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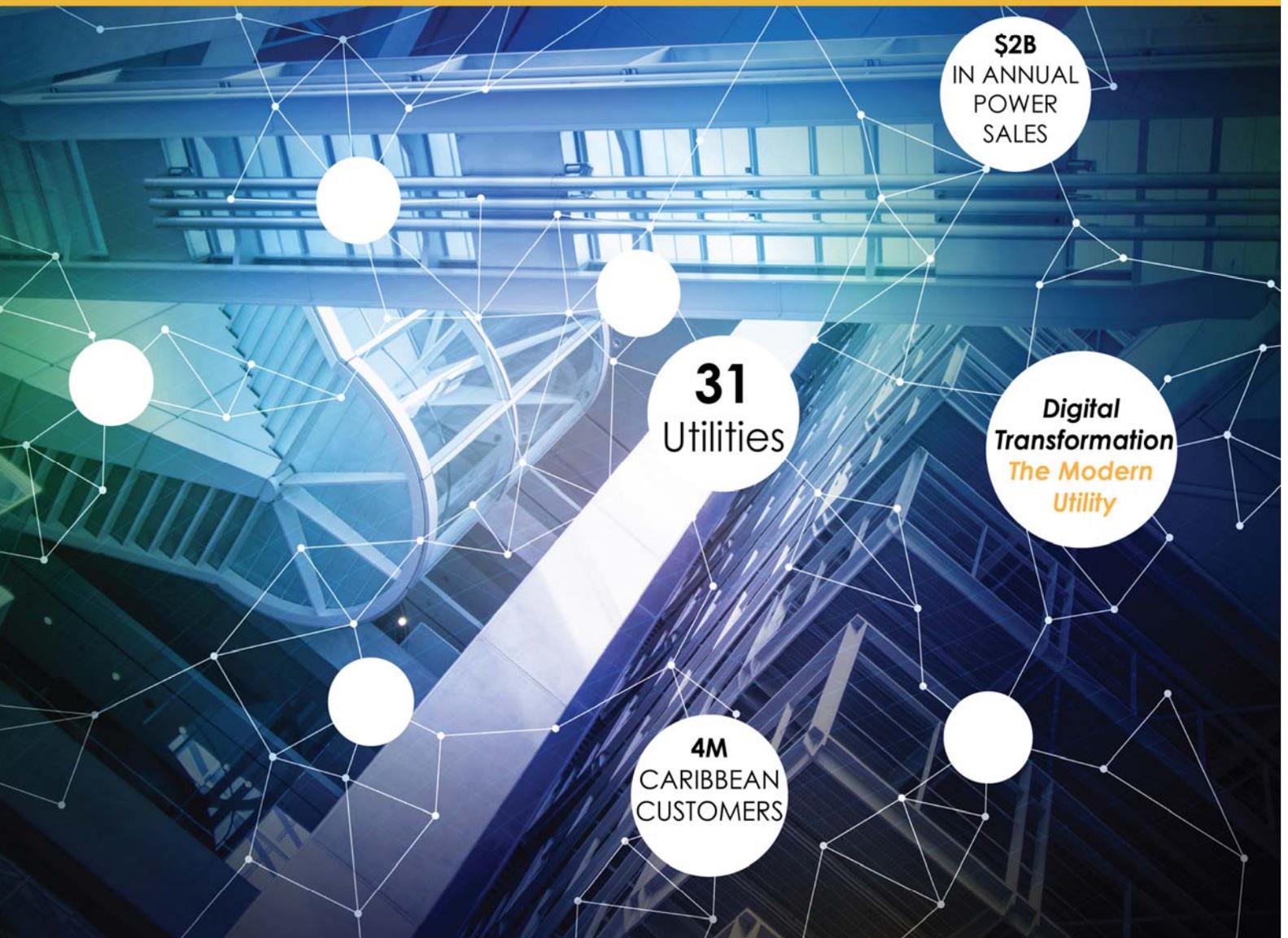
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# SMART GRID+ SYMPOSIUM



Theme: "Digital Transformation: The Modern Utility"



**OCTOBER 23-26, 2017 | TRINIDAD**  
THE RADISSON HOTEL, PORT OF SPAIN

## Welcome...

DEAR PARTICIPANT,

Be prepared not only to gain invaluable information but for the opportunity to network amongst your fellow peers.

Once again, welcome and enjoy the Seminar!

*-Seminar Planning Team*

## Conferences & Seminars 2018

Human Resource, Public Relations & Customer Service

Linesman Rodeo

Chief Executive Officer's Conference

Occupational Health & Safety Seminar

Engineer's Conference

RE Conference

GIS/ICT/Metering & Smart Grid

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## Seminar Planning Team

**Laurena Primus** - CARILEC Secretariat

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**Nakita Dusuazay** - CARILEC Secretariat

## Monday - October 23, 2017

7:30am - 8:30am	<b>Registration</b>
8:30am - 9:30am	<b>Opening Ceremony:</b>
9:30am - 10:00am	<b>Coffee Break &amp; Booth Visitation</b>
10:00am - 11:00am	<p><b>Panel Discussion: Deployment of Micro Grids in Island Communities</b></p> <p><b>Panelists:</b> <b>Dwayne Cenac</b>, Senior Electrical Engineer, Grenada Electricity Services Ltd, <b>Fidel Neverson</b>, National Project Coordinator (SVG), Rocky Mountain Institute  moderated by <b>Siana Teelucksingh</b>, Renewable Energy Consultant, Rocky Mountain Institute</p>
11:00am - 11:30am	<p><b>Title: SMART Sensors</b></p> <p><b>Speaker:</b> <b>Fili Udvadia</b>, VP Business Development &amp; General Manager, Ardry Trading Co. Ltd  moderated by <b>Wynn Alexander</b>, Information Services Manager, St. Lucia Electricity Services Ltd</p>
11:30pm - 12:15pm	<p><b>Title: Will the JPS Smart Grid Prevent All-Island Blackout</b></p> <p><b>Speaker:</b> <b>Ricardo Case</b>, Head - Systems Operations, Jamaica Public Service  moderated by <b>Wynn Alexander</b>, Information Services Manager, St. Lucia Electricity Services Ltd</p>
12:15pm - 1:30pm	<p><b>Title : Developments in Active Network Management Application</b></p> <p><b>Speaker:</b> <b>Tim Spearing</b>, Lucy Electric Ltd  moderated by <b>Wynn Alexander</b>, Information Services Manager, St. Lucia Electricity Services Ltd</p>
1:30pm - 3:00pm	<p><b>Lunch and Booth EXPO</b></p> <p><b>Book Signing: Pramod Jain, "Wind Energy Engineering"</b></p>
3:00pm - 3:40pm	<p><b>Title: Enabling Renewables on Island Grids: Applying lessons from projects on the Mainland</b></p> <p><b>Speaker:</b> <b>Vani Dantam</b>, Executive, Landis+Gyr  moderated by <b>Austin Castro</b>, Information Communications Technology Manager, Belize Electricity Ltd</p>
3:40pm - 4:20pm	<p><b>Title: AMI as a Building Block for The Modern Utility</b></p> <p><b>Speaker:</b> <b>Charles Harris</b>, Senior Manager, Barbados Light &amp; Power Company Ltd  moderated by <b>Austin Castro</b>, Information Communications Technology Manager, Belize Electricity Ltd</p>
4:20pm - 5:00pm	<p><b>Title: Smart Community Aruba</b></p> <p><b>Speaker:</b> <b>Robert-Jan Moon</b>, Program Manager, TNO Caribbean  moderated by <b>Javed Samuel</b>, Technical Director, NCC Group</p>
6:30pm - 8:30pm	Business Mixer sponsored by CARCEP and CARILEC

## Tuesday - October 24, 2017

8:00am - 9:00am	<p><b>Topic: How Secure is Your Grid</b></p> <p><b>Speaker: Javed Samuel</b>, Technical Director, NCC Group moderated by Richard Sitahal, Head of Projects, Trinidad &amp; Tobago Electricity Commission</p>
9:00am - 10:00am	<p><b>Panel Discussion: Electric Vehicles</b></p> <p><b>Panelists: Ian Smart</b>, CEO, Smart Energy, <b>Joanna Edghill</b>, Managing Director, MegaPower, <b>Dr. Curtis Boodoo</b>, Program Leader– NETD, University of Trinidad &amp; Tobago, <b>Charles Harris</b>, Senior Manager, Business Solutions, Barbados Light &amp; Power Ltd and <b>Dr. Camron Gorguinpour</b>, Principal, Woden LLC</p>
10:00am - 11:00am	<p><b>Coffee Break ; Booth Visitation and EV display</b></p>
11: 00am - 12:00pm	<p><b>Panel discussion: Challenges of Managing very high levels of Distributed Energy Resources</b></p> <p><b>Panelists: Charles Harris</b>, Senior Manager, Barbados Light &amp; Power Company Ltd, <b>Ricardo Case</b>, Head Systems Operation, Jamaica Public Service Company Ltd. moderated by <b>Dr. Indra Haraksingh</b>, University of the West Indies</p>
12:00pm - 12:45pm	<p><b>Topic: Intranet of Grid - Advanced Grid Analytics</b></p> <p><b>Speaker: Carson Zerpa</b>, Solutions Director, Landis+Gyr moderated by <b>Nelson Stapleton</b>, Metering Services Engineer, St. Kitts Electricity Company</p>
12:45pm - 1:45pm	<p><b>Lunch and Booth Visitation</b></p>
1:45pm - 2:20pm	<p><b>Topic: How Criminal looks at your AMI Network: Using Attack Tree to Mitigate Threats</b></p> <p><b>Speaker: Stephen Chasko</b>, Solutions Director, Landis+Gyr moderated by <b>Nelson Stapleton</b>, Metering Services Engineer, St. Kitts Electricity Company</p>
2:20pm - 3:10pm	<p><b>Topic: A Cognitive Approach to Improving Asset Performance Management</b></p> <p><b>Speaker: Mitch Simon</b>, Global Solutions Consultant, IBM moderated <b>Davinder Sharma</b>, Lecturer, University of the West Indies</p>
3:10pm - 3:40pm	<p><b>Speaker: Fili Udvardia</b>, VP Business Development &amp; General Manager, Ardry Trading Co. Ltd</p> <p><b>Topic: SMART Transformer Moisture Management System</b> moderated by <b>Richard Sitahal</b>, Head of Projects, Trinidad &amp; Tobago Electricity Commission</p>
3:40pm - 3:50pm	<p><b>Coffee Break and Booth Visitation</b></p>
3:50pm - 4:30pm	<p><b>Speaker: Emma Ritch</b>, Global Business Development, ABB</p> <p><b>Topic: Designing Smart Grid Networks for Economics and Performance</b> moderated by <b>Farrel Christopher</b>, Systems Analyst, Trinidad &amp; Tobago Electricity Commission</p>
4:30pm - 5:15pm	<p><b>Speaker: Hala Ballouz</b>, USAID Caribbean Clean Energy Program</p> <p><b>Topic: Grid Modernization: Why Develop a Smart Grid Road Map</b> moderated by <b>Farrel Christopher</b>, Systems Analyst, Trinidad &amp; Tobago Electricity Commission</p>



### KEYNOTE SPEAKER: PRAMOD JAIN

Pramod is a leading expert in Wind Power, Energy Storage and Internet of Things. He is a consultant to private developers, the Asian Development Bank, USAID, US Department of Energy, United Nations Development Program, Inter-American Development Bank and others. One of his areas of focus is improving the operations of wind and other power plants. He designs sensors and data analytics methods for

operations and maintenance of wind power plants. He also develops solutions on IT cloud platforms for IOT. Pramod has provided consulting in the USA, Bangladesh, Brazil, Guyana, Jamaica, Mexico, Mongolia, India, Indonesia, Lebanon, Philippines, Sri Lanka, St. Kitts, Vietnam. He is the author of a book Wind Energy Engineering, McGraw-Hill, NY, published in April 2016. He holds a B. Tech from Indian Institute of Technology, Bombay and Ph.D. from University of California,



### TIM SPEARING

Tim is responsible for the product management of the automation business in Lucy Electric. These range from secondary RTUs to complete network management solutions, including integrated protection and control. Tim is a Chartered Engineer, a Member of the IET, and a key supporter and contributor to IET Developments in Power System Protection (DPSP), the IET Midlands Power Group in the UK, and is a member of the UK Smart Grid Forum, and the EU Smart Grid Task Force. Tim has worked in design and application of protection, automation and control systems, and has contributed to smart grid research in the UK.

training engagements covering web security, mobile security, cloud security or cryptography for multiple clients across a range of industries including the electric sector.

He also devote some time to research interests and have presented at various security conferences and workshops including Blackhat, Bluehat, SecureWorld, Real World Cryptography, Infraguard, OWASP, CarolinaConAT&T Cybersecurity Conference and Interface. Research areas include cryptography topics such as Secure Messaging, Blockchain and Financial Information eXchange (FIX) protocol.

He has been involved and delivered services for several projects within the Caribbean including financial, telecommunications and government entities. This has included provided advisory services for various technological initiatives ensuring that they follow best industry practices for software development and security. He hopes to continue to play a role in the development of the technology industry in the Caribbean. He is currently the CSEC Additional Mathematics Assistant Chief Examiner at the Caribbean Examination Council (CXC). One of the key goals is to enable students to solve real-world problem using mathematical techniques and to further expand critical thinking.



### JAVED SAMUEL

Javed Samuel was born and raised in St. Lucia and completed up to A'Levels in St Lucia. Javed then obtained a Masters in Engineering (MEng) and BSc in Computer Science at the Massachusetts Institute of Technology (MIT) where he completed a number of computer security and cryptography classes. He also has a BSc in Management Science with a concentration in Operations Research and minors in Economics and Mathematics from MIT. He was the recipient of the prestigious Rhodes Scholarship in 2005 and completed a Masters in Science (MSc) in Applied and Computational Mathematics at Oxford University.

Javed Samuel is currently a technical director at NCC Group. His current responsibilities are both technical and business and include technical account management of clients where he works on understanding their security needs and software and systems development process and ensuring that the final product or application is aligned with their requirements. He has conducted gap analysis between design and industry best practices and recommends solutions for addressing various weaknesses. He is also a lead member of the specialized Cryptography Services practice that specializes on novel and complicated cryptographic assessments. He has also delivered numerous customized



### MITCH SIMON

Mitch Simon is a Global Solutions Consultant with more than 22 years experience, helping clients apply innovated solutions to solve business problems. For the past 4 years Mitch has developed deep knowledge in the IBM Analytics Solution Platform, focused on Energy and Utilities industry. He has worked with utilities worldwide, across Generation, Transmission, Distribution and Renewable domains, helping clients leverage analytics solutions that provide insights into asset condition, improve decision making around operations & maintenance policies, and optimize Capex/Opex expenditures. He also has experience in Analytics solutions for Smarter Cities including water, local government and Law enforcement.



### CARSON ZERPA

Brings 13 yrs of utility distribution design, and smart grid program management experience to the Landis+Gyr team. At Florida Power and Light, Carson supported both operations and planning departments, via construction project management and engineering various overhead and underground hardening projects. Carson has also consulted with various utilities across North and South America including the Caribbean to develop and delivery Smart Grid modernization planning. Some of those projects include large scale renewable integration, AMI, Distribution Automation and Demand Response projects. Carson is now focused on helping utilities maximize the benefits gained by the data generated by these various systems and supporting the development of their boarder grid modernization strategies.



### CHARLES HARRIS

Charles is currently the Senior Manager Business Solutions and has previously served as Senior Distribution Engineer, Distribution Engineer and Service Planning Engineer at the Barbados Light & Power Co. Ltd' in Distribution and Transmission Department. As an engineer he has been responsible for Overhead Lines Installation and Maintenance, Underground Cables & Padmount Transformers, Fibre Optic Network Installation & Fiber Optic Network Governance, Service Planning & Estimating, Contractor Management & Scheduling, Electric Meter Management & Installation and Service Management & Installation. He is currently a registered professional Engineer. In his new role his focus will be on customer solutions/satisfaction, key accounts, employee engagement, profitability of the company and driving the technology improvements which will take BLPC to is 100/100 vision in 2045. His twenty-two (22) years of project execution / engineering / management experience started at the Arawak Cement Company Limited where he obtained his initial training. Working with the project team they transformed the plant from an 8-hour, 3 day a week operation with 50 employees to a 24-hour a day

operation with over 300 employees. He was appointed Project Engineer at the end of the Kiln Reactivation Project. He was subsequently employed at IBM World Trade Corporation as a Site & Connectivity Specialist for Barbados and the Eastern Caribbean; where his responsibilities were account management, marketing, design, project management and implementation of Cabling Infrastructure Systems (Voice & Data) and Power Management Systems (UPS & TVSS). At TeleBarbados, he was the Domestic Business Development Manager responsible for the TeleBarbados Terrestrial Fiber Network and Management of TeleBarbados Return on Investment for network development and expansion.



### **HALA BALLOUZ**

Hala N. Ballouz is lead consultant for CARCEP on renewable energy integration, President & Owner of Electric Power Engineers, Inc., and board member of the Wind Coalition and Association of Women in Energy. She is also chair of GridNext, an initiative that she launched as President of the Texas Renewables Energy Industries Association (TREIA), opening the barriers to market readiness for the grid of the future. An accomplished industry author and presenter, Ms. Ballouz has over 25 years of experience in power systems and energy market study, and backs her work with pioneering innovation in software and technology analytics.



### **STEPHEN CHASKO**

Stephen is responsible for AMI solution delivery to Landis+Gyr customers and continues to work with customers directly regarding their communications software and security architectures. Stephen has experience in working on security issues for advanced metering, RFID, secure microcontrollers, stored value, smart card, retail and financial systems. His employment experience includes NCR, ACI Worldwide and Texas Instruments. His special fields of interest include data communications, smart card systems, secure microcontrollers and Smart Grid security. Stephen has spoken at numerous security conferences and panels including the RSA Conference, the Smart Grid Security conference, Distributech and IEEE PES.



### **VANI DANTAM**

Vani Dantam has over 35 years of experience in business development, sales & marketing, program management/operations and product & test engineering in Transportation, Energy Generation/Storage and Utility industries.

Before joining Landis+Gyr, Vani was the Senior V.P. of Business Development, Sales & Marketing at Axion Power, a startup company in Pennsylvania, commercializing advanced lead acid battery technology. Prior to that he worked as the V.P. of Business Development and Sales at Ener1, a Lithium ion battery manufacturer in Indiana. He worked as the global director of Sales & Marketing for EV/Hybrid motor/generator sales at Remy International, also in Indiana. He has worked with automotive and heavy duty OEM's and transportation companies around the world, most notably with Daimler globally for more than 10 years. During his years at Remy he pioneered Remy's market development in Mexico and South America and transfer of production from the U.S. facilities into Mexico and Brazil. He spent 4 years at GM Truck & Bus in Michigan, as an Engineering Manager and over 10 years at Delco Remy, a division of GM prior to formation of Delphi in a variety of responsibilities from Design Engineer to Program and Operations Manager. During his tenure at Delco Remy, Vani helped start battery plants in France, Korea and Brazil. He was also instrumental in negotiating J/V and licensing agreements in Korea, Mexico, Brazil, Hungary, China and India.

Vani served in the U.S. Navy with rank LtJG, in the 7<sup>th</sup> fleet (active duty 3yrs and reserves 7yrs). He is fluent in 5 languages including Hindi, Telugu, Portuguese and Spanish. He is an active member of MISO ancillary services market subcommittee. His educational qualifications include an MBA in Finance & International business from Indiana University, an MS in Mechanical Engineering from Vanderbilt University, a Quality Engineering Certification from Kettering University and a BS (Hons) in Metallurgical Engineering from IIT, Banaras Hindu University, India. He spent a year at Trinity College, Cambridge U.K. as a Churchill Scholar.



### **EMMA RITCH**

Emma Ritch leads Global Business Development in the utilities market for ABB Wireless. Emma has a decade of experience in utilities as a consultant and analyst. She specializes in market strategy and strategic partnerships for wireless communication networks and data analytics. Before joining ABB, she led product marketing for Silver Spring Networks. As a senior analyst Greentech Media, Cleantech Group and E3 Technology Consulting, she worked with clients including General Electric, Siemens, ABB and Ericsson. Emma studied at the Stanford Graduate School of Business and the University of South Carolina Honors College



### **ROBERT-JAN MOONS**

Robert-Jan Moons has been a member of the TNO Caribbean office since 2012. He holds a M.Sc. in Electrical Engineering from Delft University of Technology, the Netherlands (1995). At TNO Caribbean he serves as the program manager of TNO's framework agreement to support Aruba's transition to sustainable energy and environmental improvements. He is the consortium coordinator of the Smart Community Aruba pilot, a residential neighborhood geared at sustainable living and developed as a public private partnership. Working closely with island utilities and government officials he led development of a Smart Grid Roadmap for Aruba and Sustainable Energy Vision for Bonaire. He also led studies into the technical, social and financial implications of legislation regarding energy and water for the Dutch islands. In earlier episodes of his career he evolved from a scientific researcher (KPN Research) in field of telecoms to business analyst and corporate strategist for Royal Dutch Telecom (KPN) with focus on scenario analysis, strategy development and business planning at the time of major industry shaping. Following this role, he obtained seven years of banking experience with one of the largest financial institutions across the Dutch Caribbean. During this period, he obtained a Dutch banking degree (NIBE AOB, 2009) which he now leverages towards green financing.



### **RICK CASE**

Rick Case has over 27 years in the electric utility industry and is currently the Head of System Operations at the Jamaica Public Service Company Ltd. He has the responsibility for the short to medium term planning for the grid, the real time system operations, grid performance and the development and deployment of SCADA/EMS/ADMS throughout the company as well as the preparation of the utility for the MODERN GRID. He is a registered Professional Engineer, Project Management Professional and a technical consultant to various officers within the company and works as a lead on the Central Emergency Operations Center (CEOC) for disaster management and grid restoration. He holds a Bachelor of Engineering degree in Electrical Power Systems (first class), he later went on to earn a Master of Science in Computer Based Management Information Systems at the University of the West Indies where his dissertation was on Expert Systems and Usability Engineering. He has an Executive Master of Science degree in the Management of Sporting Organizations (MEMOS) from the International Olympic

# Presenter Biographies

Committee, professional certificates in Modern Energy Management Systems from Georgia Institute of Technology and SMART GRID Modeling and Control for island Utilities from University of Hawaii, Manoa. Rick is a mentor for young students at his alma mater Kingston College and the University of Technology and volunteers for annual career days at various high schools across Jamaica. He is a sought after speaker in the Caribbean region on SMART GRID, Utility Automation and Grid Modernization having presented at various regional and international conferences. He is the former manager of the Kingston College Track and Field team, an executive of the UTECH Engineering and Computing Academic Advisory Board, a past Vice President of the Project Management Institute Jamaica Chapter, a trustee member on the JPS Pension Fund Board and a co-opted board director on the National Housing Trust Board's HRM and IT committee.



### FILI UDVADIA

Fili Udvadia is currently VP business Development & General Manager of Ardry Trading Company. Starting at Ardry in 1995 as Senior Sales Engineer progressed to Sales Manager and then General Manager. Ardry functions as an Export

Management Company, Representative and Distributor of electrical Transmission and Distribution equipment to utilities, industrials and OEM's in international markets. Fili is a graduate of Baldwin Boys High School, Bangalore, India and holds a B.S.E.E. T. degree from Milwaukee School of Engineering and has completed all the courses for an M.S.E.M degree in Marketing & Engineering Management. He previously worked at McGraw Edison Power Systems as Application Engineer Latin America (1978-1989), G&W Electric Co as Application Engineer/Sales Engineer/regional Manager for Latin America and Far East (1980-1985), and Joslyn Power Products where he managed International Sales covering the Canadian market (1986—1994).



### DWAYNE CENAC

Dwayne Cenac graduated from the Universidad de Oriente, Santiago de Cuba with a bachelor degree in Electrical Engineering in 2004. He received his post graduate diploma from the University of Wales in Project Management, MBA. During his 12 years of electric utility experience, he has held roles as Plant Electrical Engineer, Substation Engineer and T&D Planning Engineer. These positions has allowed him to

accumulate extensive knowledge from all fields of an island utility. Dwayne now leads the Planning and Engineering Department in the capacity of Senior Electrical Engineer. Apart from system planning and the implementation of large scale power system projects, the department is also responsible for developing alternative energy projects. In recent years, Dwayne has been responsible for studies related to system hosting capacities, as well as impact studies for the integration of intermittent generation in distribution networks. Presently, the focus has been on developing isolated high penetration renewable energy micro-grid systems.



### FIDEL NEVERSON

Fidel Neverson is National Project Coordinator in Saint Vincent and the Grenadines with Rocky Mountain Institute - Carbon War Room. With a background in electrical engineering and experience at VINLEC, he leads project preparation and development efforts in SVG, while bringing technical input to various initiatives of the RMI-CWR Islands Energy Program.

## CARILEC At a Glance...

29  
YEARS



### WHO WE ARE...

Established in 1989 the **Caribbean Electric Utility Services Corporation (CARILEC)** is an association of electric services, business developers, manufacturers and other stakeholders operating in the electricity industry in the Caribbean region, Central and South Americas and Globally.

### OUR MISSION

CARILEC will enhance the effectiveness of its members by providing industry related services, creating regular networking, training and knowledge sharing opportunities; supporting mutual assistance programs and being an advocate for the industry throughout the Caribbean.

### OUR VISION

To be the Premier Association of Electric Utilities and Industry partners; facilitating the development of world class electric energy services for all peoples of the Caribbean.

## Social Media at a Glance...



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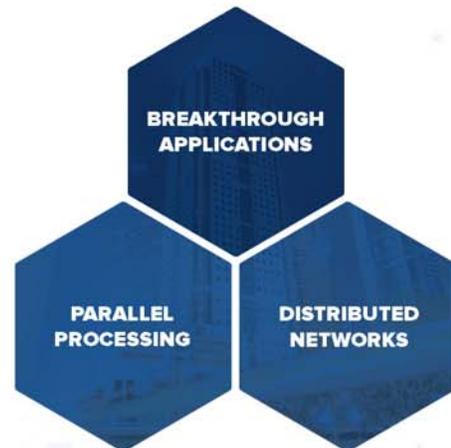
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## ISLAND INFORMATION

Island country of the southeastern West Indies. It consists of two main islands—Trinidad and Tobago—and several smaller islands. Forming the two southernmost links in the Caribbean chain, Trinidad and Tobago lie close to the continent of South America, northeast of Venezuela and northwest of Guyana. Trinidad, by far the larger of the two main islands, has an area of about 1,850 square miles (4,800 square km). It is 7 miles (11 km) from the Venezuelan coast at its nearest point and is separated from it by the Gulf of Paria and two narrow channels, where there are several small islands and rocks. Tobago, much smaller, with an area of about 115 square miles (300 square km), lies 20 miles (30 km) to the northeast of Trinidad. Extending diagonally from southwest to northeast, Tobago is about 30 miles (50 km) long and more than 10 miles (16 km) across at its widest point. Little Tobago lies about a mile off Tobago's northeastern coast. Also called Bird of Paradise Island, Little Tobago was once noted as the only wild habitat of the greater bird of paradise outside of New Guinea; however, the bird is no longer found there.

## LANGUAGE

English is the country's official language, but the main spoken language is either of two English-based creole languages (Trinidadian Creole or Tobagonian Creole), which reflects the Amerindian, European African, and Asian heritage of the nation

## CLIMATE

Tropical, tempered by north-east trade winds, with a temperature range of 22–31°C and an average annual rainfall of 1,631 mm. The dry season is January to May and the wet season June to December, with a short dry sunny season called the Petit Careme during September and October. .

## ELECTRICITY

Electrical outlets in Trinidad and Tobago supply electricity between 110/220 volts. Standard two prong plugs can be used however; it is

advisable to travel with an adapter as a precautionary measure. Adapters can also be purchased at local electronic stores

## CURRENCY AND EXCHANGE RATE

The local currency is the Trinidad and Tobago dollar. US dollars are widely accepted at an approximate rate of TT \$6.5 to US \$1. You can find rate information at local banks, or the daily newspapers. Euro's and the Pound Sterling (GBP) are not as widely accepted as US dollars. However, traveller's cheques and international credit cards are accepted at most hotels, restaurants and malls. ATMs are also widely available but bank fees will apply.

## RADISSON TRINIDAD

Conveniently located in downtown Port of Spain, Radisson Hotel Trinidad places guests a five-minute walk from the city's beautiful waterfront. If you are traveling for work, you can enjoy quick access from our setting in the commercial district to numerous banks, local government buildings and regional offices for companies like DHL and ExxonMobil. The Radisson turns any Port of Spain business trip into a pleasurable experience by offering the most spacious hotel rooms in the city and beautiful views of Port of Spain, the Northern Range and the Gulf of Paria. We're also home to the only revolving rooftop restaurant in the Caribbean where you can enjoy outstanding views during brunch or dinner.

## Hotel amenities & services

Stay on top of work with free Wi-Fi, our 24-hour business center and ample meeting space. When it's time to relax, you can kick back next to our outdoor pool on a sun lounger or a canopied daybed. Enjoy these amenities and services:

- Outdoor pool and tropical gardens
- Fitness center, open 24 hours
- 24-hour business center
- Two restaurants and a bar
- 24-hour room service

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ATESCO POWER LTD	GRENADA ELECTRICITY SERVICES LTD
BARBADOS LIGHT & POWER COMPANY LTD	IBM
BELIZE ELECTRICITY LTD	INNOVATIVE WIND ENERGY INC
CANTO	ITRON
CARIBBEAN LED LIGHTING	JAMAICA PUBLIC SERVICE COMPANY LTD
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## Participating Companies

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TANTALUS

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USAID CARIBBEAN CLEAN ENERGY PROGRAM



**ARDRY TRADING COMPANY, INC.**

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EXHIBITING AT



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An Association Of Electric Utilities



**SMART GRID<sup>+</sup>  
SYMPOSIUM**

**23- 24 October, 2017**

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## Exhibiting Companies



### Itron

Itron is a world-leading technology and services company dedicated to the resourceful use of energy and water. We provide comprehensive solutions that measure, manage and analyze energy and water. Our broad product portfolio includes electricity, gas, water and thermal energy measurement devices and control technology; communications systems; software; as well as managed and consulting services.



### Tantalus

Tantalus provides TUNet® an award-winning platform that enables Smart Grid applications such as AMI, load management, and grid optimization for electric and multi-commodity utilities. TUNet utilizes a hybrid network that improves reliability and reduces operational cost through “Beyond AMI” applications that leverage distributed computing capability embedded at every endpoint.



### Landis+Gyr

Landis+Gyr is the global industry leader in metering solutions for electricity, gas, heat/cold and water for energy measurement solutions for utilities. Since 1896 the company has been helping customers overcome operational, regulatory and consumer driven challenges by capturing the advantages and benefits of technology. Focused on quality, reliability and innovation, the Group offers a complete portfolio of energy meters and integrated smart metering solutions, enabling utilities and end-users to make better use of scarce resources, save operating costs and protect the environment by managing energy better – and to build the smart grid.



### IBM

International Business Machines Corporation (commonly referred to as IBM) is an American multinational technology company headquartered in Armonk, New York, United States, with operations in over 170 countries.



### Lucy Electric

Lucy Electric is a leader in secondary power distribution solutions with over 100 years’ industry experience. Specialising in high-performance medium voltage switchgear for utility, industrial and commercial applications, we enable the safe and reliable distribution of energy to homes and businesses worldwide.



### INTERNATIONAL

#### ESB International

ESB International is a leading global engineering consultancy specialising in the power industry. The company focuses on the delivery of large scale, capital infrastructure projects for international clients and for its parent company ESB, helping them to optimise their energy related projects and strategies.

Since its establishment in 1975, it has completed projects in 120 countries and helped clients around the world in delivering modern, efficient and dependable energy systems which can transform the economies and societies that they serve.

ESB International, which is wholly owned by ESB, Ireland’s State-owned electricity company, is headquartered in Dublin Ireland, and employs over 725 staff across operations in Europe, the Middle East, Africa and Asia. ESB International is committed to being a successful, responsible and progressive company, contributing to economic and social progress in the regions where it operates.

## Sponsors



## Exhibiting Companies



### KVR Energy

KVR Energy Limited has a systematic approach to HSSE management designed to ensure compliance with the law and to achieve continuous performance improvement. We are committed to ensuring high standards of Health, Safety and Welfare at work and amongst our employees and other persons who may be affected by our activities. We will ensure that our statutory duties and company safety policies are adhered to at all times. We accept our responsibility for preventing accidents or ill-health. We have a responsibility to safeguard our people, while contributing positively to the environment and the community around us.



### Ardry Trading Co Inc

Ardry Trading Co Inc established /New York City in 1940 prime functions include: Marketing Functions for Electrical Equipment Manufacturers-International Master Distributor, International Sales Representative, Export Management Company. Sales Network Local (in Country) - Sales Representatives & Distributors, In 35 Countries Worldwide. T&D Products - Applications for Utilities, Industrials & OEM Customers. World Class Services - Supply Equipment to Specifications, On Time Shipments, Inland & Overseas Transportation, Shipping Documentation (It's all in the Details), Logistics & Traffic Control support.



### Glenn International

Glenn International is the leading supplier of electrical, lighting and telecom equipment for the Caribbean and Central America. Glenn International can assist project design and construction stages by furnishing product specifications and documentation, as well as different product alternatives and cost analysis.

With 50 years of experience, Glenn International has established itself as the leader in representation in Puerto Rico, the Caribbean and Central

America. Our long history has provided us with the necessary experience and expertise to choose the best manufacturers and provide the utmost technical support available in the market. This makes Glenn International the right choice.

**Telecommunications:** As an early pioneer in the Telecommunications industry, Glenn International identified, and now represents leading manufacturers of communications products, featuring the best alternatives in Structured Cabling Systems and Outside Plant available.

**Electric:** Glenn International represents the best manufacturers of Electrical Products in the USA. Corporations like Southwire, Leviton, Greenlee and Erico have, since Glenn's inception, provided timely distribution channels, facilitating inventory stock and customer service. From the largest variety and best quality of Electrical Products, to the most dedicated and competent sales staff and technical support personnel, Glenn International delivers.

**Lighting:** Glenn International provides Lighting Products ranging from components (ballast & lamps) to complete lighting systems (architectural, commercial and industrial lighting fixtures) from a variety of high quality manufacturers. Glenn also has on staff highly trained lighting experts including LEED certified personnel and a certified lighting consultant.



### LED Roadway Lighting Ltd.

LED Roadway Lighting Ltd. is a Canadian-owned and operated clean technology company that designs and manufactures energy efficient LED streetlights and adaptive control solutions. Our goal is to create positive environmental change through the development of future-proof products and sustainable technology solutions. Our LED luminaires are designed to provide on-going maintenance savings, long-term energy savings, and a short return on investment for our customers. Our environmentally friendly luminaires improve safety and lighting quality while reducing energy consumption, light pollution, and carbon emissions.



### Caribbean Clean Energy Program

### USAID/CARCEP

USAID Caribbean Clean Energy Program provides Clean Energy Development in the Caribbean (Renewable Energy & Energy Efficiency).

## Sponsors



# CARILEC RENEWABLE ENERGY COMMUNITY OF PRACTICE (CAREC)

## Target Audience

- Utility systems operators and managers working in energy generation, transmission and distribution
- Utility Executives and staff responsible for financial management, inter-agency coordination, project management and procurement
- Energy policy and government authorities involved in decision-making of renewable energy targets and investments
- Academic institutions and vocational programs
- Utility Regulators



## Community Members Gain Access To:

- Face-to-face and virtual activities to share knowledge and best practices to accelerate learning on renewable energy
- Online knowledge-sharing platform to facilitate collaboration, discussions, and networking among island energy practitioners
- Training opportunities to build capacity and foster skills to meet increasing demands in renewable energy generation and distribution, and project implementation
- Access to technical resources on utility management, safety, transmission and distribution, planning, generation, and geospatial data
- Peer network of local policymakers, utility executives & staff, project developers, and engineering, procurement & construction consultants;
- "First-stop shop" to search energy information resources, models, project documents, upcoming events, and links to ask questions and request technical assistance
- Calendars of events with opportunity to build stronger relationships with other community members
- Disaster management best practice, notifications and coordination among energy utilities in the Caribbean
- Dedicated Listserv to communicate, ask questions, and exchange with other island energy professionals
- Access to document repository on utility management, safety, transmission and distribution, planning, generation, Geographic Information Systems

## Envisioned Community Activities:

- Monthly webinars
- Weekly emails & technical updates
- Regular Google hangout with experts from the field
- Monthly member discussion
- Online training
- Others, as determined by members

To collaborate and share idea, please contact:

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