



Government of India
Ministry of Power
Central Electricity Authority

INTERNATIONAL R&D CONCLAVE

Emerging Opportunities and Challenges of R&D in Indian Power Sector

20th-21st, Feb. 2018, Hall No. 5, Vigyan Bhawan, New Delhi

Day 1: 20th February 2018

Registration:	8:30 hrs to 9:30 hrs. based on invitation from CEA
10:00-11:00 hrs. Inaugural Session	Welcome Address: Shri. Ravindra Kumar Verma, Chairperson CEA Key Note Address: Shri. A.K. Bhalla, Secretary Power Address by Chief Guest: Hon'ble Shri R.K. Singh, Minister of Power(I/C) Vote of Thanks: Shri. Pankaj Batra Member Planning, CEA
<i>High Tea 11:00 to 11.30 Hrs.</i>	
SESSION 1 : R&D ACTIVITIES IN THERMAL GENERATION	
11:30-13:00 hrs.	Chaired by: Shri. P. D. Siwal, Member(Thermal), CEA Co- Chaired by: Shri. Gurdeep Singh, CMD NTPC Paper 1: Experimental Study On The De-NO _x Efficiency Of Various Vanadium Based (V ₂ O ₅)Catalysts For Selective Catalytic Reduction(SCR)In Coal Fired Power Plants <i>by BHEL</i> Paper 2: Biomass Co-Firing In Indian Power Plants <i>by NTPC</i> Paper 3: Coal Plants Flexibility In India : Impact Of Efficiency, Reliability And Life Time <i>by GE</i> Paper 4: High Ash Coal Gasification In Fluidized Bed Gasifier: Challenges And Opportunities <i>by CSIR-CIMFR</i> Paper 5: Design & Operational Challenges In Flexibilization Of Thermal Powers Plants <i>by TATA POWER</i> Paper 6: Updates on R&D of IGCC in Japan <i>by JCOAL</i> Paper 7: Flexible Operation Of Thermal Power Plants In India <i>by SIEMENS</i>
SESSION 2 : R&D ACTIVITIES IN HYDRO GENERATION	
13:00-14:30 hrs.	Chaired by: Shri. K. K. Arya, Member(Hydro), CEA Co- Chaired by: Shri Balraj Joshi, CMD NHPC Paper 1: First Filling Of Water Conductor Systems-Challenges And Mitigations With Specific Reference To Rampur HEP-412 MW <i>by SJVNL</i> Paper 2: Alternative Methods For Design Of Support System For Underground Power House Caverns Of JTSEP(108MW) DPR Stage <i>by THDCIL</i> Paper 3: Innovations Implemented in 720MW Mangdechhu Hydro-Electric Project <i>by MHPA, Bhutan</i> Paper 4: Targeted Solution Through Emerging Geophysical Technology In Resistivity Imaging, Seismic Tomography & Ground Penetration Radar (GPR) For Optimization Of Geological Uncertainties In Hydropower Project <i>by NHPC</i> Paper 5: Geological Surprises In Hydro Power Plants/ Projects <i>by Tata Power</i> Paper 6: Challenges In Hydro Sector In India <i>by HPA Division CEA</i> Paper 7: Design Challenges on Redundancy in Power and Control Circuit of Large Variable Speed Hydro Generating Unit <i>by IIT Roorkee-THDC</i>
<i>Lunch 14:30 to 15:00 hrs</i>	
SESSION 3 : R&D ACTIVITIES IN RENEWABLE ENERGY	
15:00-16:30 hrs.	Chaired by: Shri. Pankaj Batra, Member(Planning), CEA Co- Chaired by: Shri. Abhay Bakre, DG BEE Paper 1: A Snapshot Of Research And Development Projects Undertaken By CPRI during The 12th Five Year Plan <i>by CPRI</i> Paper 2: Energy Generation And Water Savings From Floating Solar PV (FSPV)Power Plants <i>by Yellow Tropus</i> Paper 3: Emerging Issues In Large-Scale Wind Integrated Power Systems And Their Potential Solutions <i>by IIT Bombay</i> Paper 4: Perovskite-Based Low-Cost And High-Efficiency Solar Cells <i>by BBMB</i> Paper 5: Municipal Solid Waste To Energy Power Plant By Feasibility Study Of Waste To Energy Possibility In India <i>by MSPGCL</i> Paper 6: Economic Energy Storage Solution In Renewable Energy Specifically For India <i>by Vision Mechatronics Pvt. Ltd.</i> Paper 7: Battery Energy Storage System For Optimum Solar Energy Integration And Enhancement Of Grid Security at Andaman Island <i>by NTPC</i>
<i>Tea 16:30 to 17:00 hrs</i>	

Day 2: 21st February 2018

Registration: 9:00 hrs. based on invitation from CEA	
SESSION 1 : R&D ACTIVITIES IN TRANSMISSION	
10:00-11:30 hrs.	<p>Chaired by: Shri I. S. Jha, CMD POWERGRID</p> <p>Co-Chaired by: Shri. Sandesh Sharma, PCE(I/C), CEA</p> <p>Paper 1: Power Quality Measurement: Importance, Gaps and Technologies <i>by Klovertel</i></p> <p>Paper 2: Challenges & Achievements Of Indian Transmission Line Industry And Emerging New Global Technologies <i>by Sterlite</i></p> <p>Paper 3: Power Voltage Transformers: An Innovative Solution For Directly Tapping Power From EHV Lines To Reduce Diesel Consumption For Telecom Towers <i>by Sterlite</i></p> <p>Paper 4: An Innovative Solution For Online Testing Of Power Transformers <i>by CPRI</i></p> <p>Paper 5: Unmanned Aerial Vehicle (UAV) Enabled Stringing <i>by Arcturus Business Solutions</i></p> <p>Paper 6: Fault Current Limiter Selection Considerations For Utility Engineers <i>by Applied Materials India Pvt. Ltd</i></p> <p>Paper 7: Smart Grid Towards Energy Transition <i>by POWERGRID</i></p>
<i>Tea 11:30 to 11:45 hrs</i>	
SESSION 2 : R&D ACTIVITIES IN GRID OPERATION	
11:45-13:15 hrs.	<p>Chaired by: Shri K. V. S. Baba, CMD POSOCO</p> <p>Co-Chaired by: Shri. B. K. Sharma, PCE(I/C), CEA</p> <p>Paper 1: Optimization Of Energy Harvesting From Solar Micro Grids Through Distributed Storage & Vehicle Grid Integration Strategy With Demand Response/Predictive Scheduling Framework <i>by Coimbatore Institute Of Technology</i></p> <p>Paper 2: Reliability Assessment Of Indian Power System For Renewable Integration in 2022 <i>by GE Energy</i></p> <p>Paper 3: Power Quality Monitoring And Assessment As Per CEA Guidelines <i>by ERDA & SUZLON</i></p> <p>Paper 4: Enhancing Flexibility Of Transmission System Using Power Flow Controller & Dynamic Line Rating <i>by Sterlite</i></p> <p>Paper 5: Load Accessed Directional Relay (LADR)- An Innovative Approach To Power System Stability <i>by Odisha Power Transmission Corporation Ltd.</i></p> <p>Paper 6: Synchronous Rotating Equipment As Backbone For Renewables <i>by Siemens</i></p> <p>Paper 7: Optimal Generation Mix To Meet The INDC Targets <i>by IRP Division CEA</i></p>
<i>Lunch 13:15 to 13:45 hrs.</i>	
SESSION 3 : R&D ACTIVITIES IN DISTRIBUTION	
13:45-15:15 hrs.	<p>Chaired by: Shri Rajeev Sharma, CMD PFC</p> <p>Co-Chaired by: Shri. R.K. Pandey, DG NPTI</p> <p>Paper 1: New Natural Ester-based Transformer Fluid Development - Evaluation of Technical Benefits in the present Indian context <i>by Savita Polymers Ltd.</i></p> <p>Paper 2: Evaluation Of Natural Ester Filled Distribution Transformer- An Emerging Trend <i>by Cargill</i></p> <p>Paper 3: PQ Issues In CESC's Distribution System <i>by CESC Calcutta</i></p> <p>Paper 4: How Supply Side Constraints Affect The Rural Residential Feeder Parameters <i>by IIT Bombay</i></p> <p>Paper 5: Prospects Of DC Microgrid In Tiruvannamalai District, Tamil Nadu <i>by AEC, TGDC & BDU</i></p> <p>Paper 6: A Novel Approach For Improvement Of The System Power Factor By Optimally Placed DG and STATCOM In Distribution Systems <i>by KNIT & MMTU</i></p>
<i>Tea 15:15 to 15:30 hrs</i>	
SESSION 4 : R&D ACTIVITIES IN TRADING/MARKETING AND TARIFF	
15:30-17:00 hrs	<p>Chaired by: Dr. Somit Dasgupta, Member(E&C), CEA</p> <p>Co-Chaired by: Shri V. S. Nandakumar, DG CPRI</p> <p>Paper 1: India And Cross- Border Energy Trading <i>by NREL</i></p> <p>Paper 2: Brazil Transmission Market – Experience of concession model <i>by Sterlite</i></p> <p>Paper 3: Addressing Challenges For Grid Integration Of Renewable Energy In Indian Power System And Framework For Hybrid Renewable Energy Development <i>by IDAM</i></p> <p>Paper 4: Flexibility In Transmission Switching For Congestion Management <i>by IIT Delhi</i></p> <p>Paper 5: Long Term Power Purchase Agreements (PPA's) And Its Impact On Coal Based Thermal Power Plants <i>by IRP Division CEA</i></p> <p>Paper 6: Thermal Power Plant Environmental Compliance at a Much Reduced Cost <i>by LJUNGSTROM</i></p> <p>Paper 7: General Network Access-The Concept <i>by CERC</i></p>
Concluding Remarks	

Note: -All are requested to be on their seats by 9.45 am.

The event captured in action by POWERGRID

