PROGRAM AS OF 10 APRIL 2024

Important: This preliminary program is subject to changes. It is strongly recommended to check back regularly.

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TIMETABLE 8TH INTERNATIONAL HYBRID POWER PLANTS & SYSTEMS WORKSHOP

TUESDAY 14 MAY 2024

Workshop Day 1

09:00– 10:50	07:30 – 09:00 REGISTRATION / FOYER		
	HORTÊNSIA		
	WELCOME & SESSION 1: KEYNOTE SESSION		
	COFFEE BREAK & GROUP PHOTO (30 MIN)		
11:20 – 13:00	HORTÊNSIA	CEDRO	PROTEA
	SESSION 2A: COUNTRY EXPERIENCE AZORES	**SESSION 2B:** HYBRID POWER PLANTS I	**SESSION 2C:** BATTERY ASPECTS
	LUNCH 13:00 – 14:00		
14:00 – 15:40	HORTÊNSIA	CEDRO	PROTEA
	SESSION 3A: HYBRID POWER SYSTEMS COUNTRY EXPERIENCE I	**SESSION 3B:** HYBRID POWER PLANTS II	**SESSION 3C** MODELLING ASPECTS
	COFFEE BREAK & POSTER SESSION (20 MIN)		
16:00 – 18:20	HORTÊNSIA	CEDRO	PROTEA
	SESSION 4A: HYBRID POWER SYSTEMS COUNTRY EXPERIENCE II	**SESSION 4B:** FREQUENCY ASPECTS	**SESSION 4C** HYDROGEN AND HYBRID POWER PLANTS
18:45	**WORKSHOP NETWORKING EVENT/DINNER** – separately bookable –		

WEDNESDAY 15 MAY 2024

Workshop Day 2

09:00– 10:40	HORTÊNSIA	CEDRO	PROTEA
	SESSION 5A: BLACK START ASPECTS	**SESSION 5B:** ECONOMIC ASPECTS OF HYBRID POWER PLANTS	**SESSION 5C** ENERGY MANAGEMENT SYSTEMS
	COFFEE BREAK (30 MIN)		
11:10 – 12:50	HORTÊNSIA	CEDRO	PROTEA
	SESSION 6A: EDF HYBRID POWER SYSTEMS EXPERIENCE	**SESSION 6B:** HYBRID POWER PLANTS III	**SESSION 6C** LOCAL MARKETS AND LOCAL ENERGY COMMUNITIES
	LUNCH 12:50 – 13:50		
13:50 – 15:30	HORTÊNSIA	CEDRO	PROTEA
	SESSION 7A: HYBRID POWER SYSTEMS COUNTRY EXPERIENCE III	**SESSION 7B:** TECHNICAL ASPECTS	**SESSION 7C:** GENERATION ASPECTS
	COFFEE BREAK (20 MIN)		
15:50 – 16:50	HORTÊNSIA		
	SESSION 8: CLOSING SESSION: PANEL DISCUSSION		
07:45	**THURSDAY, 16 MAY 2024** **STUDY TRIP** – separately bookable –		

TUESDAY, 14 MAY 2024

07:30 – 09:00 Registration

All times in the session tables show the on-site time on the Azores/Portugal (Azores Summer Time/AZOST = UTC), the highlighted stripes show the starting times of the respective sessions in additional time zones.

05:00 New York | 06:00 Rio de Janeiro | 11:00 Berlin | 14:30 New Delhi | 16:00 Jakarta | 17:00 Beijing | 18:00 Tokyo | 19:00 Sydney

09:00 – 09:15 WELCOME

09:15 – 10:50 SESSION 1 – KEYNOTE SESSION

05:15 New York | 06:15 Rio de Janeiro | 11:15 Berlin | 14:45 New Delhi | 16:15 Jakarta | 17:15 Beijing | 18:15 Tokyo | 19:15 Sydney

> Session Chair Thomas Ackermann (Energynautics, Germany)

09:15 – 10:35 Presentations (20 min. each)

- **Welcome Address & Azorean Energy Strategy 2030 – Status Update**
  Dra. Joana Ferreira Rita (Regional Director of Energy, Autonomous Region of the Azores, Portugal)
- **Electrical Energy Production on the nine Azorean Islands**
  Paulo Jorge da Costa André (President of the Board of Directors of EDA, Autonomous Region of the Azores, Portugal)
- **Roadmap toward 100% Renewable Energy in the Azores**
  Fernando José de Melo Henriques (Director Innovation & Technical Planning of EDA, Autonomous Region of the Azores, Portugal)
- **The Hybrid Power Plant in Graciosa island - a Pioneer Project in the Azores Islands**
  Duarte Conde Silva (Graciólica, Portugal) (Submission ID 000)

10:35 – 10:50 Discussions

10:50 – 11:20 COFFEE BREAK | GROUP PHOTO

11:20 – 13:00 SESSION 2A – COUNTRY EXPERIENCE AZORES

07:20 New York | 08:20 Rio de Janeiro | 13:20 Berlin | 16:50 New Delhi | 18:20 Jakarta | 19:20 Beijing | 20:20 Tokyo | 21:20 Sydney

> Session Chair João Peças Lopes (INESC TEC | FEUP, Portugal)

11:20 – 12:40 Presentations (20 min. each)

- **System Studies for Large-Scale Integration of PV-Battery Hybrid Plants in Azorean Islands**
  M. Castro, R. Sousa (INESC TEC, Portugal), C. Moreira, J. Peças Lopes (INESC TEC, Portugal | FEUP, Portugal) (Submission-ID HYB24_54)
- **Decarbonisation of Terceira Island through Technology Installation and Power Flow Optimisation for Island Energy Self Sufficiency**
  M. Fitzpatrick, E. Rodrigues, A. Carvalho (EDP NEW – Centre for New Energy Technologies, Portugal), C. Martins (EDA – Electricidade dos Açores, Portugal), C. Papadopoulos (CERTH – Centre for Research & Technology Hellas, Greece), R. Amaral Lopes (UNINOVA – Instituto de Desenvolvimento de Novas Technologias, Portugal) (Submission-ID HYB24_68)
- **BESS Applications in Microgrids: The Azores Islands Use Case**
  P. Ribeiro, R. Verissimo, J. Damásio (Siemens, Portugal), J. Mori (Siemens, Spain), F. Henriques (Electricidade dos Açores, Portugal) (Submission-ID HYB24_52)
- **Country Experience Azores**
  I. Arvanitis (FluenceEnergy) (Submission-ID HYB24_xy) – TBC

12:40 – 13:00 Discussions

11:20 – 13:00 SESSION 2B – HYBRID POWER PLANTS I

07:20 New York | 08:20 Rio de Janeiro | 13:20 Berlin | 16:50 New Delhi | 18:20 Jakarta | 19:20 Beijing | 20:20 Tokyo | 21:20 Sydney

> Session Chair Name Surname (Company, Country)

11:20 – 12:40 Presentations (20 min. each)

- **Beyond Blueprints: EPRI's Vision and Strategies of our Hybrid Energy Future**
  D. Vazquez Pombo (Electric Power Research Institute (EPRI), Ireland) (Submission-ID HYB24_8)
- **Control Architectures for Co-Located Hybrid Power Plants**
  F. Iov (Aalborg University, Denmark), J. Martinez Rico (Tekniker – Basque Research and Technology Alliance, Spain), L. Petersen (Vestas Wind Systems, Denmark), A. G. Raducu (Vattenfall, Denmark), K. Das (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_43)
- **Complex Hybrid Power Plants with Renewable Energies and Storage: Insights into Optimizing Sizing and Revenue Streams**
  U. Gunnemann (BayWa r.e., Germany) (Submission-ID HYB24_103)
- **5G vPAC Virtual Hybrid Power Plant**
  K. Winter (Vattenfall, Sweden) (Submission-ID HYB24_56)

12:40 – 13:00 Discussions

11:20 – 13:00 SESSION 2C – BATTERY ASPECTS

07:20 New York | 08:20 Rio de Janeiro | 13:20 Berlin | 16:50 New Delhi | 18:20 Jakarta | 19:20 Beijing | 20:20 Tokyo | 21:20 Sydney

> Session Chair Name Surname (Company, Country)

11:20 – 12:40 Presentations (20 min. each)

- **Operation of Li-Ion Battery Systems in Off-Grid applications**
  F. Stortz (Fraunhofer ISE, Germany) (Submission-ID HYB24_88)
- **Comparison of Model Performance and Field Data for Hydro-Battery Hybrid Systems Providing Ancillary Services**
  D. Laban (Uppsala University, Sweden | Fortum Sverige, Sweden), P. Norrlund (Uppsala University, Sweden | Vattenfall, Sweden), U. Lundin (Uppsala University, Sweden) (Submission-ID HYB24_39)
- **Towards Energy Transition with Battery Energy Storage System at AEW in Switzerland**
  P. Linggi (AEW NIB, Switzerland), **H. Bitaraf** (Hitachi Energy, USA), G. Sadhana (Hitachi Energy, India), N. Vezzini, E. Soressi (Hitachi Energy, Italy) (Submission-ID HYB24_3)
- **Combining Batteries and Synchronous Condensers: The Case Study of Madeira Island**
  F. Fernandes, J. Peças Lopes, C. Moreira (INESC TEC, Portugal | University of Porto – FEUP, Portugal) (Submission-ID HYB24_27)

12:40 – 13:00 Discussions

13:00 – 14:00 LUNCH BREAK

14:00 – 15:40 SESSION 3A – HYBRID POWER SYSTEMS COUNTRY EXPERIENCE I

10:00 New York | 11:00 Rio de Janeiro | 16:00 Berlin | 19:30 New Delhi | 21:00 Jakarta | 22:00 Beijing | 23:00 Tokyo | 24:00 Sydney

> Session Chair Name Surname (Company, Country)

14:00 – 15:20 Presentations (20 min. each)

- **Energy Transition League – A Comparison of Islands' Paths to Net Zero Emissions**
  D. G. Quirk (Technical University of Denmark – DTU, Denmark | Energy and Sustainability Centre, Isle of Man), F. Mendonça, F. Henriques (EDA, Azores), T. Jørgensen, M. Lahtimo (Bornholms Energi og Forsyning, Denmark), A. Figueira (EEM, Madeira), H. M. Tróndheim, T. Nielsen (SEV, Faroe Islands), C. Nordberg (Vind AX Ab, Åland), G. Davies (Aquatera, Orkneys), P. Alberg Østergaard, H. Lund, M. Kristensen (Aalborg University, Denmark), S. Hermansen (Samsø Energiakademi, Denmark), A. Cowin, R. Peake (Energy and Sustainability Centre, Isle of Man) (Submission-ID HYB24_105)
- **The History and Future of Storage for Remote Hybrid Systems: Village Power, Island Power, and the Potential for Hydrogen**
  P. Lilienthal (UL Solutions, USA), N. Verma (UL Solutions, India) (Submission-ID HYB24_26)
- **The Renewable Transition of the 5 Small Isolated Island Grids - Faroe Islands**
  H. M. Tróndheim, T. Nielsen (SEV R&D, Faeroe Islands) (Submission-ID HYB24_67)
- **PV Integration on Grand Bahama**
  P. Henzel, **P.-P. Schierhorn** (Energynautics, Germany) (Submission-ID HYB24_98)

15:20 – 15:40 Discussions

14:00 – 15:40 SESSION 3B – HYBRID POWER PLANTS II

10:00 New York | 11:00 Rio de Janeiro | 16:00 Berlin | 19:30 New Delhi | 21:00 Jakarta | 22:00 Beijing | 23:00 Tokyo | 24:00 Sydney

> Session Chair Name Surname (Company, Country)

14:00 – 15:20 Presentations (20 min. each)

- **The case for Utility scale Hybrids in Australia**
  J. Dyson (Greenview Strategic Consulting, Australia) (Submission-ID HYB24_92)
- **Empowering Renewable Hybrids by Overcoming Regulatory Barriers – What we Can Learn about the Different Regulatory Environments in Europe**
  M. Nissen, **U. Gunnemann** (BayWa r.e., Germany) (Submission-ID HYB24_102)
- **Hybridization of existing wind power plants with solar photo-voltaic and Li-Ion batteries**
  J. P. Murcia Leon (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_21)
- **Design of Hybrid Power Plants for Constant Output**
  R. Zhu, J. P. Leon, M. Friis-Møller, K. Das (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_50)

15:20 – 15:40 Discussions

14:00 – 15:40 SESSION 3C – MODELLING ASPECTS

10:00 New York | 11:00 Rio de Janeiro | 16:00 Berlin | 19:30 New Delhi | 21:00 Jakarta | 22:00 Beijing | 23:00 Tokyo | 24:00 Sydney

> Session Chair Name Surname (Company, Country)

14:00 – 15:20 Presentations (20 min. each)

- **Resilient vs. Non-Resilient Energy Systems in Europe**
  J. Lotze (TransnetBW, Germany | Karlsruhe Institute of Technology, Germany) (Submission-ID HYB24_66)
- **EPSO-based Methodology for Modelling Equivalent PV-Battery Hybrid Power Plants using Generic Converters Models**
  R. Pinto De Sousa, M. Castro (INESCTEC, Portugal), C. Moreira, J. Peças Lopes (INESCTEC, Portugal | University of Porto, Portugal) (Submission-ID HYB24_83)
- **Elevating Offshore Renewable Energy: A Study on Integrating Wind, Solar, and Storage Systems**
  M. Mihajlovic, S. J. Stark (Dutch Marine Energy Centre, Netherlands) (Submission-ID HYB24_55)
- **Enhancing Accuracy in Curtailment Loss and Profitability Predictions for Oversized Hybrid PV-Wind Power Plants Using High, Instead of Hourly, Resolution Data**
  Ø. Klyve (Institute for Energy Technology – IFE | University of Oslo, Norway), R. Grab (Fraunhofer ISE, Germany), V. Olkkonen (Institute for Energy Technology – IFE, Norway), E. Marstein (Institute for Energy Technology – IFE | University of Oslo, Norway) (Submission-ID HYB24_51)

15:20 – 15:40 Discussions

15:40 – 16:00 COFFEE BREAK & POSTER SESSION

16:00 – 18:20 SESSION 4A – HYBRID POWER SYSTEMS COUNTRY EXPERIENCE II

12:00 New York | 13:00 Rio de Janeiro | 18:00 Berlin | 21:30 New Delhi | 23:00 Jakarta | 24:00 Beijing | 01:00 Tokyo | 02:00 Sydney

> Session Chair Name Surname (Company, Country)

16:00 – 18:10 Presentations (20 min. each)

- **Challenges and Opportunities for Transitioning Island Power Systems to High Levels of Wind and Solar**
  A. Hoke (National Renewable Energy Laboratory – NREL, USA) (Submission-ID HYB24_64)
- **Energy Transitions for Island Power Systems and Contributions of the Interamerican Development Bank**
  José Ramón Gómez (Interamerican Development Bank – IDB) **– 10 min**
- **Leapfrogging from Primarily Diesel-based to Primarily PV-Battery Island Power Systems in Galapagos**
  C. Fernández (ElecGalapagos, Ecuador), (Submission-ID HYB24_106)
- **Integration of Wind Generation in Jamaica's Power System**
  D. Reid (Jamaica Public Service, Jamaica) (Submission-ID HYB24_107)
- **System Protection for Highly Inverter-based Island Power Systems**
  C. Kruse (Kauai Island Utility Cooperative, USA) (Submission-ID HYB24_108)
- **Puerto Rico Grid Resilience and Transitions to 100% Renewable Energy Study (PR100)**
  B. Kroposki (National Renewable Energy Laboratory – NREL, USA) (Submission-ID HYB24_101)
- **Philippines Island Microgrids Case Study: Design, Simulation, Deployment and Operations with Integrated Digital Platform**
  S. Cherian (Spirae, USA) (Submission-ID HYB24_100)

18:10 – 18:20 Discussions

16:00 – 18:20 SESSION 4B – FREQUENCY ASPECTS

12:00 New York | 13:00 Rio de Janeiro | 18:00 Berlin | 21:30 New Delhi | 23:00 Jakarta | 24:00 Beijing | 01:00 Tokyo | 02:00 Sydney

> Session Chair Name Surname (Company, Country)

16:00 – 18:00 Presentations (20 min. each)

- **Stability Services by Wind-Solar-Storage Hybrid Power Plants**
  V. Gevorgian (NREL, USA) (Submission-ID HYB24_35)
- **Centralized Frequency Control of Offshore Hybrid Power Plant**
  A. Celna (Ørsted Wind Power | Technical University of Denmark – DTU, Denmark), M. Gryning (Ørsted Wind Power, Denmark), P. E. Sørensen (Technical University of Denmark – DTU, Denmark), M. K. Bakhshizadeh (Ørsted Wind Power, Denmark), A. D. Hansen (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_11)
- **Improved Frequency Control in Microgrids Dominated by Renewables**
  S. Cherevatskiy (Enerjia, Australia), D. Stephens (Horizon Power, Australia) (Submission-ID HYB24_89)
- **Frequency Services from Hybrid Storage Wind Turbines**
  S. Pouraltafi Kheljan (Technical University of Denmark – DTU, Denmark), M. Moataz El-Seid, M.-A. Rahmani (TotalEnergies, France), K. Das, P. Ejnar Sørensen (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_63)
- **An Artificial Intelligence Approach for the Identification of the Normative Frequency Behavior of Decentralized Generators in an Islanded Network**
  C. Bernecker-Castro, S. Faltz, J. Timmermann (TU Munich – TUM, Germany), T. Lechner, S. Seifried (Augsburg University of Applied Sciences, Germany), K. Schaarschmidt (LEW Distribution Network Operator, Germany), S. Herrmann (AVS Aggregate Construction, Germany), M. Finkel (Augsburg University of Applied Sciences, Germany), R. Witzmann (TU Munich – TUM, Germany) (Submission-ID HYB24_77)
- **Validation of a Laboratory-Scale Inverter in Forming a Stand-Alone Multi-Energy Microgrid**
  E. D. Gomez Anccas, K. Pourhossein, D. Schulz (Helmut Schmidt University / University of the Armed Forces Hamburg, Germany) (Submission-ID HYB24_79)

18:00 – 18:20 Discussions

16:00 – 18:20 SESSION 4C – HYDROGEN AND HYBRID POWER PLANTS

12:00 New York | 13:00 Rio de Janeiro | 18:00 Berlin | 21:30 New Delhi | 23:00 Jakarta | 24:00 Beijing | 01:00 Tokyo | 02:00 Sydney

> Session Chair Name Surname (Company, Country)

16:00 – 18:00 Presentations (20 min. each)

- **Hybrid Power Plant Operation in the Context of Evolving Energy Markets: Focus on P2H Integration**
  M. Gupta, J. P. Murcia Leon, M. Friis-Møller, K. Das (DTU Wind, Denmark) (Submission-ID HYB24_44)
- **Off-Grid Concept for Large Scale Production of Green H2 From Wind Energy**
  A. Jain (Vestas, Portugal), T. Abeyasekera (Vestas, Denmark), K. V. Gadiraju, M. Gupta (Vestas, India), T. Lund, O. Sønderby (Vestas, Denmark) (Submission-ID HYB24_4)
- **Hydrogen Hybrid Power System "Hydrogen Lab Bremerhaven"**
  A. Heuschmann, J. Vervoort, N. Denecke (Fraunhofer IWES, Germany) (Submission-ID HYB24_24)
- **Development of a Controller for Voltage Stabilisation in Fuel Cells using an Electric Field Modifier (EFM) Electrode**
  C. Cosse (Helmut Schmidt University / University of the Federal Armed Forces Hamburg, Germany), R. Costa Castelló, M. Serra (Institut de Robòtica i Informàtica Industrial – CSIC-UPC, Spain), D. Schulz (Helmut Schmidt University / University of the Federal Armed Forces Hamburg, Germany) (Submission-ID HYB24_93)
- **Long-Term Co-Optimisation of Green-Hydrogen Production in the Day-Ahead Electricity Market**
  S. Farah, G. Bruun Andresen (Aarhus University, Denmark) (Submission-ID HYB24_46)
- **Optimal Wind Turbine Design for Hydrogen Production**
  J. Thomas, **C. Bay**, C. Irmas, G. Starke, E. Grant, N. Riccobono (National Renewable Energy Laboratory – NREL, USA) (Submission-ID HYB24_90)

18:00 – 18:20 Discussions

18:45/19:15 **WORKSHOP NETWORKING EVENT/ DINNER**
– to be booked separately –

WEDNESDAY, 15 MAY 2024

09:00 – 10:40 SESSION 5A – BLACK START ASPECTS

05:00 New York | 06:00 Rio de Janeiro | 11:00 Berlin | 14:30 New Delhi | 16:00 Jakarta | 17:00 Beijing | 18:00 Tokyo | 19:00 Sydney

> Session Chair Name Surname (Company, Country)

09:00 – 10:30 Presentations (18 min. each)

- **Black Start of an Islanded Grid with Run of River Hydropower Plant and Battery Energy Storage**
  V. Gevorgian (NREL, USA) (Submission-ID HYB24_33)
- **Black Start of an Off-Grid Offshore Wind Farm with Grid Forming Converter**
  P. Hebbal Prakash (University of Porto, Portugal), J. Peças Lopes, B. Silva (University of Porto | INESC TEC, Porto, Portugal) (Submission-ID HYB24_62)
- **Grid-Forming Plant Controls for Self-Supply and Black Start Applications of Battery Energy Storage Systems**
  S. Henninger, **I. Arvanitis** (Fluence Energy, Germany) (Submission-ID HYB24_86)
- **Black start on a medium voltage grid with storage and PV**
  A. Anta, D. Vettoretti (Austrian Institute of Technology – AIT, Austria) (Submission-ID HYB24_18)
- **The Role of ML and AI in Managing Forced Outages in Hybrid Energy Systems**
  M. Kezunovic (Texas A&M University, USA) (Submission-ID HYB24_99)

10:30 – 10:40 Discussions

09:00 – 10:40 SESSION 5B – ECONOMIC ASPECTS OF HYBRID POWER PLANTS

05:00 New York | 06:00 Rio de Janeiro | 11:00 Berlin | 14:30 New Delhi | 16:00 Jakarta | 17:00 Beijing | 18:00 Tokyo | 19:00 Sydney

> Session Chair Name Surname (Company, Country)

09:00 – 10:20 Presentations (20 min. each)

- **Multi-Market Operation Strategy and Sizing of a Hybrid Power Plant Connected to the German Grid**
  S. Vogt, A. Peker, H. Seefluth, B. Schropp (SMA Solar Technology, Germany) (Submission-ID HYB24_53)
- **Day-Ahead Trading of Co-Located Wind-Battery Farm: Wind Forecast Uncertainty and Limited Feed-In Grid Connection**
  A. Vicari (Technical University of Denmark – DTU, Denmark), M. Ledro, G. Mouette, J. J. Sørensen (Ørsted Wind Power, Denmark), J. M. Zepter, M. Marinelli (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_36)
- **Efficient Optimization of Hybrid Power Plant Sizing under Uncertain Costs**
  C. Assaad, J. P. Murcia Leon, P. E. Sørensen (Technical University of Denmark – DTU, Denmark), S. Ghazouani (TotalEnergies, France), K. Das (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_28)
- **Business Model Evaluation of a Hybrid Wind-Battery Virtual Power Plant Dynamically Updating the Remaining Battery Capacity.**
  D. Fernández-Muñoz, J. I. Pérez-Díaz (Polytechnical University of Madrid, Spain) (Submission-ID HYB24_94)

10:20 – 10:40 Discussions

09:00 – 10:40	SESSION 5C – ENERGY MANAGEMENT SYSTEMS
05:00 New York | 06:00 Rio de Janeiro | 11:00 Berlin | 14:30 New Delhi | 16:00 Jakarta | 17:00 Beijing | 18:00 Tokyo | 19:00 Sydney	
> Session Chair	Name Surname (Company, Country)
09:00 – 10:20	Presentations (20 min. each)

- **Optimal Energy Management System for the Hybrid PV-BESS-Diesel Bora Bora Power System to Increase Resiliency With OPEX and Maintenance Cost Reduction**
  M. Santarelli (Hitachi Energy Italy, Italy), M. Giuntoli (Hitachi Energy Germany, Germany), P. Almaleck, F. Baccino, M. Cosentino (Hitachi Energy Italy, Italy), K. Furmanska (Hitachi Energy Poland, Poland), P. Serra (Hitachi Energy Italy, Italy) (Submission-ID HYB24_25)
- **Case Study: Energy Management System for a Hybrid Island Microgrid**
  J. Ågren (Wärtsila, Finland) (Submission-ID HYB24_104)
- **Optimized Energy Management of a Photovoltaic-Heat Pump Sector Coupling System with Electrical And Thermal Energy Storages in an Office Building**
  L. Strobel, N. Munzke, B. Schwarz, M. Hiller (Karlsruhe Institute of Technology – KIT, Germany) (Submission-ID HYB24_81)
- **Design Drivers for the Storage System of Baseload Hybrid Power Plants**
  J. Iori, M. Zaaijer, D. von Terzi, S. Watson (TU Delft, Netherlands) (Submission-ID HYB24_20)

10:20 – 10:40	Discussions

10:40 – 11:10 COFFEE BREAK & POSTER SESSION

11:10 – 12:50	SESSION 6A – EDF HYBRID POWER SYSTEMS EXPERIENCE
07:10 New York | 08:10 Rio de Janeiro | 13:10 Berlin | 16:40 New Delhi | 18:10 Jakarta | 19:10 Beijing | 20:10 Tokyo | 21:10 Sydney	
> Session Chair	Name Surname (Company, Country)
11:10 – 12:30	Presentations (20 min. each)

- **Future of Thermal Plants in Microgrids with High Renewable Share**
  M. Chiodetti (EDF R&D, France), C. Huet (EDF SEI, France) (Submission-ID HYB24_15)
- **On the verification of Full Potential of BESS During Major Grid Events in Insular Power Grids**
  J. Freytes, J. His (EDF R&D, France), **G. Prime** (EDF SEI, France), Q. Ferreira (EDF R&D, France) (Submission-ID HYB24_37)
- **Dealing with Unintentional Islanding - A Complex Issue in Developing Decentralized Energy Resources which Directly Relates to The Safety of People and Assets**
  B. Deneuville, V. Gabrion (EDF R&D, France), L. Capely, G. Prime (EDF SEI, France) (Submission-ID HYB24_40)
- **Determining the Maximum Blinding of Overcurrent Protections in a Distribution System With Inverter-Based DER : First Static Formulation and Resolution**
  M. Velay (EDF, France) (Submission-ID HYB24_34)

12:30 – 12:50	Discussions

11:10 – 12:50	SESSION 6B – HYBRID POWER PLANTS III
07:10 New York | 08:10 Rio de Janeiro | 13:10 Berlin | 16:40 New Delhi | 18:10 Jakarta | 19:10 Beijing | 20:10 Tokyo | 21:10 Sydney	
> Session Chair	Name Surname (Company, Country)
11:10 – 12:30	Presentations (20 min. each)

- **Identifying Wind Power Plants Suitable for Being Retrofit With PV Capacity Into PV-Wind Hybrids**
  Ø. Klyve (Institute for Energy Technology – IFE | University of Oslo, Norway), V. Olkkonen, M. Nygård (Institute for Energy Technology – IFE, Norway), D. Lingfors (Uppsala University, Sweden), E. Marstein (Institute for Energy Technology – IFE | University of Oslo, Norway), O. Lindberg (Uppsala University, Sweden) (Submission-ID HYB24_48)
- **Optimization of Hybrid Power System with On Site Meteo Station with Integrated Prediction Methods**
  J. Liguš (KYBERNETES, Slovakia), T. A. Murajda, S. Filip (MS THERM, Slovakia) (Submission-ID HYB24_87)
- **A Mathematical Modelling Framework for the Optimal Design and Operational Management of a Wind/Solar Photovoltaic Hybrid System.**
  D. T. Mpassi Mahinga, J. Van Vuuren (Stellenbosch University, South Africa) (Submission-ID HYB24_2)
- **Study of Potential and Design of a Hybrid wind-solar plant in South India**
  R. Saiju (Flensburg University of Applied Sciences, Germany) (Submission-ID HYB24_71)

12:30 – 12:50	Discussions

11:10 – 12:50	SESSION 6C – LOCAL MARKETS AND LOCAL ENERGY COMMUNITIES
07:10 New York | 08:10 Rio de Janeiro | 13:10 Berlin | 16:40 New Delhi | 18:10 Jakarta | 19:10 Beijing | 20:10 Tokyo | 21:10 Sydney	
> Session Chair	TBA
11:10 – 12:30	Presentations (20 min. each)

- **T5.2 - Local Energy Communities: Enhancing Collective Investments and Profitability of DERs**
  N. Chrysanthopoulos, D. Qiu, G. Strbac (Imperial College London, United Kingdom) (Submission-ID HYB24_76)
- **An Optimized Probabilistic Forecasting Approach for Hybridized Wind Power Plants**
  A. Couto, H. Algarvio, A. Estanqueiro (LNEG - Laboratório Nacional de Energia e Geologia, Portugal) (Submission-ID HYB24_60)
- **Energy Management in Energy Communities With Participation in MIBEL**
  B. Canizes, Z. Vale, P. Faria, G. Santos, L. Gomes (Polytechnic of Porto, Portugal) (Submission-ID HYB24_57)
- **The Rise of Localized Distributed Energy and the Evolution of the Bulk Power Systems: From "Central" to "Residual"**
  F. Sioshansi (Menlo Energy Economics, USA) (Submission-ID HYB24_1)

12:30 – 12:50	Discussions

12:50 – 13:50 LUNCH BREAK

13:50 – 15:30	SESSION 7A – HYBRID POWER SYSTEMS COUNTRY EXPERIENCE III
09:50 New York | 10:50 Rio de Janeiro | 15:50 Berlin | 19:20 New Delhi | 20:50 Jakarta | 21:50 Beijing | 22:50 Tokyo | 23:50 Sydney	
> Session Chair	Name Surname (Company, Country)
13:50 – 15:10	Presentations (20 min. each)

- **Comparison of HOMER Grid and PyPSA Capabilities for Modelling Capacity Expansion to Meet High Renewable Energy Targets on Island Grids: Case Study of 100% Renewable Energy for Vanuatu's Efate Grid**
  J. Prasad, A. Bruce, I. Macgill (University of New South Wales, Australia), N. Verma (UL Business Services India LLP, India) (Submission-ID HYB24_69)
- **Hybridization of Diesel Small Grids in Papua New Guinea**
  T. Diani (Trama TecnoAmbiental, Spain) (Submission-ID HYB24_23)
- **Pilot Project for Hybrid/Renewable Off-Grid Energy Systems in the Arctic**
  M. O. Sellevold (Store Norske Energi, Norway) (Submission-ID HYB24_30)
- **Techno-Economic Analysis of Hybrid Energy Storage for Zero-Carbon Energy Systems in a Remote Community of Northern Canada**
  H. Knowles (Dalhousie University, Canada), A. Swingler (University of Prince Edward Island, Canada), L. Swan (Dalhousie University, Canada), (Submission-ID HYB24_31)

15:10 – 15:30	Discussions

13:50 – 15:30	SESSION 7B – TECHNICAL ASPECTS
09:50 New York | 10:50 Rio de Janeiro | 15:50 Berlin | 19:20 New Delhi | 20:50 Jakarta | 21:50 Beijing | 22:50 Tokyo | 23:50 Sydney	
> Session Chair	Name Surname (Company, Country)
13:50 – 15:10	Presentations (16 min. each)

- **Grid Code Compliance-Oriented Design of a Power Management System for Hybrid Power Plants**
  J. Martinez-Rico (Tekniker – Basque Research and Technology Alliance, Spain), F. Iov (AAU Energy, Denmark), J. L. Azpeitia, I. Ruiz de Argandoña, M. Armendia (Tekniker – Basque Research and Technology Alliance, Spain) (Submission-ID HYB24_58)
- **Review of Grid Code Requirements for Cost Optimization of Offshore Energy Hubs**
  D. Pagnani (Ørsted, Denmark), L. Huang (Aalborg University, Denmark), D. Müller, N. Cutululis (Technical University of Denmark – DTU, Denmark), P. Mahat (Siemens Gamesa Renewable Energy, Denmark) (Submission-ID HYB24_70)
- **Control Challenges for Weak Grid Integration of Hybrid Power Plants**
  F. Shahnazian, K. Das (Technical University of Denmark – DTU, Denmark), R. Yan (University of Queensland, Australia), P. Sorensen (Technical University of Denmark – DTU, Denmark) (Submission-ID HYB24_17)
- **Solar Resource Assessment and Forecasting for a Hybrid PV-CSP System in a Dust-Rich Hot, Desert Climate.**
  C. Fountoukis (Hamad Bin Khalifa University, Qatar) (Submission-ID HYB24_9)

15:10 – 15:30	Discussions

13:50 – 15:30	SESSION 7C – GENERATION ASPECTS
09:50 New York | 10:50 Rio de Janeiro | 15:50 Berlin | 19:20 New Delhi | 20:50 Jakarta | 21:50 Beijing | 22:50 Tokyo | 23:50 Sydney	
> Session Chair	Name Surname (Company, Country)
13:50 – 15:10	Presentations (20 min. each)

- **Multi-Objective Optimization of the Hybrid Power System of Madeira Including Marine Renewable Energies.**
  S. Ramos-Marin (Centre for Marine Technology and Ocean Engineering, Portugal), A. Caio (Mocean Energy, United Kingdom), C. Guedes Soares (Centre for Marine Technology and Ocean Engineering, Portugal) (Submission-ID HYB24_16)
- **Onshore wind and solar power plant with benefits of hydropower infrastructure**
  T. A. Murajda (MS THERM, Slovakia | Slovak Technical University in Bratislava, Slovakia), S. Filip (MS THERM, Slovakia), S. Berezňanin (MS THERM, Slovakia | Technical University in Košice, Slovakia) (Submission-ID HYB24_82)
- **Design and Creating of Gravity Power Plants**
  G. Saleh (Saleh Research Centre, Netherlands) (Submission-ID HYB24_29)
- **Airborne Wind Energy Accelerates the Global Energy Transition**
  N. Taphorn (SkySails Power GmbH, Germany) (Submission-ID HYB24_10)

15:10 – 15:30	Discussions

15:30 – 15:50 COFFEE BREAK

15:50 – 16:50	SESSION 8 – CLOSING SESSION
11:50 New York | 12:50 Rio de Janeiro | 17:50 Berlin | 21:20 New Delhi | 22:50 Jakarta | 23:50 Beijing | 00:50 Tokyo | 01:50 Sydney	
> Session Chair	
15:50 – 16:20	Panel discussion

Topics addressed: TBA

Panelists:

- TBA
- TBA
- TBA
- TBA

16:20 – 16:40	Discussions
16:40 – 16:50	Closing Remarks

POSTER PRESENTATIONS

- **Sensitivity-based Control for HUB Substation Considering Multiple Distribution Networks**
  S. Kang (Korea University, South Korea), **S. Jung** (Hanbat National University, South Korea) (Submission-ID HYB24_6)
- **Development of an Experimental Environment to Investigate the Integration of Energy-Flexible Facilities into a Future Smart Grid**
  C. Kondzialka, C. Schewe (University of Applied Sciences Ulm, Germany) (Submission-ID HYB24_22)
- **Evaluation of the Ability of a Battery Energy Storage System with a Grid Forming Inverter to Provide Instantaneous Reserve Regarding the Limitations of the Dynamic Behaviour of Battery Cells**
  T. Garn, D. A. Nguyen, B. Engel (TU Braunschweig – elenia , Germany) (Submission-ID HYB24_41)
- **Comparative Modeling and Scenario Analysis in Sector-Coupled Island-Energy Systems Optimization**
  V. Breburda, **P.-P. Schierhorn** (Energynautics, Germany), S. Massat, B. Blat Belmonte (TU Darmstadt, Germany), E. Tröster (Energynautics, Germany), S. Rinderknecht (TU Darmstadt, Germany) (Submission-ID HYB24_42)

- **Investigating the Impact of Nonlinearities on the Response of Spar-Integrated Oscillating Water Column Systems**
  B. Fenu, B. Paduano, M. Bonfanti (MOREnergy Lab - Politecnico di Torino, Italy) (Submission-ID HYB24_45)
- **PEM-Electrolyzer Modeling and Control Strategies in the Extended Node Method for Hybrid Power System Modeling**
  D. Vorwerk, M. Schumann, D. Schulz (Helmut Schmidt University – University of the Bundeswehr, Germany) (Submission-ID HYB24_73)
- **PEM fuel cell cooling system coupling for the effective use of waste heat**
  D. Hamann, M. Schifferdecker, A. Nosrat, J. A. Puszkiel, E. S. Wienken, P. S. Krause, J. Warfsmann, T. Klassen, J. Jepsen, D. Schulz (Helmut Schmidt University – University of the Bundeswehr, Germany) (Submission-ID HYB24_74)
- **Evaluation of a Hybrid Photovoltaic Biomass microgrid in Cuba**
  A. Rodríguez Rosales, A. J. Curbelo Alonso, A. Pavón Cárdena, A. Beceiro Ibarra, P. E. Gómez Miranda, Y. Corne Garmendia, F. Trebejo Montes, R. Sosa Cáceres (CUBAENERGÍA, Cuba) (Submission-ID HYB24_75)
- **Ecological accumulation energy for hybrid energy systems**
  M. Badida (TU Kosice, Slovakia), **S. Filip** (MS THERM, Slovakia), S. Berezňanin (MS THERM, Slovakia | Technical University in Košice, Slovakia) (Submission-ID HYB24_91)