवं प्रशि0—01/पाकालि/2022—11(06)प्रसे0—2000, M.F. दिनाँक 07 01.2022

कार्यालय ज्ञाप

National Power Training Institute, Faridabad, Haryana द्वारा "साइबर सिक्योरिटी" विषय पर आयोजित एक सप्ताह (दिनाँक 10.01.2022 से 14.01.2022) की ऑन लाईन थ्योरी तथा एक सप्ताह की ऑन लाइन हैडस ऑन (जिसकी तिथियाँ NPTI द्वारा बाद में सूचित की जायेगीं) प्रशिक्षण हेतु एतदद्वारा निम्नलिखित अधिकारियों को नामित किया जाता है :-

क्रं	अधिकारी का नाम	पद	SAP आई०डी०
	A STATE OF THE PERSON OF THE P	पू०वि०वि०नि०लि०।	网络中国 网络
1	श्री अरूणेश कुमार(CISO)	अधीक्षण अभियन्ता (आई०टी०)	11007069
2	श्री भरत भूषण	अधिशासी अभियन्ता (आई०टी०)	11001357
3	श्री निर्भय कुमार सिंह	सहायक अभियन्ता (आई०टी०)	11003392
		म०वि०वि०नि०लि०।	
4	श्री अशोक सुन्दरम् (CISO)	अधीक्षण अभियन्ता (आई०टी०)	11000264
5	श्री अरविन्द सिंह	अधिशासी अभियन्ता (आई०टी०)	13000017
6	श्री नितीश कुमार मिश्रा	अधिशासी अभियन्ता (आई०टी०)	11000231
7	श्री स्वप्निल सिंह	सहायक अभियन्ता (आई०टी०)	11002080
		द०वि०वि०नि०लि०।	
8	श्री प्रदीप खत्री(CISO)	अधीक्षण अभियन्ता (आई०टी०)	11005373
9	श्री पियुष कुमार सिंह	सहायक अभियन्ता (आई०टी०)	11000433
		प०वि०वि०नि०लि०।	
10	श्री शिवम शर्मा(CISO)	अधिशासी अभियन्ता (आई०टी०)	11000182
11	श्रीमति प्रेरणा	सहायक अभियन्ता (आई०टी०)	11000183
12	श्री अरविन्द कुमार	सहायक अभियन्ता (आई०टी०)	11000185
AGO N		केस्को-कानपुर।	
13	श्री अमित कुमार धर्मा(CISO)	अधिशासी अभियन्ता (आई०टी०)	11000035
		च०प्र०पाकालि०।	
14	श्री प्रतीश प्रांजल	अधिशासी अभियन्ता (आई०टी०)	11001205
15	श्री मधुर कुमार वर्मा	सहायक अभियन्ता (आई०टी०)	11002294
16	श्री अम्बरीश मिश्रा	सहायक अभियन्ता (आई०टी०)	11000533
17	श्री भानु प्रताप सिंह	सहायक अभियन्ता (आई०टी०)	11002247
18	श्री मनीष कुमार	सहायक अभियन्ता (आई०टी०)	11003281
19	श्री आर०एम० भारती	सहायकअभियन्ता (आई०टी०)	11003464

उपर्युक्त कार्यक्रम हेतु यथा निर्धारित शुल्क रू० 39,000.00 (उनतालिस हजार मात्र) (GST @18% Extra) प्रति प्रतिभागी की दर से भुगतान आर0टी0जी0एस0 C/A No 10724879119, National Power Training Institute, Faridabad, IFSC code-SBIN0003245, SBI, Sarai Khwaja, Faridabad, GST Number: 06AACAN2698A1ZR के माध्यम से भूगतान किये जाने की स्वीकृति एतदद्वारा प्रदान की जाती है।

उक्त सन्दर्भ में होने वाला समस्त व्यय उ०प्र० पावर कारपोरेशन लि० के चालू वित्तीय वर्ष के वजट के सुसंगत मद में दर्शाया जायेगा।

प्रबन्ध निदेशक

संख्या-35(i)-ज0शा प्र0सु० एवं प्रशि0-01/पाकालि/2022, तद्दिनांक ।

प्रतिलिपि :- डा० तृप्ता ठाकुर, महानिदेशक, राष्ट्रीय विद्युत प्रशिक्षण प्रतिष्ठान, फरीदाबाद, हरियाणा को उनके पत्र सं0-D.O No. NPTI/Co/Trg/Cyber/2021/5789, Date 22-12-2021 के संदर्भ में सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

आज्ञा से,

(एस० पीठ सिंह) उप सचिव (ज०श० प्र०स्० एवं प्रशि०)

संख्या-35(ii)-ज0श0 प्र0सु0 एवं प्रशि0-01/पाकालि/2022, तद्दिनांक।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :--

- 1. अध्यक्ष, उ०प्र० पावर कारपोरेशन लि०, शक्ति भवन, लखनऊ के निजी सचिव।
- 2. प्रबन्ध निदेशक, उ०प्र० पावर कारपोरेशन लि०, शक्ति भवन, लखनऊ के निजी सचिव।
- 3. प्रबन्ध निदेशक, पूर्वांचल / मध्याँचल / दक्षिणाँचल / पश्चिमाँचल, वि०वि०नि०लि०, कानपुर विद्युत आपूर्ति कम्पनी लि०, वाराणसी / लखनऊ / आगरा / मेरठ / केस्को—कानपुर ।
- 4. समस्त निदेशकगण, उ०प्र० पावर कारपोरेशन लि०, शक्ति भवन, लखनऊ।
- मुख्य अभियन्ता (आर०ए०पी०डी०आर०पी), उ०प्र०पा०का०लि०, शक्ति भवन विस्तार, लखनऊ को उनके
 टिप्पणी एवं आदेश सं0—1641/आर०ए०पी०डी०आर०पी०—ए/आई०टी० दिनांक 31.12.2021 के सन्दर्भ में।
- 6. अपर सचिव (प्रथम / द्वितीय), उ०प्र० पावर कारपोरेशन लि०, शक्ति भवन, लखनऊ।
- 7. लेखाधिकारी (केन्द्रीय भुगता),उ०प्र०पा०का०लि०, शक्ति भवन विस्तार, लखनऊ।
- 8. अधिशासी अभियन्ता (वेब), शक्ति भवन लखनऊ को उ०प्र०पा०का०लि० की वेबसाईट पर अपलोड करने हेतु।
- 9. समस्त प्रतिभागियों को ब्रोशर की छायाप्रति इस आशय के साथ प्रेषित की प्रश्नगत कार्यक्रम में भाग लेने हेतु यथा निर्धारित शुल्क उक्त प्रस्तर—2 में वर्णित पद्धति से अपनी आहरण/वितरण इकाई से आयोजित संस्था को ससमय उपलब्ध कराने का कष्ट करें।

आज्ञा से,

(एस० पी० सिंह) उप सचिव (ज०श० प्र०सु० एवं प्रशि०)



राष्ट्रीय विद्युत प्रशिक्षण प्रतिष्ठान National Power Training Institute

An ISO 9001: 2015 & 14001: 2015 Organisation (Ministry of Power, Govt. of India)



डॉ. तुप्ता ठाकुर महानिदेशक Dr. Tripta Thakur **Director General**

3916

D.O No. NPTI/Co /Trg /Cyber/2021/ 5789

Dated: 22.12 2021

Sub Training and Certification Program on Cyber Security —Reg

Dear Shri Pankaj Kumar Ji,

संख्या । ने १ ने बार्गा प्रत्य एवं प्रशिष्-01 /पाञ्काञ्जिञ् /2011 पत्रावली संख्या 11 (६) प्राप्त । २०००

Ministry of Power has issued Cyber Security in Power Sector Guidelines 2021 on 7th October 2021. The guidelines on Cyber Security, in the form of Articles, requires mandatory Compliance by all Responsible Entities.

In this regard under Article 8, CEA has given mandate for Training and Certification of all personnel engaged in O & M of IT and OT Systems to NPTI. These personnel have to mandatorily undergo courses on Cyber Security of Power Sector immediately within 90 days from notification of CEA Guidelines on Cyber security in Power Sector.

The Governing Board for PSO Training and Certification has approved 1 week class room Basic Level program and 1 week laboratory program for the Power Sector Employees proposed to be started from 10th January 2022.

You are requested to convey the nominations of 30-35 employees engaged in the O & M of IT and OT systems of your organization to participate in the above mentioned Training Program.

The list may be forwarded to Shri Mukesh Kumar, Dy. Director, NPTI: email: mukesh.npti@qov.in, Mobile.: 9810704004 at the earliest to make necessary arrangements. The brochure for the 1 week on-line program is attached herewith.

5196 MOSh 25/12/4 With kind regards,

प्रबन्ध निदेशक

निदेशक (काठ

उत्तर प्रदेश पावर कारपोरेशन लि०

To

Yours sincerely.

EE(A) Dir. (PM 4A)
(Dr. Tripta Thakur)

Shri Pankaj Kumar (IAS)

Managing Director

Uttar Pradesh Power Corporation Limited (UPPCL), Shakti Bhawan Extension.

अंक अवस् वास् 14 Ashok Marg Lucknow - 226 001

(Uttar Pradesh)

MODE 34 (112) (1121)

A.C. DI

एनपीटीआई के साथ पावर सेक्टर का सुनिश्चित सम्पूर्ण विकास



National Power Training Institute

An ISO 9001 & ISO 14001 Organization Ministry of Power, Govt. of India NPTI Complex, Sector: 33 Faridabad: 121003, Haryana







CYBER SECURITY IN POWER SECTOR

Cyber intrusion attempts and cyber- attacks in any critical sector are carried out with a malicious intent. In the power sector it is either to compromise the power supply system or render the great operation insecure. Any such compromise may result in operations of equipments, equipment damages or even in a cascading grid blackout. The much hyped air gap myth between IT and OT systems now stands shattered. The artificial air gap created by developing firewalls between any IT and OT systems can be jumped by any insider or an outsider through social engineering. After gaining the entry inside the system through privilege escalation, the control of IT network and operations of OT systems can be taken over even remotely by any cyber advisory. The gain of sensitive operational data through such intrusions may help the cyber attackers to design more sinister and advanced cyber attacks. In order to reduce the risk, while robust risk-driven cyber security architecture, policies, and procedures, and application of cyber risk mitigating technologies are required, increasing public awareness, and development of human resources trained in cyber security technology, as well as policy makers, lawenforcement, judicial actors, are law makers are also equally necessary. In particular, lots of cyber risks are sector specific. Therefore, domain knowledge combined with cyber security education and hands-on training are required. Awareness among individuals who use technology on a daily basis, as well as employees in government, businesses, education institutes, utilities etc., are also very important. Thus, a multi-prong approach to enhance the country's cyber security posture is a pressing need of today's world.

NATIONAL POWER TRAINING INSTITUTE WILL CONDUCT TRAINING AND CERTIFICATION PROGRAM ON CYBER SECURITY

As per Article 8 of CEA (Cyber Security in Power Sector) Guidelines, 2021, National Power Training Institute (NPTI) in consultation with CEA has identified and designed domain specific courses on Cyber Security for different target groups in Power Industry, NPTI will organize class-room training programs along with hands-on training programs for personnel having authorized cyber or authorized physical access (unescorted or escorted) to their Critical Systems. All Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from NPTI.

1

About National Power Training Institute

National Power Training Institute has been set up by the Government of India under the Ministry of Power, to function as the National Apex Body for Human resources development of the Indian Power Sector. The corporate office of NPTI is located at NPTI Complex, Sector-33, Faridabad, Haryana. NPTI operates on all India basis with 11 constituent Institutes spread over the country. The Institutes are at Faridabad, Badarpur, Nagpur, Durgapur, Bangalore (PSTI and HLTC), Neyveli, Guwahati, Shivapuri, Nangal and Alappuzha.

NPTI has over 50 years of professional expertise in the field of Training, Education and HRD in Power Sectors with industry specific Technical Interface. NPTI has been in the forefront of the Power Industry in developing Hi-Tech Training facilities such as Multimedia Computer Based Training (CBT) Centres and the State-of-the-art Full scope and Distributed Digital Control High – Fidelity, High – Quality, Real – Time Training Simulators.

OBJECTIVE OF THE TRAINING AND CERTIFICATION PROGRAM

- Creating cyber security awareness
- Creating a secure cyber ecosystem
- Creating a cyber-assurance framework
- Strengthening the regulatory framework
- Creating mechanisms for security threat early warning, vulnerability management and response to security threats
- Securing remote operations and services
- Protection and resilience of critical information infrastructure
 - Reducing cyber supply chain risks
- Encouraging use of open standards
- Promotion of research and development in cyber security
 - Human resource development in the domain of Cyber Security
- Developing effective public private partnerships
- Information sharing and cooperation
- Operationalization of the National Cyber Security Policy



BASIC LEVEL TRAINING AND CERTIFICATION PROGRAM ON CYBER SECURITY

As per Article 8 of CEA (Cyber Security in Power Sector), National Power Training Institute (NPTI) will be the Certifying Authority for Basic Level Training and Certification Program.

NPTI will conduct the Training and Certification Programs in On-line/Off-line/ Hybrid mode. These courses will equip the Power Professionals with necessary inputs to Creating mechanisms for security threat early warning, vulnerability management and response to security threats.

SCHEDULE

Training Mode	Duration	Date	Course Fee (INR)
Theory (On-line)	1 Week	10 th to 14 th January, 2022	18,000 (GST @ 18% Extra)*
Hands-on (On-line)	1 Week	Date will be announced	21,000 (GST @18% Extra)*

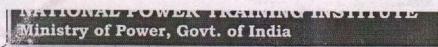
Above mentioned course fee is applicable only for online mode of training.

WHO CAN ATTEND THE TRAINING AND CERTIFICATION PROGRAM

All Power Professionals from Generation, Transmission and Distribution Sector of Power Industry are invited to participate in the Training Program.

IMPORTANT NOTE

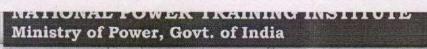
After the completion of Theoretical Training, Hands-on sessions will be conducted at a gap of two/ three weeks for the same set of participants. Participants should complete both the modules to get the Course Completion Certificate.



BAS' LEVEL TRAINING AND CERTICICATION PROGRAM ON CYBER SECURITY (THEORY)

Day	FN/AN	Focused on
Day 1	Introd	luction to Cyber Security and Cyber Risk Management
	Fore Noon	Introduction to Cyber Security, Cyber Risks, Risk Assessment Models, Basic Cyber hygiene, Cyber Security of IT vs. OT, Role of CERT-In, Power Sector Sectorial CERTs, NCIIPC, IT Act 2000 with amendments, Govt. Initiatives and Guidelines
	After Noon	Cyber Security Awareness Phishing Awareness, Remote Session Security, Device/End Point Security, Server Security, Network Security, Application Security, ICS and SCADA Security
Day 2	Britis .	Network Security
	Fore Noon	Network Security Fundamentals Network Zoning and Segregation, Network Cyber Threats, Network Protocols and their security Issues, DNS, TCP/IP, LAN, Physical Layer Security, Wifi Security Intranet Security, Port Analysis, Mitigation Techniques
	After Noon	Firewall, Intrusion Detection and Intrusion Prevention, Detecting Network based Attacks, Encryption, Hashing, Digital Signature, Router Security
Day 3		Application Security
	Fore Noon	Security Threats to Applications – Stand alone, Network based applications, Web applications, Application Security Threats and Problems, Application Security Threat Detection and Mitigation, Vulnerability Assessment and Penetration Testing (VAPT), OWASP Top 10 Vulnerabilities
	After Noon	Web Application Security Threats and Attacks, Web Application Attack Detection SSL/TLS and Digital Certificates, Capturing Web traffic, Web Application VAPT

1



BASIC LEVEL TRAINING AND CERTIFICATION PROGRAM ON CYBER SECURITY (THEORY)

Day	FN/AN	Focused on
Day 4		Best Practices and Awareness
	Fore Noon	Introduction to various standards such as NIST Cyber Security Framework/NERC-CIP/ISO27001/ISO27002/ISO 27019 etc., NESCOR guide to vulnerability assessment, Security assessment strategy, Risk Assessment
	After Noon	Authentication and Authorization, Network Traffic Analysis, Patch Management and Upgradation, Solar, Wind, Colonial Pipeline, Black Energy 3 & Stuxnet, malware infection on Kudankulam Nuclear Power Plant (KKNPP) - Lessons Learnt
Day 5		Emerging Technologies
	Fore Noon	Intrusion Detection System (IDS) & Intrusion Prevention System (IPS), Deception technology, Data diode, SIEM (Security Information and Event, Management) & EDR (Endpoint Detection & Response), SOC (Security Operation Center)
	After Noon	Technologies for anomaly detection in, power system, Malware Detection, Artificial Intelligence and Machine Learning, Industrial IoT, Big Data, Blockchain etc.
		Appraisal



BASY LEVEL TRAINING AND CERTIFICATION PROGRAM ON CYBER SECURITY (HANDS-ON)

Day	FN/AN	Focused on	
Day 1	Hardening of Your System		
	Fore Noon	LAB: Hands on Malware Analysis Manual Tools to check malware, Use URL, IP address, Domains & File Hashes and Use of Virus Total to check against malware, Malware Analysis Tool Usage (Signature, Yara Rules)	
	After Noon	LAB: Operating System Hardening Understanding the concept of O/S Hardening against, Vulnerabilities, Lynis Tool for Linux, Windows Group Policy Edit Tool, Opens cap and Scap Workbench for, Configuration Audit	
Day 2	Finding Security Flaws/Vulnerabilities		
	Fore Noon	Application Security Buffer Overflow Lab, Integer Overflow Lab, Privilege Escalation Labs , Open VAS Lab	
	After Noon	Web Security Command Injection Lab, SQL Injection Lab, Cross-site Scripting Lab, Cross-site, Request Forgery Lab, Session Hijacking Lab, OWASP Top 10 vulnerabilities Lab	
Day 3		Network Security Lab	
	Fore Noon	Network Labs Arp Spoofing Lab, Packet Sniffing and Packet Analysis Lab, Man in-the-Middle Attack Network reconnaissance, Wireshark overview & Hands on	
	After Noon	Wifi Network Lab Password sniffing in wifi network, Reconnaissance on wifi network using aircrack-ng Wifi password cracking lab	



BASIC LEVEL TRAINING AND CERTIFICATION PROGRAM ON CYBER SECURITY (HANDS-ON)

Day	FN/ AN	Focused on
Day 4	一带在	Intrusion Detection Lab
	Fore Noon	Using Snort NIDS, Using Zeek/Bro NIDS Visualization of network traffic data Visualization of security events using ELK
	After Noon	Host/Endpoint Intrusion Detection Lab using Wazuh OSSEC HIDS Lab
Day 5	Deception Technology Labs and Organizational Security Policy Lab	
	Fore Noon	Honeypots for Threat Intelligence Collection Lab, Use of Honey Tokens
	After Noon	Organization Level Security Policy – Requirements, Discussions and Formulation (Discussion Oriented Lab)
	VVIII	

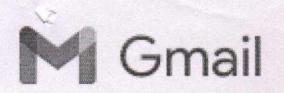
CONTACT DETAILS

DR. MANJU MAM
Principal Director
NPTI, CO, Faridabad
Mail I.d: manju.npti@gov.in

SHRI. SANJAY D PATIL
Director
NPTI, Shivapuri
Mail I.d: sanjay.npti@gov.in

GOOGLE LINK TO SEND NOMINATIONS https://docs.

google.com/forms/d/e/1FAIpQLSe_2dpvSoZly4fVvcZHbnmm1wbQ0-uv_NOOM42VhC3rXtxkaA/viewform?usp=sf_link



Deputy Secretary dsmpi01uppcl@gmail.com/

Account details of NPTI

1 message

Mukesh Kumar

Fri, Jan 7, 2022 at 2:01

<mukesh.npti@gov.in>

PM

To: dsmpi01uppcl@gmail.com

Cc: "Dr. Tripta Thakur" <dg.npti@gov.in>, "Dr. Manju Mam"

<manju.npti@gov.in>

Dear Sir,

Greetings from NPTI!

Please find below NPTI's account details:

C/A No 10724879119
National Power Training Institute, Faridabad
IFSC code - SBIN0003245
SBI, Sarai Khwaja, Faridabad
GST Number: 06AACAN2698A1ZR

With Kind RegardsMukesh KumarDeputy Director(T/F)/PRONational Power Training Institute,FaridabadMinistry of Power,Govt.of IndiaMob:9810704004