Job oriented Program POST GRADUATE DIPLOMA COURSE IN POWER SYSTEM OPERATION

(52 Weeks)
III BATCH (2023)

PROSPECTUS



NATIONAL POWER TRAINING INSTITUTE

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

Power Systems Training Institute

Subramanyapura Road, Near Yarab Nagar Bus Stop, Banashankari II Stage, Bangalore- 560 070 (KARNATAKA) INDIA

TELEFAX: 080 26713758 TEL: 080-26934369 E-mail: pstinpti@yahoo.com Website: www.nptibangalore.com



NATIONAL POWER TRAINING INSTITUTE

Power Systems Training Institute

(An ISO 9000:2000 & ISO 14001 Organization) Ministry of Power, Govt. of India BANGALORE-560 070



Announces III Batch of

52 Weeks Post Graduate Diploma Course in POWER SYSTEM OPERATION

WHY YOU SHOULD JOIN?

This is a job oriented Graduate Engineer Program for those who desire to make a career in the power sector. On successfully undergoing this course, the Graduate Engineers will find immense opportunities of employment in Indian Power Sector.

ABOUT THE COURSE

The course content complies with the syllabus for Engineers and Supervisors for Operation & Maintenance of Transmission & Distribution Systems as per Safety and Electric Supply Regulations 7(3) of Goyt, of India.

The instruction and training methodology comprises 60% theory and 40% practical Sessions. The main objective of the course is to create a technically and professionally trained manpower available for the Power Industry.

PLACEMENT

Many of our previous batch trainees are employed with reputed Organizations like Sterlite Grid, Bajaj Electricals, Wind World India Ltd., Arcadis, Toshiba Transmission and Distribution, Khatib and Alami, JVS Electronics, National Contracting Company, Atkins Global, KEC, Kalpataru Power Transmission Co., Adani Power, Kalkitech, Suzlon, Genus Power & Infrastructure Company, Manav Energy Pvt Ltd, Oblum Electric, Vijay Electricals, Teems India Towerlines Pvt. Ltd., Open Systems International, Schweitzer Engineering Lab Pvt. Ltd., Manikaran Power Etc.

IMPORTANT DATES

Issue of Prospectus	01.05.2023
Last Date for receipt of application forms in all respect	27.07.2023
Display of merit list in website	28.07.2023
Counseling & Admission	03.08.2023 & 04.08.2023
Commencement of the Course	07.08.2023

IMPORTANT POINTS

- ✓ ELIGIBILITY: Bachelor of Engineering or equivalent in "Electrical" / "Electrical & Electronics" / "Power Engineering".
- ✓ **AGE LIMIT:** No age limit.
- SELECTION CRITERIA FOR ADMISSION:
 Percentage of marks obtained in the B.E. or equivalent examination as per University norms.
- NO. OF SEATS: 60 (Sixty only). 25% seats are reserved for sponsored category. Reservation for SC, ST, OBC & PH will be as per Govt. norms in the non-sponsored category.

✓ FEES:

- Rs. 2,30,000 (Including GST)
- Rs.54,000/- is Hostel room charges for residential candidates and canteen charges will be as per actual.
- ✓ **SPONSORED CANDIDATES:** The candidates sponsored by the companies, if fulfilling eligibility requirement, will be admitted directly
- **✓** HOW TO APPLY

Download the Application form from our website. For all other information please refer to the application.

ADDRESS FOR CORRESPONDENCE

The Director & Head of Institute

National Power Training Institute-PSTI, Subramanyapura Road, Banashankari-II Stage, Near Yarab Nagar Bus stop,Bangalore-560 070

Contact: Tele-Fax: 080-26713758

Trg. Section e-mail ID: pstinpti.training@gmail.com

Shri Sanjay D. Patil, Director & HoI, (M) 9480253706, sanjay.npti@gov.in

Smt. Piyali Sarkar, Deputy Director, (M) 9900097375 piyali.npti@gov.in

www.npti.gov.in/npti psti bangalore

To download the prospectus and application form visit: www.nptibangalore.com

FIVE DECADES OF SERVICE TO THE POWER SECTOR

ABOUT NPTI, BANGALORE

Power Systems Training Institute, Bangalore, established in the year 1972 (formerly functioning under CEA) has been brought under the National Power Training Institute (NPTI); the National Apex Body for Training Power Sector Personnel in the country w.e.f. 1st April 2002. During the last 45 years, the Institute has trained many power sector personnel in the area of Transmission & Distribution of Power, who are manning various important positions in Power Sector of the Country. It has a self-contained complex with hostel and Institute with all infrastructural and instructional facilities. The PSTI, Bangalore is equipped with the laboratories for Power System Studies, Power System Simulation, Relay Testing and High Voltage Testing. The Hot Line Training Center, also a unit of NPTI in Bangalore, imparts live line maintenance training of High Voltage transmission lines up to 400KV. The Institutes have experienced Faculty members, Trainers, Laboratories, etc.

WHY YOU SHOULD JOIN?

Power Sector is a continuously expanding sector of Indian infrastructure contributing significantly to the GDP. The Indian Electricity Act, 2003 has opened private sector participation in the Transmission & Distribution of Power creating a large demand for the trained persons in Electrical Utilities.

The main objective of the course is to create technically sound and trained manpower readily available for recruitment to the power utilities dealing with Transmission & Distribution of Electrical Power.

This is a job oriented **Graduate Engineer Program** for those who desire to make a career in the power sector. On successful completion of this course, the Graduate Engineers will get their knowledge and skills sharpened, paving the way for better employment opportunity in various power companies.

ABOUT THE COURSE:

The course content complies with the syllabus for Engineers and Supervisors for Operation & Maintenance of Transmission & Distribution Systems as per Safety and Electrical Supply Regulations 7(3) of Govt. of India.

PLACEMENT:

NPTI maintains close linkage with companies. Placement assistant will be provided by the Institute. The previous trainees got placement in Sterlite Grid, Bajaj Electricals, Wind World India Ltd., Arcadis, Toshiba Transmission and Distribution, Khatib and Alami, JVS Electronics, National Contracting Company, Atkins Global, KEC, Kalpataru Power Transmission Co., Adani Power, Kalkitech, Suzlon, Genus Power & Infrastructure Company, Manav Energy Pvt Ltd., Oblum Electric, Vijay Electricals, Teems India Towerlines Pvt. Ltd., Open Systems International, Schweitzer Engineering Lab Pvt. Ltd., Manikaran Power Etc. However, the placement depends on the response from the Industry and performance of the trainees.

ELIGIBILITY:

Bachelor of Engineering or equivalent in "Electrical" / "Electrical & Electronics" / "Power Engineering".

AGE LIMIT:

No age limit.

SELECTION CRITERIA FOR ADMISSION:

Percentage of marks obtained in the B.E. or equivalent examination as per University norms. In case of universities awarding Grade Points (CGPA or equivalent), the same should be converted into percentage and the conversion formula obtained from University/College should be attached.

NO. OF SEATS:

60 (Sixty) Reservation for SC, ST, OBC & PH will be as per Govt. norms in the non-sponsored category.

FEES: (Non-sponsored Category)

Residential/ Non-Residential	Course Fee (including GST)	Lodging Charges (Optional)	Caution Money (Refundable)	Total
Residential	2,30,000/-	54,000/-	15,000/-	2,99,000/-
Non-residential	2,30,000/-	0	15,000/-	2,45,000/-

1st Installment

Residential/ Non-Residential	Course Fee (including GST)	Lodging Charges (Optional)	Caution Money (Refundable)	Total
Residential	50,000/-	27,000/-	15,000/-	92,000/-
Non-residential	50,000/-	0	15,000/-	65,000/-

2nd Installment

Residential/ Non- Residential			Total
Residential	80,000/-	0	80,000/-
Non-residential	80,000/-	0	80,000/-

3rd Installment

Residential/ Non- Residential	Course Fee (including GST)	Lodging Charges (Optional)	Total
Residential 50,000/-		27,000/-	77,000/-
Non-residential	50,000/-	0	50,000/-

4th Installment

Residential/ Non- Residential	Course Fee (including GST	Lodging Charges (Optional)	Total
Residential	50,000/-	0	50,000/-
Non-residential	50,000/-	0	50,000/-

SPONSORED CANDIDATES:

The candidates sponsored by Power Utilities/Corporations/Companies and fulfilling the eligibility requirement will be admitted directly.

HOW TO APPLY:

Application form along-with prospectus can be obtained from the Institute by paying cash or at the following address by post sending A4 size self addressed envelope alongwith an online paid receipt towards application fee of Rs. 500/-. The online banking details are as follows:

Name of the Beneficiary	National Power Training Institute
Name of the Bank & Branch	State Bank of India, Sarai Khawaja Branch
Address of the Branch	State Bank of India, Sarai Khawaja Branch, Faridabad
NEFT IFSC Code	SBIN0003245
Account Type	Current
Account No.	10724879119
GST no.	06AACAN2698A1ZR

The application form complete in all respects along with the attested copies of documents listed in the application form are to be sent or submitted in person to the address mentioned below latest by 27.07.2023. NPTI shall not be responsible for any postal delay or loss of mail.

Address for Correspondence

Shri. Sanjay D. Patil Director & HoI, National Power Training Institute (PSTI) Subramanyapura Road, Banashankari-II Stage, Near Yarab Nagar Bus stop, Bangalore-560 070

Contact Details:

Office	080-26713758
Shri. Sanjay D.Patil, Director	9480253706
& HoI	sanjay.npti@gov.in
Smt. Piyali Sarkar, Deputy	9900097375
Director	piyali.npti@gov.in
Smt. K Madhavi, PS-II	6362609386
Sint. A Maunavi, PS-II	pstinpti.training@gmail.com

IMPORTANT DATES

Issue of Prospectus	01.05.2023
Last Date for receipt of application forms in all respect 27.07	
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BOARDING & LODGING

The total lodging charges of Rs. 54,000/- for twelve months are to be paid in two installments by residential participants.

GENERAL

Security Deposit: An amount of Rs. 15,000/- as Caution Money (Refundable) against use of Library, Hostel, Stores, etc. is to be deposited by the student at the time of joining the Institute.

Hostel: No outsiders – known or relatives – shall be permitted to use hostel facilities for whole or part of the day.

REFUND POLICY:

Refund on Discontinuation of the course: In case a selected candidate discontinues from the program for any reason, no part of course fees and lodging charges will be refunded. The security deposit becomes refundable at the time of discontinuation after the dues.

Refund on Completion of Course: Only the Security Deposit will be refunded after deduction of dues, if any.

Late Fee: If a candidate fails to deposit any installment of course fee by the due date, late fee @ Rs. 100/- per week will be chargeable from the due date.

The right of admission will rest with NPTI. Candidates found irregular in attending training or uninterested shall not be considered for placement and/or their course certification will be reviewed.

HOW TO REACH THE INSTITUTE:

The Institute is about 10 KMs south of Bangalore City Railway Station/Bangalore City Bus Stand and 45 KMs from Bangalore International Air Port from where Pre-paid taxi / Auto-rickshaw services are available. City buses also ply via Yarab Nagar bus stop (bus route Nos. 15C, 15E, 15H, 210A, 210R and 210E from Bangalore City Bus Station).

Course Module

S1. No.	Module	Weeks
1	General Introduction- Overview of Power Sector Scenario	0.6
2	Generation Systems- Thermal, Hydro, Nuclear, CCGT, Diesel Power Plant	
3	Fundamentals of Electricity, Power Quality, Harmonics & Mitigation	1
4	Renewable Energy Sources	2
5	SPV System Configurations- Stand alone, Grid Connected, Rooftop SPV systems, SPV System Design, Micro grids	1
6	Power Electronic Controls - Rectifier, Inverter, Power Control Unit	2
7	Power System Studies	1
8	Power System Planning, Optimization, Design and Civil Engineering requirements	1.4
9	Engineering of Transmission and Distribution Sub- Stations	1.2
10	Engineering of Transmission and Distribution Lines	1.6
11	Inspection of Electrical Installations and Indian Electricity (IE) Safety Regulations	1.4
12	HT & LT Switchgear, Battery, Battery chargers, DC Distribution Board and UPS	1.8
13	Smart Meters and Advanced Metering Infrastructure	1.2
14	Power Cables and LT Cables	0.6
15	Protective Relays	1.2
16	Power System Protection	2
17	Power System Operation, Power Markets and Tariff regulations	1.4
18	Flexible AC Transmission Systems	0.8
19	Grid Integration of Distributed Generation	0.6
20	Energy Storage, Scheduling and Despatch of RES systems	1
21	Power System Automation, SCADA, EMS, PMU, Wide Area Monitoring	1.4
22	Smart Grids, Smart Power flow Controllers and Intelligent automation	0.6
23	Project Management and Contracts management	1
24	O&M of T&D Systems and Renewable Energy Power Systems	1
25	Power System Emergency Operation and Restoration	1
26	Distribution Service Connections, H R Aspects & CRM	1.4
27	Reliability issues, customer awareness and satisfaction, Trouble call management	1
28	Energy Efficiency and Energy Audit	1.2

29	Demand Side Management and Ancillary Services	1.2
	Management	
30	Best Practices in Transmission and Distribution Loss	1
30	Reduction	1
31	General Principles of Live Line Maintenance Techniques	1
31	(LLMT)	1
32	Demo of LLMT on 11 kV and 33 kV systems	1
33	Hands on LLMT – 11 kV and 33 kV systems	2
34	Live line Punctured Insulator Detection	1
25	Technical Visits – Power plants, Sub-Stations,	4
35	Manufacturing Units, Testing Centres, etc.	4
	Laboratory Sessions: Power System Planning, Relay	
36	Testing, Despatcher Training Simulator, High Voltage	6
	Testing, HT & LT Switchgear	
37	Project Presentations and Appraisals	1
	Total No. of Weeks	52
	2000 100 01 100 01	

APPLICATION FORM

52 Weeks Post Graduate Diploma Course in Power System Operation

Session August, 2023

For Official Use only	
Name: DD/Cash: Sl.No.:	Paste Passport sized photograph
Full Name of the candidate (In Capital Letters)	:
2. Father's Name	:
3. Date of Birth (in Christian Era) (as given in 10 th /SSLC/SSC)	Date Month Year
4. Sex (mark √)	Male Female
5. Marital Status (mark √)	Single Married
6. Nationality	
7. Category (mark √)	SC ST OBC PH GEN SPONSORED
8. Address for communication	
	PIN CODE Fax No
	E-mail ID:
9. Permanent address (if different from above)	
	PIN CODE

10. E	Educational Qualificati	ons (Starting	g from hig	ghest qual	ification)							
S1. No.	Examination passed	Branch/ Subject	Year of passing	College/ University		Percentage of marks/class (as per University norms)						
1.												
2.												
3.												
4.												
Self Attested photocopy of qualifying degree, mark sheet and proof of date of birth are to be sent along with application form.												
11. Experience after Graduation (if any) Period of												
Sl.	Designation	Nam	I	Employment		Nature of duties						
No.		organiz	zation	From	То							
1.												
2.												
12. Are you a Sponsored Candidate? If Yes, please furnish the certificate given below: Certificate of Sponsorship (In Company's Letter Head)												
		_	- ·			•						
	This is to certify the											
	ern/organization from											
_	sored by us in case	•										
mai	ısmission & Distributi	on Systems			.ugust, 2023 f Employer	•						
				Name								
Place	··			Designation								
Seal:				Address								
ocar.			710	iuicss								
13. Proof of Identity (attach copy) (Employer ID/Passport/Driving License/PAN Number, etc)												
14. Any other information: (Offer of job in hand, continuing education, bond/liability/commitments etc.)												

15. List of Documents to be attached with the application:

- a) Application fee of Rs. 500/- in the form of a crossed DD in favour of PSTI, Bangalore (In case the application is downloaded from website)
- b) One Passport size photo
- c) Self Attested photocopy of qualifying degree and age
- d) Self Attested photocopy of Mark sheet of the qualifying degree & conversion formula obtained from university in case of Grade Points.
- e) Sponsorship Certificate, Experience Certificate, Salary Slips/Bank Statement (if applicable)
- f) Community Certificate (if applicable)

DECLARATION

The above furnished information are true to the best of my knowledge and belief. In case of anything found misleading or wrong or incomplete I agree that my candidature is liable to be rejected without any notice.

Place: Signature of Candidate		Signed on this	_(day)	of	(mont	h)	(year)						
Note: Application complete in all respects along with the self attested copies of the documents indicated must reach: The Director & Hol National Power Training Institute, Power System Training Institute, Near Yarabnagar Bus stop, Banashankari II stage, Bangalore 560 070 FOR OFFICE USE ONLY Enrolment No: Application Fee for Rs. 500/- Online Transaction No. Date Type of Candidature Sponsored Non-Sponsored Certificate Proof attached: Age Yes No Qualification Yes No No NA	Place:			Signature	e of Candid	date		_					
the documents indicated must reach: The Director & HoI National Power Training Institute, Power System Training Institute, Near Yarabnagar Bus stop, Banashankari II stage, Bangalore 560 070 FOR OFFICE USE ONLY Enrolment No: Application Fee for Rs. 500/- Online Transaction No. Date Type of Candidature Sponsored Non-Sponsored Certificate Proof attached: Age Qualification Yes No No NA	Date:			Name (in full)									
Enrolment No: Application Fee for Rs. 500/- Online Transaction No. Date Type of Candidature Sponsored Non-Sponsored Certificate Proof attached: Age Yes No Qualification SC/ST/OBC Yes No NA	the documents indicated must reach: The Director & HoI National Power Training Institute, Power System Training Institute, Near Yarabnagar Bus stop, Banashankari II stage,												
Type of Candidature Sponsored Non-Sponsored Certificate Proof attached: Age Qualification SC/ST/OBC Yes No No NA	Enrol		OR OF	rfice u	SE ONL	Y							
Type of Candidature Sponsored Non-Sponsored Certificate Proof attached: Age Qualification SC/ST/OBC Yes No No NA	Appli	cation Fee for Rs. 500/-	Online	e Transact	ion No.								
Certificate Proof attached: Age Yes No Qualification Yes No No NA	Date												
Qualification Yes No NA SC/ST/OBC Yes No NA	Туре	of Candidature	Spor	nsored	Non	n-Sponsor	red						
SC/ST/OBC Yes No NA	Certif	ficate Proof attached :		Age	Yes	No							
			Quali	fication	Yes	No							
Sponsorship Yes No NA			SC/S	T/OBC	Yes	No	NA						
			Spon	sorship	Yes	No	NA						