

PLENARY SESSIONS PROGRAM

DAY 1 - WEDNESDAY, NOVEMBER 27, 2024		ROOM 1	
TIME	ID	ARTICLE / AUTHORS	TOPIC
8:30 - 10:30	REGISTRATION AND WELCOME BREAKFAST		
10:30 - 11:30	OPENING CEREMONY OF CLAGTEE 2024		
11:30 - 12:30	3 Sessions Block (20 min each) - Moderator: Ferro, Gustavo		
11:30 - 11:50	ID004	Damping of Low-Frequency Oscillations in Power Systems by State Feedback via Gray Wolf Algorithm <i>Leonardo H. Macedo; Elenilson V. Fortes; Marcus V. S. Costa; Luis Carvalho</i>	4
11:50 - 12:10	ID007	Linearization of the Hydraulic Production Function in a Hydrothermal Optimal Power Flow Problem <i>Amanda Nerger; Tiago Forti da Silva; Leonardo Nepomuceno</i>	4
12:10 - 12:30	ID024	Methodology for Evaluating Voltage Vulnerability. Study Case: Provincial Interconnected System of Córdoba <i>Ceccarelli, Alejo; Kloster, Karel; Amaya, Juan I.; Bragagnolo, Sergio N.; Baez, Esteban A</i>	4
12:30 - 14:00	LUNCH BREAK (NOT INCLUDED)		
14:00 - 15:00	TECHNICAL TALK - NATIONAL ENERGY SCENARIO Speaker: Gerardo Rabinovich Moderator: Ciapinna, Raúl		
15:00 - 16:30	4 Sessions Block (20 min each) - Moderator: Roberts, Justo		
15:00 - 15:20	ID034	Using the Concept of Security Layers in Depth for Power Substation Automation Networks <i>C. M. Lima Jr, I. N. da Silva</i>	4
15:20 - 15:40	ID038	A Comprehensive Overview in Communication Protocols for IEDs in Electric Power Systems <i>G. C. Lilli, L. S. Lessa, C. V. C. Grilo, A. J. Prado</i>	4
15:40 - 16:00	ID040	A Constructive Heuristic Algorithm for Distribution Systems Expansion Planning Considering Reliability <i>Lluleisi Grández; Leonardo H. Macedo; Rubén Romero</i>	4
16:00 - 16:20	ID029	Numerical Relays and Coordination of Protections <i>Fernando Toledo; Miguel Tabares</i>	4
16:30 - 17:00	COFFE BREAK		
17:00 - 18:00	TECHNICAL TALK - ENERGY EFFICIENCY AND THE TECHNOLOGIES THAT ALLOW US TO ACHIEVE IT Speaker: Alejandro De Grandis Moderator: Roberts, Justo		

PLENARY SESSIONS PROGRAM

DAY 1 - WEDNESDAY, NOVEMBER 27, 2024		ROOM 2	
TIME	ID	ARTICLE / AUTHORS	TOPIC
8:30 - 10:30	REGISTRATION AND WELCOME BREAKFAST		
10:30 - 11:30	OPENING CEREMONY OF CLAGTEE 2024		
11:30 - 12:30	3 Sessions Block (20 min each) - Belliski, Gustavo		
11:30 - 11:50	ID001	Predictive Deep Learning Model for Photovoltaic Power Production Forecasting <i>S.A. Gonzalez, L.M. Seijas, G.J. Murcia, L. Marinucci, L. Palomeque</i>	5
11:50 - 12:10	ID094	Identification of Candidate Locations for Electric Vehicle Charging Stations Using Geospatial Analysis and Fuzzy Logic <i>Andres Sabillon; Mario Mejia; John Franco</i>	10
12:10 - 12:30	ID104	Development of a software tool for identifying sections and areas of the distribution electrical network that require actions to enhance Service Quality <i>Agüero Carlos Alberto; di Mauro Guillermo; Anaut Daniel; Vignerte Juan; Strack Jorge</i>	10
12:30 - 14:00	LUNCH BREAK (NOT INCLUDED)		
14:00 - 15:00	TECHNICAL TALK - NATIONAL ENERGY SCENARIO Speaker: Gerardo Rabinovich Moderator: Ciapinna, Raúl		
15:00 - 16:30	4 Sessions Block (20 min each) - Moderator: Anaut, Daniel		
15:00 - 15:20	ID051	Multicriteria Analysis of Electrical Energy Storage Technologies in Chile: Strategic Evaluation and Development Perspectives <i>Felipe Reyes León, Claudio Ortega Lorca, Gerardo Blanco Bogado, Diego Altamirano Hernández</i>	6
15:20 - 15:40	ID059	Epistemologies of Science, Technique and Technology in dialogue with STEAM education: a contribution to teaching in Electrical Engineering <i>Gustavo Belliski; Guillermo Rodríguez</i>	9
15:40 - 16:00	ID077	Scalable Hybrid Laboratories: Application to Industrial Automation <i>Marco Vilches; Hector Vargas; Jorge Huerta</i>	9
16:00 - 16:20	ID045	Energy Analysis of a Trigenation System Using Waste Energy from a Diesel Engine for Cold and Heat Production <i>W. P. Barletta, T.A Bimestre, C.E Tuna, and J.L Silveira</i>	2
16:30 - 17:00	COFFE BREAK		
17:00 - 18:00	TECHNICAL TALK - ENERGY EFFICIENCY AND THE TECHNOLOGIES THAT ALLOW US TO ACHIEVE IT Speaker: Alejandro De Grandis Moderator: Roberts, Justo		

PLENARY SESSIONS PROGRAM

DAY 2 - THURSDAY, NOVEMBER 28, 2024		ROOM 1	
TIME	ID	ARTICLE / AUTHORS	TOPIC
8:30 - 10:00	4 Sessions Block (20 min each) - Moderator: Belliski, Gustavo		
8:30 - 8:50	ID027 (virtual)	Optimal Reactive Power Dispatch of an Industrial Power System with Renewable Energy <i>G. J. Friedrich, A. A. Augusto, T. T. Borges and A. F. Schiochet</i>	2
8:50 - 9:10	ID002 (virtual)	Impacts of implementing SmartGrids with Renewable Energy Sources and Batteries for the Decarbonization of Smart Cities <i>Renata Ortiz Silva; Patricia Poloni; André Luiz Veiga Gimenes; Miguel Edgar Morales Udaeta</i>	4
9:10 - 9:30	ID013 (virtual)	Main Barriers to the Implementation of an Ancillary Services Market in Brazil <i>Olivia Delpuppo; Erik Rego; Virginia Parente</i>	4
9:30 - 10:00	ID018 (virtual)	Investigation of Sequence Parameters of Overhead Transmission Lines Located on Soils with Frequency-Dependent Electrical Parameters <i>Tainá Fernanda Garbelim Pascoalato; Anderson Ricardo Justo de Araújo; Sérgio Kurokawa; José Pissolato Filho</i>	4
10:00 - 10:30	COFFEE BREAK		
10:30 - 11:30	TECHNICAL TALK - PRODUCTION OF SYNTHETIC FUEL FREE OF FOSSIL CO₂ Speaker: Alejandro Gesino Moderator: Roberts, Justo		
11:30 - 13:00	4 Sessions Block (20 min each) - Moderator: Agüero, Carlos		
11:30 - 11:50	ID003 (virtual)	Integrated Resource Planning – An Environmental Analysis of the Madre de Dios Region - Peru <i>Renata Ortiz Silva; André Luiz Veiga Gimenes; Miguel Edgar Morales Udaeta</i>	5
11:50 - 12:10	ID017 (virtual)	Analysis of Energy Planning in a Multicriteria Environment Considering Technological and Economic Biases of Sustainable Energy <i>Ana Paula Siqueira Rosa; André Luiz Veiga Gimenes; Miguel Edgar Morales Udaeta; Vanessa Meloni Massara; Viviane Tavares Nascimento</i>	5
12:10 - 12:30	ID047 (virtual)	The need for a ten-year energy plan in Peru: comparative analysis with Chile and Brazil <i>Romel Jimenez; Clodomiro Unsihuay-Vila</i>	5
12:30 - 12:40	ID099 (virtual)	Identifying Extreme Wind Resource Scenarios for Power System Operation and Planning with High Renewable Energy Penetration <i>Alex Villamarín-Jácome, Danny Espín-Sarzosa, Jorge Vega-Herrera, Felipe Munoz, Sebastian Aguirre</i>	5
13:00 - 14:30	LUNCH BREAK (NOT INCLUDED)		
14:30 - 15:30	TECHNICAL TALK - SUPERCRITICAL WATER GASIFICATION: A SUSTAINABLE PATHWAY FOR HYDROGEN PRODUCTION AND ENERGY TRANSITION IN LATIN AMERICA Speaker: Thiago Averaldo Bimestre Moderator: Roberts, Justo		
15:30 - 16:30	3 Sessions Block (20 min each) - Moderator: Ciapinna, Raúl		
15:30 - 15:50	ID025	Cogeneration Systems Based on Fuel Cells <i>A.E., Gonnet y C.A, Mainetti</i>	2
15:50 - 16:10	ID049	Design, Installation, Commissioning and Evaluation of Photovoltaic Generation in Entre Ríos: a Case Study <i>R. M. Schierloh, J. L. Godoy, C. R. Cellino</i>	2



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16:10 - 16:30	ID050	Strategies for Mitigating Power Fluctuations in Photovoltaic Generation Utilizing an Energy Storage System <i>S. C. Gomes, A. S. Balde, J. A. Vilela Junior</i>	2
16:30 - 17:00	COFFE BREAK		
17:00 - 18:00	3 Sessions Block (20 min each) - Moderator: Branda, Julio		
17:00 - 17:20	ID108	Distributed Solar Energy in General Pueyrredón: Analyzing Potential and Pathways for Local Energy Transition <i>Ezequiel Leonardi; Alejandro Joaquín Gesino; Justo José Roberts</i>	2
17:20 - 17:40	ID022	Automatic Determination of Communication Quality in the Operation of Power Grids <i>Gonzalo Farias; Jaime Acevedo; Gonzalo García; Ernesto Fábregas; Gabriel Hermosilla; Sebastián Dormido-Canto</i>	7
17:40 - 18:00	ID093	The Strategic Importance of the Atlantic Coast Power Plants as a Provincial Energy Company <i>Camilo Castillo; Lucas Tremonti</i>	9
19:00 - 21:00	NETWORKING LUNCH		

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DAY 2 - THURSDAY, NOVEMBER 28, 2024		ROOM 2	
TIME	ID	ARTICLE / AUTHORS	TOPIC
8:30 - 10:00	4 Sessions Block (20 min each) - Moderator: Agüero, Carlos		
8:30 - 8:50	ID020	Modification and Performance Analysis of a Bidirectional DC-DC Converter with Voltage Gain for the Energy Management of Supercapacitors <i>Jessica Sousa; Thiago Soares; Jonathan Tabora; Maria Emília Tostes; José Moisés da Silva; Hugo Lott</i>	12
8:50 - 9:10	ID021	Optimal Dispatch of Battery Energy Storage Systems <i>Glaucus Lima; Matheus Ferreira; Edimar de Oliveira</i>	12
9:10 - 9:30	ID039	Fault Reconfiguration Strategy for DC-DC Multiphase Converter in Photovoltaic Applications <i>Sebastian Maestri; Rogelio Adrián García Retegui; Nicolas Wassinger; Marcos Funes</i>	12
9:30 - 10:00	ID056	Static and dynamic evaluation of an iterative phase adjustment algorithm for asymmetric interleaved converters <i>N. Wassinger, R. García Retegui, S. Maestri, M. Judewicz, M. P. Cervellini, M. Funes</i>	2
10:00 - 10:30	COFFEE BREAK		
10:30 - 11:30	TECHNICAL TALK - PRODUCTION OF SYNTHETIC FUEL FREE OF FOSSIL CO₂ Speaker: Alejandro Gesino Moderator: Roberts, Justo		
11:30 - 13:00	4 Sessions Block (20 min each) - Moderator: Di Mauro, Guillermo		
11:30 - 11:50	ID080	Transmission Networks Resource Allocation Through Direct Mixed-integer AC Optimal Power Flow Applications with Gurobi <i>D. P. C. Filho, L. J. M. Simões, M. de C. Filho and J. B. M. Filho</i>	4
11:50 - 12:10	ID035	Challenges and Solutions for Low-Carbon Hydrogen Production in Brazil: An Analysis of Business Models and Contractual Structures <i>Clarissa Petrachini Gonçalves, Waldir Gomes Gonçalves and Dorel Soares Ramos</i>	3
12:10 - 12:30	ID037	Hydrogen Production Potential from Brazilian Landfills <i>Regina Paulino; Marcelo Silva; Tatiane da Cruz; Derval Rosa; José Silveira</i>	3
12:30 - 12:40	ID063	Quality function deployment applied to comparison biomass pre-treatment methods <i>Kauan Lemes; Celso Tuna; Nestor Pérez; Gabriel Vergara; Thiago Bimestre</i>	3
13:00 - 14:30	LUNCH BREAK (NOT INCLUDED)		
14:30 - 15:30	TECHNICAL TALK - SUPERCRITICAL WATER GASIFICATION: A SUSTAINABLE PATHWAY FOR HYDROGEN PRODUCTION AND ENERGY TRANSITION IN LATIN AMERICA Speaker: Thiago Averaldo Bimestre Moderator: Roberts, Justo		
15:30 - 16:30	2 Sessions Block (20 min each) - Moderator: Murcia, Guillermo		
15:30 - 15:50	ID079	Platform for the Optimization of Distributed Energy and Simulation of the Green Hydrogen Value Chain, Chile A Case Study <i>Yunesky Masip Macía; Suleivys Milagros Nuñez Gonzalez; Alejandro Fernandez Gil</i>	3
15:50 - 16:10	ID072	Optimized sizing methodology for battery storage systems in hybrid power plants <i>L. J. M. Simões, R. L. Miranda, L. do E. S. Fernandes, M. de C. Filho, J. B. M. Filho</i>	12

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16:10 - 16:30	ID105	Study of rational energy use measures and their impact on the energy transition <i>L. Casterás, P. D'Angona, D. Ugalde, A. F. Masuzzo, L. Schiel</i>	8
16:30 - 17:00	COFFE BREAK		
17:00 - 18:00	3 Sessions Block (20 min each) - Moderator: Marotta Cassula, Agnelo		
17:00 - 17:20	ID033	Statistical Analysis of Overvoltages Applied to Insulation Coordination <i>W.F. Gimenez</i>	4
17:20 - 17:40	ID043	Analysis of Radiality and its Application in the Reconfiguration of Distribution Systems <i>Juan M. Home-Ortiz; Renzo Vargas; Gustavo M. Cerqueira; Renato Machado Monaro; Leonardo H. Macedo</i>	4
17:40 - 18:00	ID048	Assessing the Flexibility of Renewable Distributed Generation in Chile: Strategic Risk Management under Uncertainty <i>Fabián Herrera Peralta; Gerardo Blanco</i>	4
19:00 - 21:00	NETWORKING LUNCH		

PLENARY SESSIONS PROGRAM

DAY 3 - FRIDAY, NOVEMBER 29, 2024		ROOM 1	
TIME	ID	ARTICLE / AUTHORS	TOPIC
8:30 - 10:00	4 Sessions Block (20 min each) - Moderator: Anaut, Daniel		
8:30 - 8:50	ID103	Partial Discharge Diagnosis in a High Voltage Current Transformer: A Wavelet Transform and Competitive Network Approach <i>André Gifalli; Matheus Goes Crivelaro; André Nunes de Souza; Carlos Guilherme Gonzales; Paulo José Paupitz Gonçalves; André von Frühauf Hublard; Victor Hideki Saito Yamaguchi; Antonio André Zago Nunes de Souza; Erasmo Silveira Neto; Gustavo Vinícius da Silva</i>	4
8:50 - 9:10	ID070	Insertion of Renewable Energy in the Local Distribution Network, Medium, Large and Community Users, Analysis and Optimization of Losses <i>J. Vignerte, D. Anaut, G. F. di Mauro, C. Agüero, J. Strack</i>	4
9:10 - 9:30	ID075	Algorithm based on Euclidean Distance for Detecting Faults in Transmission Lines <i>Álisson Silva; Ricardo Santos; Guilherme Alencar</i>	4
9:30 - 10:00	ID082	Device for Monitoring Variables Associated with the Performance of High Voltage Insulators <i>Victor Yoshizumi; Sofia Lopes; Danilo Spatti; Rogério Flauzino; Ivan da Silva; Beatriz Tavares; Ana Barquete</i>	4
10:00 - 10:30	COFFEE BREAK		
10:30 - 11:30	TECHNICAL TALK - SMART METER INSTALLATION EXPERIENCE Speakers: Mauro Pertini and Martín Cruz Moderator: Roberts, Justo		
11:30 - 13:00	4 Sessions Block (20 min each) - Moderator: Vignerte, Juan		
11:30 - 11:50	ID083	Tools to Mitigate Ice Sleeve Formation. Case Study: LAT La Viña – Los Molinos, EPEC <i>Baez, Esteban Ariel; Otta, Gerardo</i>	4
11:50 - 12:10	ID084	Consolidating Maneuvers Commands Approach in Power Transmission Systems Using Cross-Validation in Speech Processing <i>V. H. Yoshizumi, D. H. Spatti, S. M. A. Lopes, R. A. Flauzino, I. N. da Silva, I. G. Ricci, A. G. C. Latorre and C. M. L. Junior</i>	4
12:10 - 12:30	ID064	Analysis of Resonance Stability in Power Systems with DFIG-Based Wind Generation <i>Luiza Buscariolli, Ahda Pavani, Maurício Salles</i>	4
12:30 - 12:40	ID067	Performance Evaluation of Transfer Functions in Metaheuristics for AC Transmission Expansion Planning <i>Lucas Nepomuceno; Edimar De Oliveira; Arthur De Paula, Leonardo Willer de Oliveira</i>	5
13:00 - 14:30	LUNCH BREAK (NOT INCLUDED)		
14:30 - 15:30	TECHNICAL TALK - SUSTAINABLE HOUSING INITIATIVES: A PATH TO ENERGY EFFICIENCY AND ENVIRONMENTAL PRESERVATION Speaker: Samir El-Omari Moderator: Roberts, Justo		
15:30 - 16:30	4 Sessions Block (20 min each) - Moderator: Vignerte, Juan		
15:30 - 15:50	ID006	Hyperparameter Optimization of the Genetic Algorithm Applied to the Economic Dispatch Problem <i>Giovanna Pascolat; Fabiano Silva; Leonardo Nepomuceno</i>	5



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15:50 - 16:10	ID028	Technical Relevance Analysis of Solar Photovoltaic Energy Generation Forecasting Systems <i>Veiga Udaeta, Miguel Edgar Morales Massara, Vanessa Meloni Nascimento, Viviane Tavares</i>	5
16:10 - 16:30	ID023	Stability analysis for DC NMGs with active loads and time delay - circuit validation <i>Marco Carnaghi; Paula Cervellini; Rogelio García Retegui; Marcos Judewicz; Marcos Funes</i>	12
16:30 - 16:50	-	-	-
17:00 - 17:30	CLOSING CEREMONY		
17:30 - 18:00	GOOD BYE COFFEE		

PLENARY SESSIONS PROGRAM

DAY 3 - FRIDAY, NOVEMBER 29, 2024		ROOM 2	
TIME	ID	ARTICLE / AUTHORS	TOPIC
8:30 - 10:00	4 Sessions Block (20 min each) - Moderator: Ferro, Gustavo		
8:30 - 8:50	ID058	Economic Assessment of Energy Savings in an Electric Power Distribution System by Insertion of Photovoltaic Distributed Generation <i>G. F. di Mauro, J. Vignerte, C. Agüero, J. Strack, D. Anaut</i>	2
8:50 - 9:10	ID026	Fault Classification in Power Transformers by High Frequency Current Sensors and Wavelet Transform <i>Abdo Khoury Filho; João Pedro Gouvêa; Marco Aurélio Rocha; Alceu Ferreira Alves; André Luiz Andreoli; Bruno Castro</i>	7
9:10 - 9:30	ID055	Automatic data clustering to identify changes in consumption patterns <i>Patricio G. Donato, Marcos A. Funes y Carlos M. Orallo</i>	7
9:30 - 10:00	ID061	Evaluating machine learning algorithms for power demand forecasting <i>Yenia Maza Diaz, Patricio G. Donato, Marcos A. Funes y Carlos M. Orallo</i>	7
10:00 - 10:30	COFFEE BREAK		
10:30 - 11:30	TECHNICAL TALK - SMART METER INSTALLATION EXPERIENCE Speakers: Mauro Pertini and Martín Cruz Moderator: Roberts, Justo		
11:30 - 13:00	4 Sessions Block (20 min each) - Moderator: Marotta Cassula, Agnelo		
11:30 - 11:50	ID112	Assessing the Impact of Electric Mobility on Transformer Loadability in a Residential Distribution in Mar del Plata <i>Mikel Méndez; Ignacio Linares; Jorge Strack; Guillermo Murcia; Juan Vignerte; Juan Martínez; Julio Branda</i>	11
11:50 - 12:10	ID100	Survey for the design of a light electric vehicle parking and charging system for Faculty of Engineering of the UNMDP <i>Natan Toda; Paula Cervellini; Nicolás Wassinger; Rogelio García Retegui; Marcos Funes</i>	11
12:10 - 12:30	ID062	Forecast of Total Real and Reactive Power Losses for Systems under Contingency via Function Fitting Artificial Neural Network <i>G. G. da Silva, W. P. L. dos Santos, A. de Queiroz, E. Garbelini, A. Bonini Neto</i>	7
12:30 - 12:40	ID065	Comparison of estimation of real-valued sinusoidal using three DFT samples <i>Carlos M. Orallo, Patricio G. Donato, Marcos A. Funes</i>	7
13:00 - 14:30	LUNCH BREAK (NOT INCLUDED)		
14:30 - 15:30	TECHNICAL TALK - SUSTAINABLE HOUSING INITIATIVES: A PATH TO ENERGY EFFICIENCY AND ENVIRONMENTAL PRESERVATION Speaker: Samir El-Omari Moderator: Roberts, Justo		
15:30 - 16:30	4 Sessions Block (20 min each) - Moderator: Branda, Julio		
15:30 - 15:50	ID068	Practical Use of Class M PMU Data for Automatic Fault Location in Power Transmission Lines <i>E. L. de Almeida, F. O. Passos, M. J. Ramos, M. V. da Costa</i>	7
15:50 - 16:10	ID071	Assessing the Energy Impact and Carbon Footprint of AI Model Training: A Case Study Using GPU Servers <i>Giovanni Cocca Guardia; Gabriel Hermosilla Vigneau; Danny Espín-Sarzosa; Bárbara Dumas Feris; Sebastian Oliva H.; Gabriel Olmos Leiva</i>	7
16:10 - 16:30	ID097	Forecast of Reactive Power Injection in Power Systems Using Artificial Neural Networks <i>A. de Queiroz, G. G. da Silva, A. Bonini Neto</i>	7



**CLAGTEE
2024**

XV LATIN-AMERICAN CONGRESS ON ELECTRICITY

GENERATION AND TRANSMISSION

November 27th - 29th, 2024 - Mar del Plata - Argentina

PLENARY SESSIONS PROGRAM

16:30 – 16:50	ID111	Self-Organized Map based on Acoustic Emission Signals for Power Transformers Monitoring <i>Bruno Albuquerque de Castro; Izadora Rodrigues Bittencourt; Abdo Youssif Khoury Filho; Jorge Alfredo Ardila-Rey; André Luiz Andreoli</i>	7
17:00 - 17:30	CLOSING CEREMONY		
17:30 – 18:00	GOOD BYE COFFEE		



**CLAGTEE
2024**

XV LATIN-AMERICAN CONGRESS ON ELECTRICITY
GENERATION AND TRANSMISSION

November 27th - 29th, 2024 - Mar del Plata - Argentina

PLENARY SESSIONS PROGRAM

LAST MOMENT UPDATES IN THE PROGRAM, PLEASE CHECK THE CHANGES MADE

1. **Technical Talk on Wednesday 11:00h will be moderated by Raúl Ciapinna**
2. **Session Blocks of Friday 8:10h to 10:00h will be moderated by Gustavo Belliski**
3. **Presentation of paper ID105 was moved to Thursday at 16:10h (Room 2)**
4. **Presentation of paper ID022 was moved to Thursday at 17:20h (Room 1)**
5. **Presentation of paper ID058 was moved to Friday at 8:30h (Room 2)**