



HIMACHAL PRADESH STATE ELECTRICITY BOARD LIMITED

(A State Govt. undertaking)

Registered office	Vidyut Bhawan, HPSEBL, Shimla-4
Number (CIN)	U40109HP2009SGC31255
GST No.	HPSEBL 02 AACCH4894EHZB
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No. HPSEB Ltd. (SECTT) / Training-115/2018-19 **19688-94**

Dated:- **24-05-2018**

To

The Chief Engineer (OP) North,
HPSEBL, Dharamshala.

The Chief Engineer (OP) South,
HPSEBL, Shimla-04.

The Chief Engineer (OP) CZ,
HPSEBL, Mandi.

The Chief Engineer (PCA),
HPSEBL, Shimla-4.

The Chief Engineer (Generation),
HPSEBL, Sundernagar.

The Chief Engineer (ES),
HPSEBL, Hamirpur.

Subject: - Calendar for Conferences, Tutorials & Training Programmes being organized by Central Board of Irrigation & Power (CBIP) during 2018-2019-reg.

Sir,

I have been directed to enclose herewith a copy of letter No. 32 (600)/ Membership/2018-19 dated April 2018 along with a list of proposed conferences / tutorials & training programmes on the subject cited above. It is requested to supply the names of two officers / officials alongwith their mobile Nos. and office address with e-mail to this office **for the programmes mostly needed / related to your wing**, through return Fax , by post & E-mail: trainingcell.hpseb@gmail.com within seven days positively.

However, it may be got ensured that the engineers / officers whose names are being recommended and sent to this office are not repeated for the same training programme and opportunity in this regard may please be given to others also.

It may also be got ensured that the engineers / officers, so recommended, are not at the verge of retirement and are having minimum three years of service to be rendered to HPSEB Ltd.

DA:-As above.

Yours Faithfully,

(KUMAD SINGH,
Executive Director(Personnel)
HPSEBL, Shimla-04

23/5/18



LIST OF CONFERENCES, TUTORIALS AND TRAINING PROGRAMS TO BE ORGANISED DURING 2018-19

Conferences and Tutorials – Power Sector

Sl. No	Conferences and Tutorials	Dates	Venue	Page
1	Tutorial Course on Water Optimization in Thermal Power Plants & Zero Discharge	19-20 April, 2018	New Delhi	25
2	3 rd Interactive Workshop on Rotating Electrical Machines and Drives – Emerging Technologies (Under the aegis of CIGRE NSC on Rotating Machine)	26-27 April 2018	New Delhi	25
3	Tutorial Course on Gas Turbine Power Plant Performance in Open Cycle and Combined Cycle – Analysis & Optimization	10-11 May, 2018	New Delhi	26
4	CIGRE-AORC Technical Meeting 2018 – International Conference Global Energy Transition Issues and Challenges	24-25 May 2018	Gangtok (Sikkim)	26
5	Tutorial Course on Power Plant Performance Analysis & Optimization	29-30 May, 2018	New Delhi	27
6	6 th Conference on Advances & Innovations in Substations	21-22 June 2018	New Delhi	27
7	Tutorial Course on Best Practices in O&M of Thermal Power Plants	28-29 June, 2018	New Delhi	28
8	Workshop on Net Metering	5-6 July 2018	New Delhi	28
9	National Conference on Power System Protection and Automation	12 -13 July 2018	Bangalore	29
10	Pre-CIGRE India Session – Conference on Global Trends & Innovation in Development of Power Sector	26-27 July 2018	New Delhi	29
11	Tutorial Course on Boiler Tube Failures - Causes and Remedial Measures	30-31 July, 2018	New Delhi	30
12	7 th Conference on Latest Developments and Advances in Power Transformers	2-3 August 2018	Cochin	30
13	CIGRE Paris Session	26-30 August 2018	Paris	31
14	Tutorial Course on Best Practices in Operation and Maintenance of Gas Turbines in Open & Combine Cycle	30-31 August 2018	New Delhi	31
15	Tutorial Course on Environmental Issues, Challenges and Innovations for Thermal Plants	20-21 Sept. 2018	New Delhi	32
16	International Conference on Innovations in Power Transmission and Distribution Systems including Application of Polymer Materials	27-28 Sept. 2018	New Delhi	32
17	Workshop on Power Economics	4-5 October 2018	New Delhi	33
18	Tutorial Course on Coal Characteristics, Blending, Mill Performance and Combustion Optimization	23-24 Oct.2018	New Delhi	33
19	11 th National Conference on Earthing Systems	25-26 October 2018	New Delhi	34



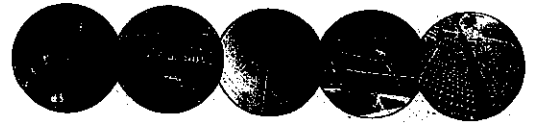
20	National Conference on Best Practices in Power Distribution Systems including Demand Side Management and Smart Grid Technologies	25-26 October 2018	Kolkata
21	Interactive Workshop on Procurement, Inventory Management & Control and Store Management	15-16 Nov. 2018	New Delhi
22	National Conference on Power System Protection and Automation	15-16 Nov. 2018	Patiala
23	CBIP Day Celebrations	December 2018	New Delhi
24	Tutorial Course on Numerical Protection Relay	30-31 Jan. 2019	New Delhi
25	Workshop on Distribution Business Model to Improve Consumer Satisfaction	14-15 Feb. 2019	New Delhi
26	Conference on Strategies to Make Regulations Simple and Effective	21-22 Feb 2019	New Delhi
27	Tutorial on Best Practices and Other O&M Aspects of Hydro Power Station Including Safety Requirement	11-21 March 2019	New Delhi
28	National-Conclave on Prevention of Accidents on Distribution & Power Transformers	22-23 March 2019	New Delhi

Conferences and Tutorials – Renewable Energy Sector

Sl. No	Conferences and Tutorials	Dates	Venue
1	Workshop on Solar Power Development including Roof Top Solar & Net Metering	19-20 July 2018	New Delhi
2	National Conference on Regulatory issues in RE Sector	5-6 October 2018	New Delhi
3	Workshop on Renewable Energy Technologies and its Integration with Grid	20-21 Dec. 2018	New Delhi
4	National Conference on Development in Renewable Energy including Solar Power Generation, Energy Storage & Grid Connectivity - Issues and Challenges	17-18 January 2019	New Delhi

Training Programs– Renewable Energy Sector

Sl. No.	Programs Code	Training Programs	Duration (days)
1	S-1	Solar P.V. System and Solar Roof Top System	2 days
2	S-2	Renewable Energy System	2 days
3	S-3	Government Initiatives, Targets, Roles and Challenges in Renewable Energy sector including Energy Storage	2 days



Training Programs – Long Term			
Sl. No	Training Programs	No. of days Date	Page
T&D Programs			
1	26 Weeks PGDC in Transmission & Distribution System (13 th Batch)	June 2018	47
2	26 Weeks PGDC in Transmission & Distribution System (14 th Batch)	Sept. 2018	47
3	26 Weeks PGDC in Transmission & Distribution System (15 th Batch)	Feb. /March 2019	47
Thermal Program			
4	52 Weeks PGDC In Thermal Power Plant Engineering (8 th Batch)	Sept./Oct. 2018	48
Renewable Programs			
5	Design, Installation, Operation & Maintenance of Solar Roof Top PV Plant	1 Month 2 nd July 2018	49
6	Design, Installation, Operation & Maintenance of Solar Roof Top PV Plant	1 Month 3 rd December 2018	49

Training Programs (at CBIP Centre of Excellence, Gurgaon) – Short Term				
Sl. No	Programs Code	Training Programs	No. of days Date	Page
Transmission Programs				
1	COE-1	Latest Trends in Sub- Station Planning and Engineering	2 Days 21-22 May 2018	51
2	COE-2	Operation and Maintenance of Power Transformer and Circuit Breakers	3 Days 18-19 June 2018	51
3	COE-3	Advance Power System Protection	2 Days 23-24 July 2018	51
4	COE-4	Recent Trends in Gas Insulated Sub-station	1 Day 20 August 2018	52
5	COE-5	Advance Power Cable and Joining Techniques for EHV Power System	2 Days 19-20 November 2018	52
6	COE-6	High Temperature Low Sag Conductors in Transmission System	2 Days 15-16 October 2018	52
Maintenance Programs				
7	COE-7	Cable & Cable Jointing for Supervisors	3 Days 17-19 September 2018	53
8	COE-8	Battery & Inverter Maintenance	3 Days 28-30 May 2018	53
9	COE-9	Motor Maintenance for Supervisors	3 Days 18-20 June 2018	53
10	COE-10	Maintenance Management of Power Stations	2 Days 4-5 June 2018	54
11	COE-11	Reliability Centered Maintenance	2 Days 10-11 September 2018	54



Civil Programs				
12	COE-12	Foundation Design for Civil Engineers of Thermal Power Stations	3 Days 16-18 July 2018	54
13	COE-13	Foundation Design for Civil Engineers of Transmission & Distribution utilities	3 Days 17-19 December 2018	55
Renewable Energy Programs				
14	COE-14	Installation of Solar PV Roof Top Plant	3 Days 7-9 May 2018	55
15	COE-15	Installation of Solar PV Roof Top Plant	3 Days 23-25 July 2018	55
16	COE-16	Installation of Solar PV Roof Top Plant	3 Days 10-12 December 2018	55
General Programs				
17	COE-17	Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010	2 Days 18-19 June 2018	55
18	COE-18	Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010	2 Days 12-13 November 2018	55
19	COE-19	Root Cause Analysis & Condition Monitoring of Motors	2 Days 13-14 August 2018	56
20	COE-20	Control & Instrumentation in Process Industry	3 Days 15-17 October 2018	56
21	COE-21	Store Management & Inventory Control	2 Days 25-26 June 2018	56
22	COE-22	Store Management & Inventory Control	2 Days 10-11 December 2018	56

Training Programs (Door Step/Short Term Programs)				
Sl. No.	Programs Code	Hydro Power Generation (E&M)	Duration (days)	Page
1	EM 1	O&M of Hydro Power Station	10	58
2	EM 2	Operation & Maintenance of Hydro Turbines & Generators	3	58
3	EM 3	Current Practices in Power System Protection / Protection Principles, Applications and Analysis	3	59
4	EM 4	Generator Excitation System	3	59
5	EM 5	Governing System of Hydraulic Turbines (RGMO & FGMO) including Power Feedback and Frequency Control Mode of Operation)	3	60
6	EM 6	Gas Insulated Switchgear (GIS) – Layout, Maintenance and Trouble Shooting	3	60
7	EM 7	Control System, SCADA & Communication Network	3	61



8	EM 8	Generator Transformer: Design, Erection, Commissioning and Maintenance	3	61
9	EM 9	Life Management of Transformers and Reactors	3	62
10	EM 10	Vibration Analysis, Alignment & Balancing	3	62
11	EM 11	Grid Discipline - Fault Analysis, Management, Operation of Power Station	3	63
12	EM 12	Circuit Breaker & Switchyard Equipment, CT, PT&CVT etc	3	63
13	EM 13	RLA Services for Hydro Turbine and Hydro Generator, RLA techniques, Laboratory Evaluation Services, Trouble Shooting Services for Hydro Plants and Up-rating Studies	3	64
14	EM 14	Renovation, Modernization and Upgradation /Life Extension of Hydro Electric Power Station	3	64
15	EM 15	Earthing System in Hydro power station	3	65
16	EM 16	Regulating Electricity Tariffs and Related Issues, (CERC Regulations, SERCs including IEGC)	3	65
17	EM-17	Tariff Design Challenges	3	66
18	EM-18	Challenges of Construction in Electricity Sector	3	66
19	EM-19	Open Access	2	66
20	EM 20	Core Issues of Electricity – Regulation Perspective	2	67
21	EM 21	Best O&M Practices & Other O&M Aspects of Hydro Power Station including Safety Requirement	3	67
22	EM 22	Energy Management System	3	68
23	EM 23	Power Economics	3	68
24	EM 24	O&M Aspect of HM Equipment in HE Projects	3	69
25	EM 25	O&M of EOT/Gantry Cranes and Hoist	2	69
26	EM 26	General Safety Awareness Electrical Safety & Basic Fire Safety System	3	70
27	EM 27	Disaster, Safety Management and Fire Fighting System of Hydro Power Station	3	70
28	EM 28	Power Pricing and Power Market	3	71
29	EM 29	Contracts and Purchase Management	3	71
30	EM 30	Store Management & Inventory Control	3	72

Sl. No.	Programs Code	Power Generation (Thermal)	Duration (days)
1	TH-1	Coal Characteristics, Blending, MN Performance and Combustion	2 days
2	TH-2	Water Optimisation in Thermal Power Plants & Zero Discharge	2 days
3	TH-3	Environmental Issues, Challenges and Innovations For Thermal Power Plants	2 days
4	TH-4	Fly Ash Management and Utilisation	2 days
5	TH-5	Power Plant Performance Analysis & Optimization	2 days
6	TH-6	Boiler Tube Failures - Causes and Remedial Measures	2 days
7	TH-7	Root Cause Analysis & Condition Monitoring And Maintenance of Motors	2 days
8	TH-8	Procurement, Inventory Management & Control and Store Management	2 days
9	TH-9	Maintenance Management of Thermal Power Stations	2 days
10	TH-10	Best Practices in O&M of Large Thermal Power Stations	2 days
11	TH-11	Gas Turbine Power Plant Performance in Open Cycle and Combined Cycle Operation and Maintenance Practices In Various Inspections Its Analysis & Optimization	3 days

Sl. No.	Programs Code	Transmission System	Duration (days)
1	T-1	Operation & Maintenance of Substation Equipments	3 days
2	T-2	Gas Insulated Switch Gear (GIS)- Layout, Maintenance and Trouble shootings	3 days
3	T-3	Operation & Maintenance of Transmission Lines	3 days
4	T-4	Power System Protection - Protection Principles, Applications and Analysis	3 days
5	T-5	Power Transformers and Reactors - Operation and Maintenance, Erection, Testing and Commissioning	3 days
6	T-6	Power Transformers and Reactors- Tender specifications, Design aspect, Latest trends in Power Transformers, Insulating Oil Properties	2 days
7	T-7	Life Management of Power Transformers and Reactors	3 days
8	T-8	Design and Construction practices for Sub-station and Transmission line	3 days
9	T-9	SCADA in Transmission System	3 days
10	T-10	Smart Grid Concept in T&D-Issues and Challenges	3 days
11	T-11	Grid Discipline, Energy Management & Power Quality Issues	3 days
12	T-12	Latest development in Metering Technology including Smart Meters	2 Days
13	T-13	Regulatory and Commercial Aspect	2 Days
14	T-14	Earthing System and its Importance	2 Days
15	T-15	Procurement, Inventory and Store Management	2 days
16	T-16	Electrical & Fire Safety including Prevention of Accidents	3 days
17	T-17	Disaster Management	3 days
18	T-18	Transformer Maintenance & Testing for Supervisor/ Technician	2 days
19	T-19	Tariff Design Challenges	3 days
20	T-20	Challenges of Construction in Electricity Sector	3 days
21	T-21	Training Program on Open Access	2 days



Sl. No.	Programs Code	Distribution	Duration (days)	Page
1	D-1	Revenue Management and Loss Reduction in Distribution System	2 days	94
2	D-2	Improving the Health of Distribution System including Distribution automation, Prevention of Accidents, Power quality	2 days	94
3	D-3	Arresting Failure of Distribution Transformers	2 days	95
4	D-4	Grid Discipline and Energy Management	2 days	95
5	D-5	Latest Development in Metering Technology including Smart Meters	2 days	96
6	D-6	Regulatory and Commercial Aspect	2 days	96
7	D-7	Smart Grid Concept in Distribution-Issues and Challenges	2 days	97
8	D-8	Distribution Management with SCADA and Communication Network	2 days	97
9	D-9	Power Pricing and Power Market	2 days	98
10	D-10	Electrical and Fire Safety including Prevention of Accident	3 days	98
11	D-11	Disaster Management System	2 days	99
12	D-12	Operation, Maintenance and Handling of Underground/ABC Cables	3 days	99
13	D-13	Operation & Maintenance of Substation Equipments	2 days	100
14	D-14	Operation & Maintenance of Overhead Transmission Lines	2 days	100
15	D-15	Distribution System - Construction Practices for Sub-station and Transmission Line and Maintenance Methodology	3 days	101
16	D-16	Current Practices in Power System Protection-Protection Principles, Applications and Analysis	2 days	101
17	D-17	Power/Distribution Transformers - Design, Construction, Erection, Testing and Commissioning, Operation and Maintenance	3 days	102
18	D-18	Life Management of Transformers	2 days	102
19	D-19	Procurement, Inventory and Store Management	2 days	103
20	D-20	Tariff Design Challenges	3 days	103
21	D-21	Challenges of Construction in Electricity Sector	3 days	104
22	D-22	Training Program on Open Access	2 days	104
23	D-23	Core Issues of Electricity – Regulation Perspective	2 days	104

116 Conferences and Tutorials – Water Resources and Infrastructure Development			
Sl. No.	Conferences and Tutorials	Dates	Venue
1	Seminar on Silting Problems in Hydroelectric Projects	18 May 2018	Chandigarh
2	Seminar Concrete in Tunnelling and Bridges	25 May 2018	Mumbai
3	Seminar on Slope Stabilization Challenges in Infrastructure Projects	14-15 June 2018	Dehradun
4	Seminar on Reforms in Management of Irrigation Systems	21-22 June 2018	Chandigarh
5	Seminar on Coastal Protection with Geosynthetics	19-20 July 2018	Bhubaneswar
6	Workshop on Best Practices and Advancements in Geotechnical Investigations of Hydro Power and Infrastructure Projects	9-10 August 2018	New Delhi
7	Workshop on Open Pit Mining	13-14 Sept. 2018	Dhanbad/ Nagpur
8	Rock Mechanics India' 2018 – Present Technology and Future Challenges	10-12 October 2018	New Delhi
9	Workshop on Sedimentation of Reservoirs	25-26 October 2018	New Delhi
10	Seminar on Latest Technologies in Dam Construction	8-9 November 2018	New Delhi
11	Seminar on Geotechnical Challenges in Infrastructure Projects	15-16 November 2018	New Delhi
12	Conference on Innovation in Tunnelling Technology	29-30 November, 2018	Guwahati
13	Workshop on Seismic Aspects of Dam Design	6-7 December 2018	New Delhi
14	Seminar on Grouting and Deep Mixing	13-14 December 2018	New Delhi
15	Seminar on River Basin Management	19-20 December 2018	Bangalore
16	Workshop on Geosynthetics Reinforced Soil Slopes and Walls	10-11 January 2019	Ahmedabad
17	Workshop on Design and Construction of Pavements with Geosynthetics	7-8 February 2019	Hyderabad
18	Tunnelling Asia 2019: Design, Construction and Risk Management in Tunnel and Underground Projects	14-16 February 2019	Chennai/ Mumbai
19	Workshop on Applications of Geosynthetics in Hydraulic Structures	14-15 March 2019	Bhopal



Training Programs – Water Resources & Infrastructure Development				
Sl. No.	Programs Code	Training Programs	Duration (days)	Page
Dams and Hydropower ✓				
1	WR-1	Planning, Design & Construction of Earth, Concrete & Rockfill Dams	3	119
2	WR-2	Analysis and Design of Concrete Gravity Dams	5	119
3	WR-3	Seismic Aspects of Dam Designs	3	120
4	WR-4	Roller Compacted-Concrete (RCC)	3	120
5	WR-5	Construction of Dams and Tunnels in Weak Rocks	3	121
6	WR-6	Design and Construction of Ground Improvement Technology Like Diaphragm Wall, Slurry Wall, Piles Foundation, etc.	3	121
7	WR-7	Dam Safety Management including Instrumentation of Existing Dams	3	122
8	WR-8	Grouting Techniques for Repair of Dams; Quality Control/ Assessment, Machinery; Tests and Analysis	3	122
9	WR-9	Use of Advanced Software in Design of Water Resources Structures	5	123
10	WR-10	Application of Finite Element Analysis for Water Resources Structures	5	123
11	WR-11	Spillway and Energy Dissipation Designs	3	124
12	WR-12	Civil Quality Aspects & Mix Design in Hydropower Project Construction	2	124
13	WR-13	Assessment of Soil Erosion and Sedimentation Control in Hydropower Projects	2	125
14	WR-14	Environmental Aspects of Hydropower Projects	2	125
Tunnel and Underground ✓				
15	WR-15	Tunnel Design and Construction – Issue & Challenges	3	126
16	WR-16	Geotechnical and Geological Investigations under High Over Burden	2	126
17	WR-17	Risk Management in Tunnelling Techniques	3	127
18	WR-18	Rock Mechanics and Tunnelling Techniques	2	127
19	WR-19	Waterproofing for Tunnel and Underground Structures	2	128
20	WR-20	Use of TBM/Road Header in Underground Works - Issues & Challenges	2	128
21	WR-21	Health and Safety in Tunnel Construction	3	129
22	WR-22	Ventilation System in Long Tunnels	3	129
23	WR-23	Shotcreting and Grouting	2	130
24	WR-24	Drilling & Blasting for Surface and Underground Excavation	3	130
25	WR-25	Construction Chemicals and Injection Techniques	2	131
26	WR-26	Micro Irrigation	3	131



27	WR-27	Innovation in Tunnelling Technology	2	13
28	WR-28	Design & Construction of Underground Works of Hydropower Project	3	13
Geosynthetics				
29	WR-29	Applications of Geosynthetics in Dams and Hydraulic Structures	2	13
30	WR-30	Applications of Geosynthetics for Slope Stability & Landslides	2	13
31	WR-31	Applications of Geosynthetics for Ground Improvement	2	13
32	WR-32	Geosynthetics Reinforced Soil Slopes and Walls	2	13
33	WR-33	Applications of Geosynthetics for Coastal, River and Hill Slope Erosion Control	2	13
34	WR-34	Geosynthetics in Mining - Practice and Developments	2	13
Miscellaneous Topics				
35	WR-35	Earthquake Resistant Structural Design	2	13
36	WR-36	Quality Management and Trends in Construction	2	13
37	WR-37	Concrete Technology	2	13
38	WR-38	Shotcrete Technology and High Performance Concrete (Including Self Compacting Concrete)	2	13
39	WR-39	Construction and Contract Management	2	13
40	WR-40	Environmental Aspects of Water Resources Projects	2	13
41	WR-41	Training Programmes for ET (Civil)	7 weeks	13

Note : The programs are tentative and the same can be changed by CBIP due to unavoidable circumstances.