

E_GCC POWER 2021
25th – 27th October 2021/ 19th -21st Rabi Al-Awwal, 1443

Conference Program
TIME BASED ON UTC + 3 (DOHA LOCAL TIME)

The First Day: Monday 25th October 2021 (19th Rabi-AlAwwal 1443)

Conference Registration & Reception 9:00 - 10:00

Opening Ceremony: (AUDITORIUM A & B)

- Welcome statement and Holy Quran 10:00 - 10:05
- Patronage Address (H.E. GCC Asst. Secretary General) 10:05 - 10:10
- GCC Cigre Address: H.E. Chairman of GCC CIGRE Board of Directors: 10:10 - 10:15
- Cigre Address: H.E. Cigre Secretary General 10:15 - 10:20
- Main sponsors Address: 10:20 - 10:30

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10:30- 12:00 KEYNOTE PANEL SESSION (AUDITORIUM A)
Revelation in GCC Electricity Sector toward energy transition

10:30- 12:00 Tutorial1: (AUDITORIUM B)
Title: Application of non-SF6 gases or gas-mixtures in medium voltage and high voltage gas-insulated switchgear
Speaker: Maik Hyrenbach and Günter Kachelrieß

12:00 – 12:30 BREAK & EXHIBITION VISIT

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Session A1: ELECTRICITY MARKET & REGULATION (AUDITORIUM A)

Chaired by: Eng. Easa Al-Zarooni
Co-Chaired by: Dr. Nasser Al-Shahrani

25th October 2021 12:30 – 14:00	A101	SYNERGIES OF RENEWABLES DEVELOPMENT AND GRID INTERCONNECTION IN THE MIDDLE EAST. By: Kaifeng Yu, Global Energy Interconnection Development and Cooperation Organization: United Arab Emirates
	A102	Remuneration and Market Schemes for Decentralized Renewable Energy Systems in the Kingdom of Saudi Arabia: A Preparation for the Energy Sector Transformation. By: Vincent Thevenin, Elia Grid International: Belgium
	A103	Balancing Mechanism for GCC Countries. By: Abdulrahman Mohammed Bati Alkelbi, Saudi Electricity Company: Saudi Arabia
	A104	Assessment of power trading opportunities in the GCC Region. By: Yousef O. Al-Marwan, GCC Interconnection Authority: Saudi Arabia
	A105	Facilitating Power Trading in the GCC.. By: Tarek Fawzy, Energy Exemplar: United Kingdom

Q&A

12:30- 15:00 Tutorial2: (AUDITORIUM B)
Title: Protection and local control of HVDC grids
Speaker: Eng. Kees Koreman & Dr. Willem Leterme.
Description: First, the fault response of converters with and without fault blocking capability is compared. Then, various strategies for clearing DC-side faults are discussed. Thereafter, various principles in fault detection and localisation are explained and compared. Finally, the basic operation of DC Circuit Breakers is described.

15:00 END OF DAY ONE

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Second Day: Tuesday 26th October 2021 (20th Rabi Al-Awwal 1443)

TRACK – A (AUDITORIUM A)		TRACK – B (AUDITORIUM B)	
Session A2: SYSTEM OPERATION & CONTROL Chaired by: Ahmad AL-ZHRANI Co-Chaired by: Hashim AL-ZHRANI		Session B2: Asset Management for Power Systems Chaired by: Dr. Bruce Stedall Co-Chaired by: Sana AL-Ghareeb	
A201	Maintaining of GCCIA Control Centers to Attain Full Operability of the interconnected system. By: Talal Alshaikh, GCCIA: Saudi Arabia	B201	Supporting Asset Management with date based solutions. By: Alexei Babizki, MR: Germany
A202	Resonance Overvoltage Study on Shunt Compensated EHV Transmission Line: Hail-3 to Jouf-1 Case Study. By: Mohammed S. Al Dahasi, Saudi Electricity Company: Saudi Arabia	B202	Utilization of Artificial Neural Network for Condition Assessment of Power Transformers. By: Dr Mohamed Khalil, Doble Engineering company: Poland
A203	Enhancing Operational Studies through Automatic Exchange of Network Models among the GCC Countries Using CIM. By: Ahmed Abdullah ALJaafari, GCCIA: Saudi Arabia	B203	An Asset Performance Tool using Data Analytics for Transco's Power Transmission Network. By: Balasubramanian Nainar, Transco: United Arab Emirates
A204	AGC Enhancement for Mitigation of PV Intermittence and Reducing Unscheduled Energy Deviations. By: Hany Salah Ashour Abdelwahed, Transco: United Arab Emirates	B204	PARTIAL DISCHARGE MONITORING FOR AUTOMATIC DIAGNOSIS. By: Javier Ortego, Ampacimon: France
A205	Implementing Six Sigma for Improving PCC Performance. By: Hussam Alomari, National Grid SA: Saudi Arabia	B205	OFF- AND ON-LINE PARTIAL DISCHARGE TESTS TO ASSESS THE CONDITION OF GENERATOR STATOR WINDING INSULATION. By: Bogdan Gorgan,OMICRON Energy Solutions GmbH: Germany
A206	Smart Automatic Voltage Control Scheme for an Island Power Grid. By: Michael Burke, Saudi Aramco: Saudi Arabia	B206	Real time insights from digital enterprise for your secondary assets. By: Peter Kreutzer, hitachi-powertgrids: Switzerland
Q&A		Q&A	
11:45– 12:15 Break for Exhibition Visit, POSTER SESSION (EXHIBITION HALL), Hitachi ABB solutions and offerings (AUDITORIUM A) OTN Systems (AUDITORIUM B)			
TRACK – A (AUDITORIUM A)		TRACK – B (AUDITORIUM B)	
Session A3: RENEWABLE ENERGY AND NUCLEAR POWER FOR THE GULF STATES Chaired by: Sana AL-GHAREEB Co-Chaired by: Mishaal AL-MUTAWA		Session B3: System Development & Economics Chaired by: Mohammad Al-Sheikh Co-Chaired by: Fahad Al Zahrani	
A301	Overview of Energy Storage Technologies for Renewable Energy Powered RO-Desalination Plants in GCC region. By: Vishal Vora, Electrical Research and Development Association (ERDA): India	B301	Optimizing the generation mix to ensure system adequacy for scenarios with very high RES shares for the Kingdom of Saudi Arabia. By: Malek M. Al-Hajji, Saudi Electricity Company: Saudi Arabia
A302	Techno-economic impact of KSA's 2030 renewable integration targets. By: Mohamed A. Al Zaid, Saudi Electricity Company: Saudi Arabia	B302	Grid development strategies for the optimal integration of very high RES shares in the high voltage grid of the Kingdom of Saudi Arabia. By: Malek M. Al-Hajji, Saudi Electricity Company: Saudi Arabia
A303	Grid Compliance Study for the First Large-Scale Wind Farm in KSA. By: Mohannad Alghamdi, Saudi Electricity Company: Saudi Arabia	B303	Role and importance of multiple neighboring power system interconnections for decarbonized utility power system. By: M. Fayyaz Akram, POWER-tek Global Inc.: Canada
A304	The Impact of Large Scale RES on the Saudi Electricity Transmission System. By:	B304	Novel cost-benefit-analysis approach in power system planning. By: Sebastian

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26th October 2021 13:45 – 15:00		Mohannad Alghamdi, Saudi Electricity Company: Saudi Arabia		Stepanescu, Elia Grid International: United Arab Emirates
	A305	<i>Application of Variable Shunt Reactor in the Middle East: OLTC brings wider regulation range.</i> By: Ajay Krishnan Nilakantan, Maschinenfabrik Reinhausen GmbH: Germany	B305	<i>Integration of Superconducting Fault Current Limiter in the inadmissible severe high level short circuit fault.</i> By: Abdullah Ali Al Habsi, Oman Electricity Transmission Company: Oman
	Q&A		Q&A	
13:30- 13:45 Break for Exhibition Visit, and Product Showcase				

26th October 2021 13:45 – 15:00	Session A4: Substations, Switchgear and HV Equipment Chaired by: Mr. Koji Kawakita Co-Chaired by: Abdulrahman AHLI		Session B4: Distribution Systems &HVDC and FACTS Technology Chaired by: Kamel Al-Shehabi Co-Chaired by: Abdulaziz Al-Shafai	
	A401	<i>Condition assessment of bushings in the field.</i> By: Evgenii Ermakov, ABB Power Grids Sweden AB: Sweden	B401	<i>Advanced optimization tool for reliability improvement of MV distribution systems through feeder automation.</i> By: Stanislav Yordanov, Tractebel Impact: Belgium
	A402	<i>Impact of HV Disconnect Switch Failures on the Reliability of Power Systems.</i> By: Sultan Mohammad, Saudi Aramco: Saudi Arabia	B402	<i>Wide-Area Frequency based Power Sharing Scheme in Hybrid Multiple Subgrids.</i> By: N.V.N. JAGADISH, Saudi Electricity Company/Distribution: Saudi Arabia
	A403	<i>Project experience of a substation with SF6-free GIS, LPITs and IEC 61850 process bus technology.</i> By: Thomas Neumeier, Siemens SI DG: Germany	B403	<i>UPFC PLUS – Dynamic Load flow Management for volatile unstable Transmission Grids.</i> By: Christian Pfeifer, Siemens Energy: United Arab Emirates
	A404	<i>Retrofit of 420kV GILs with a SF6-free gas, the fluoronitrile.</i> By: MAUFFREY, General Electric: France	B404	<i>Thyristor Quardri valve Fire incident: A Case Study at GCCIA Al Fadhili HVDC.</i> By: Jayakumar Muthsamy, GCCIA: Saudi Arabia
	A405	<i>Connection Considerations for Voltage Transformers in Resistance-Grounded Distribution Systemsof 420kV GILs with a SF6-free gas, the fluoronitrile.</i> By: Fowzan S.Fowzan, Saudi Aramco: Saudi Arabia		
Q&A		Q&A		
15:00 END OF DAY TWO				

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Third Day: Wednesday 27th October 2021 (21 ST Rabi Al-Awwal 1443)			
TRACK - A (AUDITORIUM A)		TRACK - B (AUDITORIUM B)	
Session A5: SMART GRIDS Chaired by: Mohamed Al Muaili Co-Chaired by: Abdulaziz Al-Shafai		Session B5: SUBSTATION PROTECTION & AUTOMATION Chaired by: Haifaa Al-Mteiri Co-Chaired by: Alaa Rahmaa	
A501	<i>Digitalization of Utilities: tale of a successful journey to become a Digital TSO.</i> By: Antoine Mathieu, Elia Grid International: Belgium	B501	<i>Pilot Experience of IEC 61850 real-time communication between Al-Dhafra and ASWG 400kV digital substations enabling new protection and automation concepts in the TRANSCO network.</i> By: Peter Kreutzer, hitachi-powertgrids: Switzerland
A502	<i>Innovative methods for testing PMUs in Smart Grids.</i> By: Mohamed Ali, OMICRON: Bahrain	B502	<i>Defining a Wide Area Protection System Using 5G Communication Technology.</i> By: Mohand Ouamer NAIT BELAID, EDF SA: France
A503	<i>Emerging Role of Smart Building Integration in System Operation and Control.</i> By: Lavjit Singh, Elia Grid International: Belgium	B503	<i>Case study of a specific issue of distance protection in relation to simultaneous faults and auto reclosure on double circuit radial feeders.</i> By: Haifaa AlMteiri, TRANSCO: United Arab Emirates
A504	<i>Intelligent Voltage Limit Violation Prediction for Active Distribution Network.</i> By: Mohd Zamri Che Wanik, Qatar Environment and Energy Research Institute: Qatar	B504	<i>Frequency Measurement and its Applications – Requirements and Testing.</i> By: Sameh Eldmrdash, OMICRON electronics Deutschland GmbH: Germany
A505	<i>Energy Storage System.</i> By: ABDULHADI ALQARNI, Alfanar: Saudi Arabia	B505	<i>Research on and Application of Key Technologies for Intelligent Operation and Maintenance of GIS Substation.</i> By: Jun Shen, Sieyuan Electric Co. Ltd.: China
A506	<i>Talk-back Seals: Guardian of energy meters.</i> By: SAURAV CHANDEL, TATA POWER - DDL: India	B506	ADVANCED COGENERATION ISLANDING SYSTEM. By: Muhannad Almulla, Saudi Aramco: Saudi Arabia
Q&A		Q&A	
11:30 – 12:00 Break for Exhibition Visit and Product Showcase			
TRACK - A (AUDITORIUM A)		TRACK - B (AUDITORIUM B)	
Session A6: OVERHEAD LINES AND INSULATED CABLES Chaired by: Aqeel AL-AWADY Co-Chaired by: Fahad AL-ZAHRANI		Session B6: TRANSFORMER DESIGN, MANUFACTURING, LIFE CYCLE AND PERFORMANCE Chaired by: Tarik AL-ABRI Co-Chaired by: Abdulla AL-GHAMDI	
A601	<i>LLDPE/MDPE performance as inner and outer sheath.</i> By: Mohamad Nabih Al Saati, RCGC: Saudi Arabia	B601	STRAY-FLUX HEATING IN TANK OF HIGH IMPEDANCE, LARGE CAPACITY TRANSFORMERS. By: MUKUNDAN P.NARAYANAN NAMBIAR, DUBAI ELECTRICITY AND WATER AUTHORITY: United Arab Emirates
A602	<i>Field & laboratory Assessment of RTV Coated Insulators in Harsh Desert Environment..</i> By: Ahmed AlThagafi, GCCIA: Saudi Arabia	B602	Fault Diagnosis of Transformer using Dissolved Gas Analysis Technique - Case Study. By: Manjusha S. Nambiar, Electrical Research & Development Association: India
A603	<i>Best Practices of High Voltage Underground Cables Maintenance.</i> By: Sultan Al Katiri, TRANSCO: United Arab Emirates	B603	PRACTICAL APPROACH TO TRANSFORMER WINDING CONDITION ASSESSMENT – FIELD PERSPECTIVE. By: Jaffer Aldurazi, Megger: Bahrain
A604	<i>Tangent Delta in Polymeric HV Cables.</i> By: Mohamad Nabih Al Saati, RCGC: Saudi Arabia	B604	QUALITY ASSURANCE OF TRANSFORMERS. By: Ronnie Minhaz, Transformer Consulting Services Inc.: Canada
A605	<i>Insulation Performance Analysis of Field Aged and New MV XLPE Cables Using Various Diagnostic Techniques.</i> By: Yousef Ghazi	B605	Failure Analysis of Power Transformers Tested as per IEC: 60076 (ERDA's Experience). By: Kapil J Sharma, ERDA: India

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27th October 2021 14:00 – 14:30		Alonazi, National Grid SA - Saudi Electricity Company: Saudi Arabia	
	A606	<i>Operational Evaluation of RTV Coating Performance over 17 years on the Coastal Area at Jubail-SA.</i> By: Jaafar Al Thawab, Saudi Electricity Company - National Grid SA: Saudi Arabia	
	Q&A		Q&A
13:30 – 14:00 Break for Exhibition Visit and Product Showcase			
CLOSING SESSION (AUDITORIUM A & B)			
<ul style="list-style-type: none"> <li style="display: flex; justify-content: space-between;">• GCC Cigre Chairman Closing Statement 14:00 – 14:05 <li style="display: flex; justify-content: space-between;">• Cigre Secretary General Closing Statement 14:05 – 14:10 <li style="display: flex; justify-content: space-between;">• GCC Cigre Secretary General Announcements 14:10 – 14:15 <li style="display: flex; justify-content: space-between;">• Technical Committee Chairman Remarks & Recommendations 14:15 – 14:28 <li style="display: flex; justify-content: space-between;">• Closing 14:28 – 14:30 			
14:30 End of Conference			

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Second Day: **Tuesday 26th October 2021 (20th Rabi Al-Awwal 1443)**

POSTERS (EXHIBITION HALL)

PPS01 - Transformer Online Monitoring Under N-1 Contingency: Is it beneficial?. By: Bhaba Priyo Das, Hitachi ABB: Singapore
PPS02 - Enhancement of asset and grid information governance through a reference data model management towards establishing Digital Authority. By: Dr. Jayaprakash Ponraj , TRANSCO: United Arab Emirates
PPS03 - Online Condition Monitoring Techniques for Metal Oxide Surge Arresters. By: Anil Subhashchandra Khopkar , Electrical Research And Development Association (ERDA): India
PPS04 - GIS Benefits & ROI: A CASE STUDY. By: Malika Saif Al Amri, MEDC: Oman
PPS05 - Mitigating threats and strengthening the Grid with AI-based Inspection Programs. By: Sylvain Mandrau , GE Digital: France
PPS06 - Virtualization as an enabler for digital substation deployment. By: Ben Frazer, Hitachi Power Grids: United Arab Emirates
PPS07 - PREVENTION IN THE MAIN ELEMENTS OF THE POWER SYSTEM. By: Jorge Cardenas, Adneli Consultant: Spain
PPS08- A method for Accurate balanced Radial Distribution System Parameter estimation. By: Mahmoud Aly , Arab Contractors : Egypt
PPS09 - Regional Interconnections: best practices and lessons learnt. By: LIENHART, EDF: France
PPS10 - Economic Optimization of Cable Conductor Size by Studying its Expected Lifetime at Elevated Operating Temperatures. By: Mohammed Aly Khalil Askar , GCC Electrical Testing Laboratory: Saudi Arabia
PPS11 - Dynamic Line Rating with forecasts and SCADA integration. By: Jean-Louis Repetto, Ampacimon: France
PPS12 - Root Cause Investigation of Failed Power Cable Located in Coastal Area. By: Dr. Nitin Shingne, Electrical Research and Development Association (ERDA): India
PPS13 - A Field Analysis of New Overhead Line Conductor Coatings to Increase Ampacity/Reduce Power Losses in Desert Environment: Performance and Durability Assessments. By: Dr Niall Coogan , AssetCool: United Kingdom
PPS14 - Conception and creation of the power system connecting the new Hatta hydro power plant. By: Paul PHAM , edf: United Arab Emirates
PPS15 - Wind power operation in power systems: A review of operational philosophy for Dhofar Wind Farm. By: Ammar Suhail Mohammed Al-Muhandis Al-Yafai , Oman Electricity Transmission Company: Oman
PPS16 - Maintenance work order management tool (Desktop & Mobile Solution). By: Haitham Abdullah, Oman Electricity Transmesion Company: Oman
PPS17 - Detection of HIF using Harmonics signature. By: Mohamad Dhafer Alshahrani, saudi electric co :Saudi Arabia
PPS18 - Protection coordination and special protection systems for interconnected power systems using real time communication channels. By: Ramon Bächli , ABB: Switzerland
PPS19 - Challenges of UHF PD Monitoring for Three-Phase Encapsulated GIS. By: Fraser Cook , Qualitrol: United Kingdom
PPS20 - Cost-Benefit Analysis and Cases of Study of Battery Energy storage system in Western African Power Pool (WAPP). By: Andrea Mansoldo, DNV GL :United Arab Emirates
PPS21 - Short Circuit Current Challenges in SEC - EOA By Ahmed T. Al-Awami , Malek M. Al-Hajji Ahmed , Saudi Electricity Company :Saudi Arabia
PPS22 - FIRE SAFE HIGH MOISTURE TOLERANT SUPERIOR SYNTHETIC ESTER DIELECTRIC FLUID FOR TRANSFORMERS – A CASE STUDY. By: K. BABURAO, Raj Petro Specialities Pvt Ltd - A Brenntag Group Company: India

26th October 2021
11:45 – 13:30